



2023 **SUSTAINABILITY REPORT**

Creating shared value
and involving stakeholders: the story
of a company committed to leaving a mark.
But not a footprint

**Consolidated non-financial statement prepared pursuant to Articles 3
and 4 of Italian Legislative Decree no. 254/2016**

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Letter to stakeholders

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The figures and detailed analyses contained in this report provide an accurate and transparent portrayal of the commitment made to our stakeholders, thus giving tangible evidence of the role our Company plays for the local areas served and beyond.

For our Group, doing business and contributing to sustainability go hand in hand. They nourish one another, creating a virtuous circle that is fully evident in the creation of shared value, quantified through the portion of Ebitda deriving from business activities that also meet the goals of the UN Agenda 2030. **In 2023, shared-value Ebitda rose to 776 million euro**, up 16% over 2022, and corresponded to **52% of total Ebitda**.

In particular, this report offers specific data on our commitment to the three drivers of shared value, first and foremost all projects aimed at **pursuing carbon neutrality**, that enabled us to achieve a 14% reduction in greenhouse gas emissions (compared to 2019) in 2023, in line with the target set at 37% for 2030, considering both the Group and our customers' emissions. In the area of **regenerating resources and closing the circle**, our internal water consumption dropped by more than 21% (compared to 2017), while the municipal waste recycling rate rose to 61%, exceeding the EU 2025 target years ahead of schedule. Significant achievements were also made in **resilience and innovation**, with over 148 million euro invested in innovation to enable the ecological transition and digital transformation. This is because it is ever more essential to invest preventively in order to enable our plants and networks to withstand the effects of climate change, as became clear during the emergency that struck Emilia-Romagna in May 2023.

These efforts are also confirmed by our Business Plan, which expects shared-value Ebitda to **reach 64% of total Ebitda in 2027, amounting to over 1 billion euro** and showing a growth coming to 55% in absolute terms, an even higher rate than overall Ebitda.

This drive towards continuous growth has been recognised by S&P Global, which included us for the fourth consecutive year in the Dow Jones Sustainability Index World and Europe, with one of the highest sustainability ratings worldwide in the multi & water utilities sector. This is a source of pride for us and we believe it should be for all our stakeholders as well.

In our Business Plan, we projected **4.4 billion investments in the 2023-2027 five-year period**, and more than 70% of these have been earmarked for sustainability projects that benefit the local communities we serve. Almost half goes to increasing the resilience of our infrastructures, to ensure quality and continuity in our services, even in adverse weather conditions such as those we have witnessed in recent years.

Alongside the **economic value distributed** to local stakeholders (2.3 billion euro in 2023 alone), the results included in this report provide concrete examples of the support our company gives to local areas and communities, moving towards a circular development model and a green transition.

Cristian Fabbri
Executive Chairman

Orazio Iacono
CEO

Methodological guide to this report

[2-3]

This sustainability report is a **Consolidated Non-Financial Statement (NFS)** drafted by Hera S.p.A. and its subsidiaries (the “Group”) which refers to the financial year 2023 (from 1 January 2023 to 31 December 2023) and was prepared in accordance with Articles 3 and 4 of Legislative Decree 254/2016 implementing Directive 2014/95/EU. This NFS reports information regarding relevant aspects which concern the environment, social factors, personnel, human rights and anti-corruption, which are useful in understanding the Group’s activities, including its performance and results, and their impact. The topics regarding the Group and its stakeholders were defined based on a well-structured **materiality analysis**, which is described in the section “Materiality analysis and definition of contents”, part of the present Methodological guide to this report.

As provided for by Article 5 of Legislative Decree 254/2016, this document forms a separate report and is marked with specific wording, identifying it as a NFS, as provided for by legislation.

The Hera Group considers this NFS as its **sustainability report**, a primary tool for managing and reporting on its activities and results in the **economic, environmental and social spheres**, as well as a fundamental tool for **informing and communicating** with its stakeholders.

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The Group’s sustainability report has been drafted and published annually since 2002, and since 2007 it has been **approved by the Board of Directors of Hera Spa** at the same time as the annual and consolidated financial statements, in addition to being presented at the Shareholders Meeting. This version was approved by the Board of Directors of Hera Spa on 26 March 2024 and published on 8 April 2024. This fact bears witness to the **central role** of sustainability and corporate social responsibility in the Hera Group’s planning and control system, which anticipated by more than ten years the obligations introduced by the European directive on non-financial reporting.

The structure of this sustainability report is a direct consequence of the **strategic approach** aimed at **creating shared value** that the Hera Group has adopted since 2016, with the aim of responding more effectively to the challenges of sustainable economic development both globally and locally, and making the value created in the areas served more tangible.

In addition to the **results and targets achieved**, this sustainability report sets out the **principles** underlying the Hera Group’s actions, its **future objectives** and the results of its **communication with stakeholders**.

The attachments to this report also include **case studies**, i.e. descriptions of projects and initiatives that are particularly representative of the Group’s commitment to sustainability and to creating shared value. This document is widely distributed to all Group stakeholders, through its publication on the company’s website and other initiatives.

Scope of reporting

[2-1]

[2-2]

The scope of the **operating and financial** data and information is the same as that of the Hera Group’s consolidated financial statements at 31 December 2023. The scope of the **social and environmental** data and information includes all companies shown below, consolidated on a line-by-line basis in the Group’s consolidated financial statements.

COMPANIES INCLUDED IN THE SCOPE OF REPORTING

Hera Spa	Hera Comm Spa	Herambiente Spa	AcegasApsAmga Spa	Marche Multiservizi Spa
<ul style="list-style-type: none"> ■ Acantho Spa ■ AcegasApsAmga Spa ■ Hera Comm Spa ■ Hera Trading Srl ■ Herambiente Spa ■ Heratech Srl ■ Horowatt ■ Inrete Distribuzione Energia Spa ■ Marche Multiservizi Spa ■ Tiepolo Srl ■ Uniflotte Srl 	<ul style="list-style-type: none"> ■ EstEnergy Spa <ul style="list-style-type: none"> – Etra Energia Srl ■ Hera Comm Marche Srl ■ Wolmann Spa ■ F.Ili Franchini Srl 	<ul style="list-style-type: none"> ■ Aliplast Spa <ul style="list-style-type: none"> – Aliplast France Recyclage S.A.S. – Aliplast Iberia S.L.U. – Aliplast Polska SP.Z.o.o. ■ ASA Scpa ■ Biorg Srl ■ Feronia Srl ■ Frullo Energia Ambiente Srl ■ Herambiente Servizi Industriali Srl: <ul style="list-style-type: none"> – A.C.R. Spa – Recycla Spa – Vallortigara Servizi Ambientali Spa ■ Hestambiente Srl 	<ul style="list-style-type: none"> ■ Hera Servizi Energia Spa <ul style="list-style-type: none"> – Tri-Generazione Scarl ■ Aresgas EAD <ul style="list-style-type: none"> – Aresenergy EOOD – Ares Trading EOOD – Atlas Utilities EAD – Primagas AD – Black Sea Gas Company EOOD ■ Hera Luce Srl 	<ul style="list-style-type: none"> ■ Marche Multiservizi Falconara Srl ■ Green Factory Srl ■ Macero Maceratese Srl

Any changes to the scope of operations described above have been noted in this document and, where present, do not compromise the proper representation of the company’s activities.

Compared to 2022, the following changes in the scope of operations occurred:

- **Alibardi Fiorenzo Srl**, a company involved in plastic material collection and production, was merged by incorporation into Aliplast Spa on 1 March 2023;
- **Con Energia Spa ed and Eco Gas Srl** were merged by incorporation into Hera Comm Spa on 1 October 2023, with accounting effects backdated to 1 January 2023;
- **Hera Servizi Energia Srl** was merged by incorporation into AcegasApsAmga Servizi Energetici Spa (then called Hera Servizi Energia Spa) with accounting effects backdated to 1 January 2023;
- **Hydro Mud Srl and Vallortigara Angelo Srl** were merged by incorporation into Vallortigara Servizi Ambientali Spa with accounting effects backdated to 1 January 2023;
- **A.C.R. Spa di Reggiani Albertino Spa** was 60% acquired by Herambiente Servizi Industriali Srl. The company is operating in the reclamation sector, in the treatment of industrial waste, in the decommissioning of industrial plants and in civil works, with headquarters in Mirandola (Modena). The company was fully consolidated as of 31 March 2023;
- **F.lli Franchini Srl** was 60% acquired by Hera Comm Spa on 29 June 2023. The Rimini-based company operates in the field of thermohydraulic/electrical installations and photovoltaic solutions for business customers. The company is fully consolidated;
- **Horowatt** was established on 11 May 2023 by Hera Spa and Orogel Società cooperativa agricola. The company, which will produce renewable energy through the construction of an agri-voltaic plant, is fully consolidated;
- **Tiepolo Srl** was wholly acquired by Hera Spa on 6 July 2023. The company, which will build and manage a solar photovoltaic plant in Bondeno (FERRARA), is fully consolidated.

Even though it is not included in the scope of consolidation, information on the company **Enomondo Srl** (50% owned by Herambiente Spa), which manages a biomass plant, is also reported. This information includes aspects related to atmospheric emissions and waste disposal.

In order to provide a comparison of data over time and an evaluation of the Group's business performance, comparative data for the previous two years has been included, where available. Furthermore, in order to offer a fair representation of Hera's performance and to ensure that the data is reliable, the use of estimates is kept to a minimum and, where they have been used, they are based on the best methodologies available and noted accordingly.

Reporting standards

This NFS was prepared in accordance with the methods and principles set out in the **GRI Sustainability Reporting Standards**, defined by the Global Reporting Initiative (GRI Standards). The paragraph entitled "GRI contents index" presents all indicators reported in this NFS, including references to their position in the report and any possible omissions. It is to be noted that, since the reporting of the financial year 2022, the **GRI general standards published in 2021** have been adopted, which have updated the drafting process, the general information and the process of identifying and evaluating material topics: GRI 1 Foundation; GRI 2 General Information; GRI 3 Material Topics. The GRI 1 Foundation 2021 defines the general principles of sustainability reporting (Reporting principles): accuracy, balance, clarity, comparability, completeness, sustainability context, timeliness and verifiability.

The "**2013 GBS Standards - Principles for drawing up sustainability reports**" defined by the Gruppo di Studio per il Bilancio Sociale (GBS) were also taken into account when drafting this statement as regards the definition and distribution of added value.

Even though they are not mandatory reporting standards and therefore were not used for the purposes of this NFS, a table correlating the **Sustainability Accounting Standards Board (SASB)** indicators has been included in the attachments.

As regards information concerning climate change, since 2020 the Hera Group has made reference to the **Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)**, published in 2017 by the Financial Stability Board, and the **European Union Guidelines on climate-related disclosures**, published in June 2019 by the European Commission. The process of adhering to and aligning with the TCFD's Recommendations, approved in 2020 by the Management Review Committee, involved a dedicated cross-department team with members from the Shared Value and Sustainability, Risk Management, Strategic Planning and Energy Management Departments, as well as the Central Administration, Finance and Control Department. The information consistent with the TCFD's Recommendations includes: an overview of the Group's greenhouse gas emissions, broken down by supply chain; a table with the main greenhouse gas targets and indicators in the attachments (updated in 2021 based on the document entitled "Guidance on Metrics, Targets, and Transition Plans", published in October 2021 by the TCFD); a description of the incentive system linked to climate targets; a description of the governance processes regarding the supervision and management of climate-related

risks; and lastly, some initiatives identified to reduce risks and anticipate opportunities arising from climate change.

This NFS (see the paragraph “**Information on eco-sustainable economic activities**”) includes the information required by Article 8 of the EU Regulation 2020/852 on the taxonomy of the European Union on sustainable activities. The EU taxonomy establishes the conditions that an economic activity must meet to be considered sustainable. Inside the present NFS the values of capex, opex and eligible revenues are reported and aligned to the six environmental objectives provided for in the EU taxonomy. Hera has decided to bring forward a year’s reporting of the share of aligned capex, opex and revenues. With this report, Hera continues to bring forward by one year the obligation to report the share of capex, opex and aligned revenues established by the aforementioned EU Regulation and subsequent delegated acts EU 2021/2139 amended by delegated act 2023/2485, which regulates the eligibility and alignment of activities included in the Taxonomy according to the environmental objectives of climate change mitigation and adaptation, EU 2021/2178, as amended by Delegated Act 2023/2485, which specifies the disclosure and transparency requirements for companies subject to annual non-financial reporting, EU 2022/1214, which introduced the production of nuclear energy and energy from fossil gas among the activities eligible for the Taxonomy, EU 2023/2486 which regulates the eligibility and alignment of activities included in the Taxonomy according to four additional environmental objectives (i.e. sustainable use and protection of water and marine resources, transition to a circular economy, prevention and reduction of pollution, and protection and restoration of biodiversity and ecosystems). In this report, not only the indicators related to activities eligible under the four of the six environmental objectives (Climate Change Mitigation, Climate Change Adaptation, Sustainable Use and Protection of Waters and Marine Resources, Transition to a Circular Economy, Pollution Prevention and Control, and Protection and Restoration of Biodiversity and Ecosystems) are reported, but also those related to aligned activities.

The information required by the obligations under the Regulation is accompanied by a **few additional elements**, such as the comparison between the Taxonomy Ebitda and the “Shared-value Ebitda” (CSV Ebitda) that the Group has been reporting since 2016.

The reporting process

In addition to the criteria listed above, this sustainability report was drafted in accordance with a specific **internal procedure** introduced by the Group in 2012 and updated in 2015 and 2019. This procedure sets out the activities required for planning, carrying out, approving, disclosing and presenting the report, as well as the related roles and responsibilities.

The **shared value and sustainability targets** in this NFS were defined based on the planning and control tools used by the Group: the 2023-2027 Business plan, the 2024 budget and the 2024 balanced scorecard. These interconnected tools contain sustainability objectives which have an impact on stakeholders. In particular, the Business plan includes sustainability and share value related indicators for which quantitative targets have been defined.

The **collection** and **consolidation** of the information and data reported in the sustainability report was carried out through the use of a dedicated software: the data and information were directly communicated via the software by the contact persons and were subsequently validated by the persons designated in the internal procedure.

[2-4]

In order to ensure consistency and comparability in the information, where considered necessary to correct any errors or take into account changes in the measurement methodology of the indicators or in the nature of the activity, the quantitative data presented and relating to previous periods may be recalculated and restated with respect to what was published in the previous year’s NFS. The relevant indications, recalculation criteria and effects are highlighted in the corresponding chapters and paragraphs.

Management Review Committee and work group
[2-3]

This sustainability report was prepared by Hera Spa’s Shared Value and Sustainability Department (bs@gruppohera.it) with the participation of numerous contact persons, both in terms of data collection and for the descriptions and comments. The preparation and supervision of this work, as well as the approval of the improvement targets and of the document to be submitted to the Board of Directors, was carried out by the Management Review Committee, made up of the Executive Chairman of the Board of Directors, the CEO and 17 Group managers.

We would like to thank the 338 people who contributed in various ways to drafting this report.

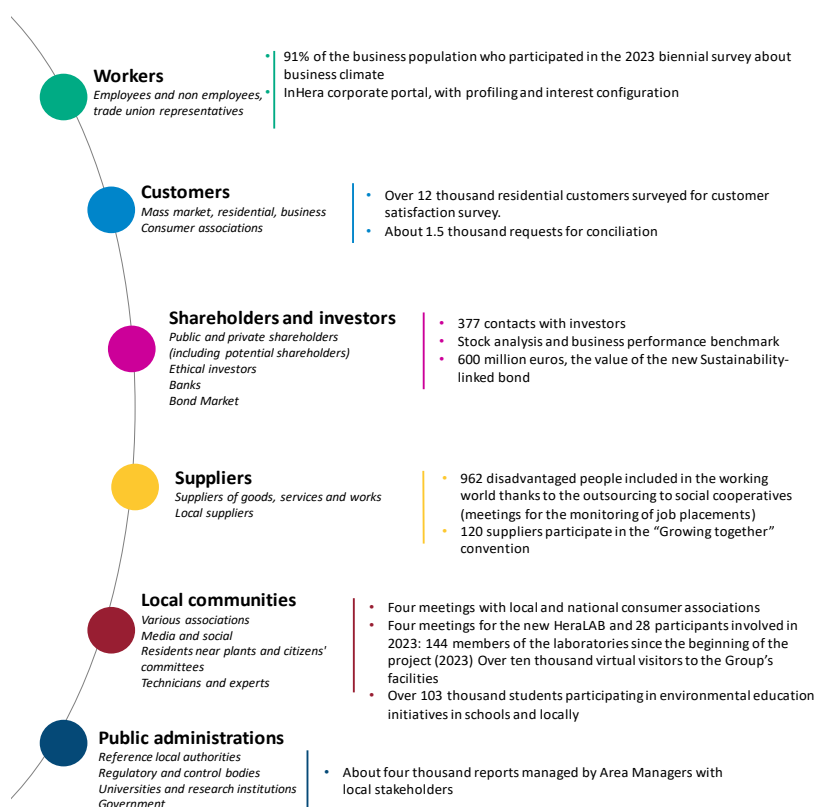
Auditing the report
[2-5]

This Consolidated Non-Financial Statement has undergone a limited audit by Audirevi S.p.A. in accordance with the principles and guidance contained in ISAE 3000 (International Standard on Assurance Engagements 3000 - Revised) of the International Auditing and Assurance Standards Board

(IAASB). The Independent Auditors' Report is attached to this document. Note that the quantitative information in this non-financial statement that does not refer to the indicators reported in the "Index of GRI contents" was not specifically examined by Audirevi Spa. This information has been reported on a voluntary basis, partially based on the materiality analysis, to supplement the requirements of Legislative Decree 254/2016 and the reporting standards adopted by the Hera Group.

Stakeholders and materiality analysis

The Hera Group's **stakeholder map** was defined based on a survey of the company's stakeholders. Each stakeholder category identified presents particular interests and priority topics and its input has been received through communications and involvement initiatives. The infographic below shows a summary of the stakeholders identified and the main dialogue and consultation activities carried out during the year. For detailed information, see the section entitled "[Communication with our stakeholders](#)" (in the chapter "Governance and creating value").



Materiality analysis and definition of the contents

The Group's sustainability reporting is preceded each year by a process that consists in **analysing and identifying material topics** for the Hera Group and its stakeholders. More specifically, the process is in line with the **GRI Universal Standards** published in 2021 (GRI 3). An analysis of internal and external sources has made it possible to identify and analyse the impacts generated or undergone by the Group, which are useful for prioritising the material topics presented in this section.

In line with the new ESRS standard (European Sustainability Reporting Standards) introduced by the EU Directive 2022/2464 (**CSRD** - Corporate Social Responsibility Directive) a first exercise was made to

integrate the impact materiality (inside-out perspective) with **financial materiality** (outside-in perspective). To this end, the following **internal sources** were analysed:

- Main **economic, reputational and sustainability risks considered as relevant** and the new emerging risk scenarios identified by the Enterprise Risk Management Analysis presented to the Board of Directors in early 2023;
- Progress of the annual **climate risk analysis**;
- **2023-2027 Business plan**, in which the Group's strategic lines are evident;
- Growth of **shared value activities** that, in line with the Business Plan, will have a greater impact on the increase in Shared-value Ebitda.

Furthermore, in order to understand the **external context and identify the material topics**, the following sources were analysed, among others:

- The scenario of **global, European, national and local policies** regarding the three drivers identified for creating **shared value**: pursuing carbon neutrality, regenerating resources and closing the circle, and enabling resilience and innovating;
- **Legislative and regulatory changes** in the sectors in which the Hera Group operates;
- The main critical issues and significant elements that emerged from the **press review**;
- The new European ESRS sustainability standards to be used from the 2024 budget onwards.

Finally, the results of the **main stakeholder communication activities**, thanks to numerous activities organised during the year, have been also analysed, in. In particular:

- the topics identified during HeraLABs, the results of the annual customer satisfaction survey,
- the topics discussed in the communications with consumer associations,
- the results of the business climate internal survey conducted in 2023,
- the issues that emerged from the latest update of the Code of Ethics and the work of the Ethics Committee on the management of reports received.

Each impact generated or suffered resulting from this analysis was then identified as positive or negative, actual or potential. Based on these parameters, the individual impacts were assessed depending on the severity and the probability of occurrence.

As a result of the evaluation phase, the impacts were grouped into topics and sorted by **priority** on the basis of their assessment.

[2-14]

The results of the material topic analysis are validated annually by the **Management Review Committee** and the Group's **Ethics and Sustainability Committee**.

Breakdown of the information required by Italian Legislative Decree No. 254/2016 and material topics in order of priority

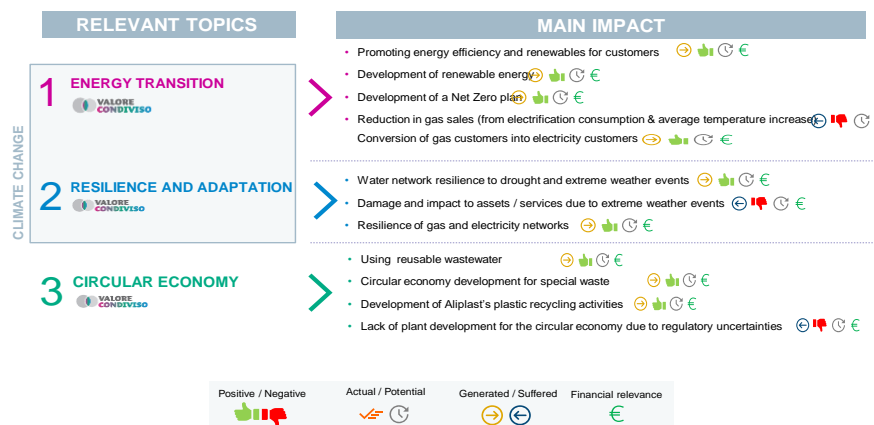
[2-25]

[3-2]

[3-3]

The **most important material topics** emerged from the analysis of materiality were: energy transition, resilience and adaptation (climate change in particular) and circular economy, all widely reported within the NFS.

The topic "Resilience and adaptation" has become more important than in the 2022 NFS, while the topics "Safety, cost and continuity of the service" (regarding the cost of services) and "Innovation and digital transition" have become less important. In addition, the topic "Quality and consumption of network water" is no longer material.




Compared to the analysis carried out for the 2022 sustainability report, the following stand out:




- The merging of two topics (Energy Efficiency and Renewables and Climate Change) into one called “Energy Transition”;
- The renaming of a topic (Anti-bribery activities) into “Corporate Conduct”, which also includes the results of the listening activities for the updating of the Code of Ethics and the activities of the Ethics and Sustainability Committee.




Within this report, each sphere of Legislative Decree 254/2016 has been taken into consideration, in accordance with current legislation. The various material topics identified by the analysis mentioned above are consistent with Legislative Decree 254/2016 on non-financial disclosures.






The following table summarises the material topics, listed **in order of relevance**, along with the impacts identified and an indication of their nature (impacts generated or suffered, positive or negative impacts, actual or potential impacts), and their relationship with the aspects of Legislative Decree 254/2016. In addition, for each topic, the commitments, policies and management methods put into practise by the Group are described and references are given to the paragraphs of this report along with a description of the actions, objectives and targets considered to manage the impacts, whether positive or negative.




Material topics and impact description	Legislative Decree 254/16	Commitments, policies and management methods	Actions, objectives, targets and monitoring
Energy transition The Hera Group, as an energy service provider, offers solutions aimed at energy efficiency and decarbonisation. Hera also promotes a wider use of renewable energy, which it generates especially by using organic waste as a source (e.g.: biomethane), and through geothermal and photovoltaic plants, provides its customers with dedicated offers. Even internally, Hera is committed to reducing energy consumption and using renewable energy. Hera is committed to reducing its consumption and using renewable electricity to cover its internal consumption. The Group is committed to reducing greenhouse gas emissions and, to this end, has set targets for all scopes validated by the Science Based Targets initiative.			
Impacts generated: - Development of green energy deals for customers (positive; actual) - Development of renewable energy and testing of innovative solutions (positive; potential) - Energy efficiency of customers (households, businesses and public administrations) (positive; actual) - Development of a decarbonisation plan with the goal of achieving “net zero emissions” by 2050 (positive; potential) - Electrification of energy consumption (positive; potential) - Promoting cultural change to support energy transition (positive; actual)		Declarations of commitment: - Greenhouse gas emission reduction targets to 2030 approved by SBTi - Drafting this report and, specifically, the “ Climate change mitigation ” section, following the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD) and the European Union Guidelines on Climate-related Disclosures - Annual participation in the CDP project Policies: - Quality and Sustainability Policy - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation)	The actions, objectives, targets and their monitoring in reference to the impacts of this topic are reported within the paragraph “ Climate change mitigation ”, “ Promoting energy efficiency ” and “ Energy transition and renewables ”. (“Energy” chapter). This material topic affects the progress of CSV Ebitda. For more information please see the paragraph “ Shared Value ” (“Sustainable strategy and shared value” Chapter). The paragraph “ Energy transition and renewables ” explains how the development of biomethane is an example of circular economy and has a direct positive impact on the community, feeding the national gas network. Within this sustainability report, the final results of the four targets in line with the “well below 2 degrees” reduction scenario, approved by SBTi, have been reported. The management of this material topic affects the Hera Group’s performance in the ESG ratings described in the paragraph “ Shareholders and financial institutions ”. This material topic is associated with incentive targets linked to the variable remuneration of executives and managers (for details see the section “Incentives also depend on sustainability”).
Impacts suffered: - Reduction in gas sales due to electrification of consumption (negative; potential) - Reduction in gas sales due to average temperature increase (negative; potential)		Management systems: - ISO 14001 environmental certification - ISO 50001 energy efficiency certification - EMAS registration	












Material topics and impact description	Legislative Decree 254/16	Commitments, policies and management methods	Actions, objectives, targets and monitoring
Resilience and adaptation The Hera Group, as a waste management, water service and gas and electricity distribution provider, is committed to a resilient management of its own networks and plants, with a view to adapting to external events, in particular those due to climate change.			
Impacts generated: - Management of flood emergency in Emilia-Romagna and support to affected populations (positive; actual) - Resilience of gas and electricity networks to cope with the energy transition and national targets for the electrification of consumption (positive; potential) - Resilience of water network to cope with drought and extreme weather conditions, to reduce the risk of water scarcity (positive; potential)	 	Policies: - Quality and Sustainability Policy - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation) Management systems: - ISO 9001 Quality Certification - Ongoing implementation of the ISO 22301 Business Continuity Management System	The Group's activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the paragraph " Resilience and adaptation ". This material topic affects the progress of CSV Ebitda. For more information please see the paragraph " Shared Value " ("Sustainable strategy and shared value" Chapter). The management of this material topic affects the Hera Group's performance in the ESG ratings described in the paragraph " Shareholders and financial institutions ". This material topic is associated with incentive targets linked to the variable remuneration of executives and managers (for details see the section "Incentives also depend on sustainability"). UN 2030 Agenda: SDGs: 7, 13
Impacts suffered: - Regulatory measures to combat water scarcity and strengthen water infrastructure (positive; actual) - Reduced availability of water sources (negative; potential) - Risk of floods and inundations (negative; potential) - Potential damage to property assets as a result of extreme natural phenomena, also caused by climate change (negative; potential) - Potential damage to property assets as a result of extreme natural phenomena (negative; potential)			
Circular economy The business model of the Hera Group is increasingly oriented towards the circular economy. Hera is committed, in fact, to increasing recycling and recovery, reducing landfill diversion, promoting initiatives for waste prevention and improving its internal circulation.			
Impacts generated: - Development of Aliplast's plastic recycling activities (positive; actual) - Development of the circular economy for special waste, also thanks to corporate partnerships with companies		Declarations of commitment: - Ellen MacArthur Foundation New Plastics Economy Global Commitment Policies: - Quality and Sustainability Policy - Code of Ethics and its	The Group's activities, commitments, targets and initiatives with regard to the impacts of this topic are reported in the sections " Transition towards a circular economy " and " Economic value for stakeholders ". This material topic affects the progress of CSV Ebitda. For more

Material topics and impact description	Legislative Decree 254/16	Commitments, policies and management methods	Actions, objectives, targets and monitoring
<p>(positive; potential)</p> <ul style="list-style-type: none"> - Reuse waste water to cope with drought and extreme weather conditions, to reduce the risk of water scarcity (positive; potential) - Recovery of materials and energy from waste collection (positive; actual) <p>Impacts suffered:</p> <ul style="list-style-type: none"> - Lack of plant development for the circular economy, caused by regulatory uncertainties (negative; potential) - Development of the customer base thanks to new tenders that prefer circular economy solutions in public lighting (positive; potential) 		<p>implementation system (Ethics and Sustainability Committee and its rules of operation)</p> <p>Management systems:</p> <ul style="list-style-type: none"> - ISO 14001 environmental certification - Circular Economy Project Management System (Afnor XP X30-901) 	<p>information please see the paragraph “Shared Value” (“Sustainable strategy and shared value” Chapter).</p> <p>This paragraph also includes the following benchmarks: comparison of sorted waste indicators with national performance; comparison of final destination of waste with Italy and Europe; comparison of network losses with national averages and the main Italian utilities.</p> <p>The management of this material topic affects the Hera Group’s performance in the ESG ratings described in the paragraph “Shareholders and financial institutions”.</p> <p>This material topic is associated with incentive targets linked to the variable remuneration of executives and managers (for details see the section “Incentives also depend on sustainability”).</p> <p>UN 2030 Agenda: SDG: 12, 17</p>
Air and soil protection			
<p>Impacts generated:</p> <ul style="list-style-type: none"> - Environmental impacts of waste treatment plants (NIMBY syndrome) (negative; actual) - Development of the land reclamation segment also thanks to corporate acquisitions (positive; potential) - Development of district heating from cogeneration and recovery (positive; potential) - Development of sustainable mobility (positive; potential) <p>Impacts suffered:</p> <ul style="list-style-type: none"> - Potential damage to property assets with negative consequences and consequent loss of reputation (negative; potential) - Development of efficient and renewable district heating, also thanks to the funds of the National Recovery and Resilience Plan (NRRP) (positive; potential) 		<p>Policies:</p> <ul style="list-style-type: none"> - Quality and Sustainability Policy - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation) <p>Management systems:</p> <ul style="list-style-type: none"> - ISO 14001 environmental certification - ISO 9001 Quality Certification - EMAS registration for several sites with waste treatment plants - Laboratory Accreditation ISO 17025 	<p>The Group’s activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the sections “Transition towards a circular economy”; “Protection of air, land and biodiversity” and “Sustainable management of water resources”.</p> <p>This paragraph also includes the following benchmarks: atmospheric emissions from WTE plants compared to legal limits (details by parameter and by plant), atmospheric emissions from WTE plants compared to authorisation limits, atmospheric emissions from the Imola cogeneration plant compared to legal and authorisation limits, comparison of the percentage of low environmental impact vehicles between Hera and the main Italian utilities.</p> <p>The management of this material topic affects the Hera Group’s performance in the ESG ratings described in the paragraph “Shareholders and financial institutions”.</p> <p>UN 2030 Agenda: SDGs: 11, 12</p>
Quality and costs of waste collection and city cleanliness			
<p>Impacts generated:</p> <ul style="list-style-type: none"> - Citizens’ perception of the quality of waste management services (reorganisations and door to door) (negative; actual) - Quantitative and qualitative 	 	<p>Policies:</p> <ul style="list-style-type: none"> - Quality and Sustainability Policy - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation) 	<p>The Group’s activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the paragraph “Transition towards a circular economy”.</p> <p>This paragraph also includes the</p>

Material topics and impact description	Legislative Decree 254/16	Commitments, policies and management methods	Actions, objectives, targets and monitoring
development of separate collection, also thanks to targeted pricing (positive; potential) - Level of environmental projects in line with local needs (positive; actual)		Management systems: - ISO 9001 Quality Certification	following benchmarks: comparison of sorted waste indicators with national performance; comparison of final destination of waste with Italy and Europe; comparison of network losses with national average and the main Italian utilities. The paragraph " Cost of services " provides a comparison of the cost of waste management services for Hera's household and non-household customers and the average for Italy, northern Italy and the main cities in Italy UN 2030 Agenda: SDG: 12
Safety, cost and continuity of the service			
Impacts generated: - Increased cost of energy services (negative; actual) - Cost of district heating service (negative; actual) - Cost of the water supply service (negative; actual)		Policies: - Quality and Sustainability Policy - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation) Management systems: - ISO 9001 Quality Certification - Ongoing implementation of the ISO 22301 Business Continuity Management System	The Group's activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the paragraph " Cost of services ". This paragraph also includes the following benchmarks: comparison of the change in Hera bills over the years, comparison of expenditure from consumption of bottled or tap water.
Sustainable management of water resources			
Impacts generated: - Completion of actions under water safety management plans (positive; potential) - Completion of wastewater treatment plant and sewer network (positive; potential) - Water saving also to reduce the risk of water scarcity (positive; potential)		Declarations of commitment: - UN CEO Water Mandate Policies: - Quality and Sustainability Policy - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation) Management systems: - ISO 14001 environmental certification - ISO 9001 Quality Certification - Aws certification for the Setta Valley drinking water plant	The Group's activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the paragraph " Sustainable management of water resources ". This paragraph also includes the following benchmarks: quality comparison between water distributed by Hera and natural mineral water on the market, quality of purified water compared to legal limits, percentage of analyses of water leaving purification plants that comply with the law. The management of this material topic affects the Hera Group's performance in the ESG ratings described in the paragraph " Shareholders and financial institutions ". UN 2030 Agenda: SDG: 6
Training and professional development, remuneration and incentives			
Impacts generated: - Development of valuable professional figures (positive; actual) - Support to work-life balance (positive; actual)		Policies: - Quality and Sustainability Policy - Remuneration policies - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation)	The Group's activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the sections " Management of skills and training ", " Professional development " and " Welfare ".

Material topics and impact description	Legislative Decree 254/16	Commitments, policies and management methods	Actions, objectives, targets and monitoring
		Management systems: <ul style="list-style-type: none"> - ISO 9001 Quality Certification - Health and safety ISO 45001 certification - ISO 37001 corruption prevention certification - Certification for SA 8000 social responsibility and SA 8000-inspired management systems 	<p>These paragraphs also include the following benchmark: comparison of average hours per capita in the main Italian utilities.</p> <p>The management of this material topic affects the Hera Group's performance in the ESG ratings described in the paragraph "Shareholders and financial institutions".</p> <p>UN 2030 Agenda: SDG: 8</p>
Occupational health and safety			
Impacts generated: <ul style="list-style-type: none"> - Accidents at the workplace, including Group supplier sites. (negative; potential) 	 	Policies: <ul style="list-style-type: none"> - Quality and Sustainability Policy - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation) Management systems: <ul style="list-style-type: none"> - Certification for SA 8000 social responsibility and SA 8000-inspired management systems - ISO 45001 occupational safety certification 	<p>The Group's activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the sections "Health and safety" as regards employees and "Contract management" as regards suppliers.</p> <p>This paragraph also includes the following benchmarks: frequency rate comparison among Italy's main utilities.</p> <p>The management of this material topic affects the Hera Group's performance in the ESG ratings described in the paragraph "Shareholders and financial institutions".</p>
Supply Chain Management			
Impacts generated: <ul style="list-style-type: none"> - Accomplishment of Hera's Goal also through the involvement of suppliers (positive; actual) Impacts suffered: <ul style="list-style-type: none"> - Inability to provide services or works by the supplier using subcontractors (negative; potential) 		Declarations of commitment: <ul style="list-style-type: none"> - Utilitalia's pact for inclusion in the company Policies: <ul style="list-style-type: none"> - Quality and Sustainability Policy - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation) Management systems: <ul style="list-style-type: none"> - Certification for SA 8000 social responsibility and SA 8000-inspired management systems - ISO 9001 Quality Certification - Management system for corruption prevention ISO 37001 	<p>The Group's activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the paragraph "Economic growth and social inclusion" and in the section "Suppliers".</p> <p>The management of this material topic affects the Hera Group's performance in the ESG ratings described in the paragraph "Shareholders and financial institutions".</p> <p>UN 2030 Agenda: SDG: 8</p>
Local development and social inclusion			
Impacts generated: <ul style="list-style-type: none"> - Accomplishment of Hera's Goal also through the involvement of customers and local community (positive; actual) - Continuous support to customers in difficulty and fight against energy poverty, 	 	Declarations of commitment: <ul style="list-style-type: none"> - Utilitalia's pact for inclusion in the company Policies: <ul style="list-style-type: none"> - Quality and Sustainability Policy - Code of Ethics and its implementation system (Ethics and Sustainability Committee 	<p>The Group's activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the paragraph "Economic growth and social inclusion".</p> <p>In the paragraph "Hera's contribution towards social inclusion", it is explained how the employment of</p>

Material topics and impact description	Legislative Decree 254/16	Commitments, policies and management methods	Actions, objectives, targets and monitoring
through instalment plans, (positive; potential)		and its rules of operation) Management systems: - Certification for SA 8000 social responsibility and SA 8000-inspired management systems - ISO 9001 Quality Certification	disadvantaged people through social cooperatives, in the area of entrustments, not only does it have a positive social impact on people entering the working world, but also an economic advantage for public administrations. The management of this material topic affects the Hera Group's performance in the ESG ratings described in the paragraph " Shareholders and financial institutions ". UN 2030 Agenda: SDG: 8
Commercial relations with customers			
Impacts generated: - Contract management not in line with expectations. (negative, actual) - Ethics Committee suggestions to the energy services sales company to improve the clarity and completeness of information provided to customers (positive; actual)		Policies: - Quality and Sustainability Policy - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation) Management systems: - ISO 9001 environmental certification	The Group's activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the paragraph " Customer relations ".
Diversity			
Impacts generated: - Consolidation of an inclusive work environment, reflecting people diversity (positive; actual) - Promotion of gender equality for Group workers (positive; potential)	 	Declarations of commitment: - Charter for equal opportunities and equality at the workplace (promoted by the Ministry of Labour and the Ministry of Equal Opportunities, Fondazione Sodalitas, Impronta Etica, AIDAF, AIDDA and UCID) - Value D Manifesto for female employment - Utilitalia's pact for inclusion in the company - Women's Empowerment Principles (WEPS) by UN Global Compact and UN Women Policies: - Quality and Sustainability Policy - Remuneration policies - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation) - Gender equality policy Management systems: - Certification for SA 8000 social responsibility and SA 8000-inspired management systems - Gender equality management system certification UNI PdR 125:2022	The Group's activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the sections " Economic growth and social inclusion " and " Job creation and jobs and development of new skills ". This paragraph also includes the following benchmark: women in senior roles in major Italian utilities. The management of this material topic affects the Hera Group's performance in the ESG ratings described in the paragraph " Shareholders and financial institutions ". UN 2030 Agenda: SDG: 5

Material topics and impact description	Legislative Decree 254/16	Commitments, policies and management methods	Actions, objectives, targets and monitoring
Innovation and digital transformation			
Impacts generated: - Development and installation of smart gas meters to promote efficiency and improvement of energy consumption measurement systems (positive; potential) - Commercial development of the telecommunications business (positive; potential)		Policies: - Quality and Sustainability Policy - Data protection policy - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation) Management systems: - ISO 9001 Quality Certification - ISO 27000 series information security certification (Acantho)	The Group's activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the paragraph " Innovation and digitalisation ". The management of this material topic affects the Hera Group's performance in the ESG ratings described in the paragraph " Shareholders and financial institutions ". UN 2030 Agenda: SDGs: 9, 11
Corporate culture			
Impacts generated: - Promotion and dissemination of positive behaviours, in line with the Group's purpose-driven Code of Ethics (positive; actual)	    	Policies: - Code of Ethics and its implementation system (Ethics and Sustainability Committee and its rules of operation) - Model for Corruption Prevention Management systems: - Organisational model for preventing offences against the company (Legislative Decree 231/2001) - ISO 37001 corruption prevention certification.	The Group's activities, commitments, objectives and targets with regard to the impacts of this topic are reported in the paragraph " Sustainability and risk management ". The management of this material topic affects the Hera Group's performance in the ESG ratings described in the paragraph " Shareholders and financial institutions ".
Topics of Legislative Decree 254/16:  Environment;  Social;  Personnel;  Human rights;  Preventing active and passive corruption			

Policies, management systems and other declarations of commitment

The main **management systems** (Article 3.1(a) of Legislative Decree 254/2016) adopted by the Group, with regard to the topics falling under Legislative Decree 254/2016, are:

- Organisational model for preventing offences against the company (Legislative Decree 231/2001)
- Management system for corporate social responsibility or Supplier audit system based on criteria similar to those of SA 8000
- Environmental Management System ISO 14001
- Quality Management System ISO 9001
- Energy Efficiency Management System ISO 50001
- Occupational Safety Management System ISO 45001
- Management system for corruption prevention ISO 37001
- Data Security Management System ISO 27000
- Laboratory Accreditation ISO 17025
- Circular Economy Project Management System (Afnor XP X30-901)
- Ongoing implementation of the ISO 22301 Business Continuity Management System
- EMAS registration
- Management system for gender equality UNI PdR 125:2022

For an overview of the certifications held by the Group in relation to these management systems, see the chapter "[Governance and Creating value](#)".

The **company's policies** (Article 3.1(b) of Legislative Decree 254/2016), again with regard to these topics, are as follows (published on the Group's website):

- [Code of Ethics](#) and its implementation system (Ethics and Sustainability Committee and its rules of operation)

- [Gender equality policy;](#)
- [Quality and Sustainability Policy;](#)
- [Data protection policy;](#)
- [Remuneration policies](#)
- [Model for Corruption Prevention.](#)

The Hera Group has also signed the following declarations of commitment:

- Charter for equal opportunities and equality at work (promoted by the Ministry of Labour and the Ministry of Equal Opportunities, Fondazione Sodalitas, Impronta Etica, AIDAF, AIDDA and UCID) (2009)
- Value D Manifesto for female employment (2017)
- Ellen MacArthur Foundation New Plastics Economy Global Commitment (2018)
- Utilitalia's pact for inclusion in the company (2019)
- CSR Europe CEOs call "a New Deal for Europe" (2019)
- UN CEO Water Mandate (2019)
- WBCDS Human Rights CEO Guide (2021)
- Women's Empowerment Principles (WEPs) by UN Global Compact and UN Women (2022)
- CO₂ Coalition Italy, formal commitment to achieve climate neutrality (2022)
- Manifesto "Together to Fight Energy Poverty" promoted by the Energy Bank (2021)
- Manifesto "Business for People and Society" promoted by da UN Global Compact Network Italy (2023)

It adheres to the following internationally significant organisations/programmes:

- UN Global Compact (Hera is a founding member of the Global Compact Network Italy Foundation)
- Ellen MacArthur Foundation

Hera's **risk management model** (Article 3.1, letter b) of Legislative Decree 254/2016) has been also integrated with environmental and social issues, as described within the paragraph "[Sustainability and risk management](#)".

The attachments to this report contain two tables correlating the material topics to the management policies/methods and risks identified by the Enterprise Risk Management Analysis.

1. SUSTAINABLE STRATEGY AND SHARED VALUE

1.01 About us

[2-1]
[2-6]

The Hera Group is one of Italy's leading multi-utility companies, and provides **4.2 million residents** with a sustainable management of **multiple public services in 311 municipalities** spread across five of the country's regions (Emilia-Romagna, Veneto, Friuli-Venezia Giulia, Marche and Tuscany). AresGas, a subsidiary of AcegasApsAmga, provides methane gas distribution, sales services and electricity sales to about 28 thousand customers in Bulgaria. The Group is also present in other European countries by way of the plastic recycling plants owned by subsidiary Aliplast.

The Hera Group provides **energy** (gas and electricity distribution and sales), **water** (aqueduct, sewerage and purification) and **waste management** (waste collection, recycling and treatment) services to residents and businesses.

The Group's main strengths are:

- a balance between free market services (gas and electricity sales, waste recycling and treatment) and regulated services (gas and electricity distribution, integrated water services and waste collection, recycling and treatment);
- a strong local presence and focus on aspects of sustainability;
- a diversified shareholder base, with approximately 25,000 shareholders.

Hera's
leadership
confirmed in all
sectors in Italy

The **Hera Group** ranks among the top companies nationwide in all business areas in which it operates, ahead of other listed companies:

1st operator in the waste management sector by waste treated

2nd operator in the water cycle by volume of water delivered

3rd operator in gas and electricity sales by number of customers

4th operator in gas distribution by volume delivered

5th operator in electricity distribution in terms of volumes distributed.

5th operator in public lighting by number of lighting points managed

Internal calculations on 2022 data

Services
managed
[2-6]

Hera's growth has been achieved with a strong focus on aspects of sustainability in managing regulated services (gas and electricity distribution, water services and waste collection) and on the free market (special waste disposal, gas and electricity sales). This development has taken place in a balanced way across the various sectors, creating shared value for local areas and putting sustainability and quality at the centre of the services managed.

	Energy Services	Integrated water service	Waste management services
	Gas and electricity sales and distribution, district heating, heat management and public lighting	Civil and industrial aqueduct, sewerage and purification	Collection, recovery, treatment and disposal of municipal and special waste
Customers	Gas: 2.1 million Electricity: 1.7 million District heating: 13 thousand	Water: 1.5 million	
Municipalities served	Gas distribution: 222 Electricity distribution: 26 District heating: 16 Public lighting: 210	Aqueduct: 227 Sewage and wastewater treatment: 228	Waste collection: 188
Residents served	3.4 million	3.6 million	3.2 million
Volumes	Gas sold: 10.7 bn m ³ Electricity sold: 14.5 TWh	Water sold: 283.4 mn m ³	Municipal waste treated: 2.3 mn t Treated waste: 7.7 mn t

RESIDENTS AND MUNICIPALITIES SERVED IN LOCAL AREAS (REGULATED SERVICES)

Local area	Group Companies	Energy Services	Water services	Waste management services	At least one service
Bologna	Hera	825 thousand (94%)	861 thousand (99%)	771 thousand (88%)	861 thousand (99%)
Ferrara	Hera	286 thousand (84%)	245,000 (72%)	130,000 (38%)	299,000 (88%)
Forlì-Cesena	Hera	322 thousand (82%)	392 thousand (100%)	213,000 (54%)	392 thousand (100%)
Imola-Faenza	Hera	193,000 (76%)	254,000 (100%)	254,000 (100%)	254,000 (100%)
Modena	Hera	477 thousand (68%)	472 thousand (67%)	491 thousand (70%)	491 thousand (70%)
Padua	AcegasApsAmga	207,000 (22%)	297,000 (32%)	289,000 (31%)	359 thousand (39%)
Pesaro-Urbino	Marche Multiservizi	240,000 (61%)	273,000 (69%)	262,000 (67%)	318,000 (81%)
Ravenna	Hera	237 thousand (87%)	273,000 (100%)	273,000 (100%)	273,000 (100%)
Rimini	Hera	35,000 (10%)	336 thousand (100%)	320 thousand (95%)	336 thousand (100%)
Trieste	AcegasApsAmga	216,000 (94%)	226,000 (99%)	199,000 (87%)	229,000 (100%)
Udine and Gorizia	AcegasApsAmga	390,000 (59%)	-	-	390,000 (59%)
Hera Group		3.4 million (64%), 226 municipalities	3.6 million (67%), 228 municipalities	3.2 million (60%), 188 municipalities	4.2 million, (78%), 311 municipalities

Number of municipalities, resident citizens and percentage with respect to the total number of residents in the province or local area (at 1 January 2023; source: ISTAT) in which Hera manages at least one energy service (gas, electricity or district heating distribution), water service (aqueduct, sewerage or purification) or waste management service (sorted waste collection, non-sorted waste collection and street sweeping). The Imola-Faenza area includes three municipalities in the province of Florence, in which Hera manages energy, water and waste management services. The Padua area includes one municipality in the province of Venice in which AcegasApsAmga manages water services. The Pesaro-Urbino area includes six municipalities in the province of Ancona where Marche Multiservizi manages waste management services through its subsidiary Marche Multiservizi Falconara and two municipalities in the province of Rimini.

Mission

Hera aims at being the best multi-utility in Italy for its customers, workforce and shareholders. It intends to achieve this by further developing an original corporate model capable of innovating and forging strong links with the areas served, while respecting the local environment.

For Hera, being the best is a source of pride and trust for:

- **customers**, who receive quality services that meet their expectations, thanks to Hera's constant responsiveness;
- **employees**, because the women and men who work for the company, with their skills, engagement and passion, are the foundation of its success;
- **shareholders**, confident that the economic value of the company will continue to be generated, in full respect of the principles of social responsibility;
- **the local areas served**, because economic, social and environmental wealth represents the promise of a sustainable future;
- **suppliers**, because they are key elements in the value chain and partners in growth.

Values

Integrity, a Group made up of fair and loyal people

Transparency, sincerity and clarity towards all stakeholders

Personal responsibility, committed towards the good of the company together
Consistency, doing what we say we will do.

Operational Principles

Sustainability and shared value: a company built to last, and to improve society and the environment for future generations

Service quality and excellence: focus on customers, will full coherence

Efficiency: making the most of available resources

Innovation and continuous improvement: a team that generates ideas and makes things better

Involvement and valorisation: sharing knowledge for improvement

Desire to choose: selecting the most useful solution for growth

The Company's Mission, Values and Operational Principles have been drawn up with the involvement of all Hera Group employees and approved by the Board of Directors of Hera Spa. They can be found, set out in full, on the Group's website, on the company's intranet and in its Code of Ethics, which is subject to review every three years and will be updated in 2022.

The "purpose" included in the Articles of Association

On 28 April 2021, the Shareholders Meeting approved the inclusion in the Articles of Association of Hera, one of the first companies to do so in Italy, of the **concept of "purpose", with a focus on creating shared value**. More specifically, an additional paragraph was inserted in Article 3 to explain the Group's **corporate purpose**, i.e. the objectives it aims to achieve in carrying out its business activities, and thus affirm **its commitment to sustainability**, which has characterised it since its establishment.

The new paragraph reads as follows: "The Company's business model aims at long-term value for its shareholders, by creating a value that is shared with its stakeholders. For this purpose, the Company organises and carries out its business activities also in order to promote social equity and contribute to achieving carbon neutrality, the regeneration of resources and the resilience of the system of services managed, for the benefit of its customers, the local ecosystem and future generations (Hera for the Planet, People and Prosperity)".

The updated Articles of Association – in line with the new Corporate Governance Code of Borsa Italiana and best practices at European level – further strengthen the Hera Group's commitment to the **energy transition** and the **circular economy**, through **innovation** and **digitisation**, as well as to promoting **social equity**.

Major recognitions in 2023

The Hera Group's path of growth can also be traced through the awards received by the company. The most important recent recognitions include:

- **Dow Jones Sustainability Index (DJSI):** Hera was included for the fourth consecutive year in the Dow Jones Sustainability Index and was among the "Top 1%" in S&P Global's Sustainability Yearbook;
- **Inclusion in Bloomberg's MIB ESG index:** for the fourth consecutive year, Hera was part of the international index that evaluates outstanding companies for their policies on gender equality, diversity and inclusion;
- **Integrated Governance Index 2023:** Hera ranked first among Italian companies for fully and consciously integrating sustainability policies into its business strategies;
- Hera was among the best companies in the world in Refinitiv's **Diversity&Inclusion** Index;
- **Top Employers 2024** award (among the top three companies in Italy, out of 2,300 companies analysed in 121 countries around the world) for Hera's strategy of putting people at the centre of welfare, training and diversity, promoting work agility and digitisation.

1.02 The Hera Group for the Planet, People and Prosperity

Putting the figures in relation to the world

Planet, People and Prosperity: the world that Hera wishes to “give” to its numbers is made up of these three “P”s, which are projected towards the horizon its business as the very reason for its existence. This is why they are not simply letters.

Each of these “P”s, in other words, identifies a sphere that becomes part of a dynamic and circular relationship with the Group, representing at the same time a goal and a tool, an objective - in other words - whose progressive achievement serves the company itself.

To the precise extent that it cares for the planet, protecting its balances, regeneration and biodiversity, Hera can in fact encourage rebalancing in the use of the natural resources on which the very services it provides depend and, when possible, their regeneration.

And it is precisely by caring about people—and therefore promoting their rights, dignity, knowledge and perspectives—that the Group can strengthen a wide range of motivated stakeholders who are also active participants in this new balance.

Lastly, by contributing to the prosperity, fairness and harmony of the system in which it operates, Hera can look with confidence towards a social and economic context that, even in the medium and long term, is conducive to its growth and the development of its businesses, with a view to creating shared value.

Already at the heart of the agenda of the G20 chaired by Italy in 2021, the requests underlying “Planet, People and Prosperity” well respond to the **demands that have globally emerged from crises of various kinds**, definitively dismissing the possibility of planning the well-being of society in watertight compartments. They also provide a comprehensive summary of the value-related horizon common to the most significant new business and development models that are currently being developed.

These are important cornerstones, which focus on the central role played by stakeholder value and on the driving role of the company’s social purpose. As such, **Hera has largely anticipated** these issues, and is now able to include under these three “P”s the many results achieved over the years, the historical evolution of its **approach to sustainability**, its **mission** and, ultimately, its very **purpose**, which in 2021 became an integral part of the company’s Articles of Association.

The **balanced scorecard system**, which has been positively guiding the actions and goals of the entire management team for seventeen years now, and the **Code of Ethics**, are also part of this framework. Introduced in 2007 and updated every three years, on the occasion of the fifth revision, carried out in 2022 and one of the most participatory in its history, the Code now sees the corporate purpose extend across Group activities. New topics have been included and others strengthened, also in light of the changing sensitivities due to the major **changes** in the external scenario over the last three years. Since the purpose of this document is to affirm and update the strategic and cultural outlook with which Hera’s **Business plan** is drawn up every year, it is therefore no coincidence that the Plan to 2027 also outlines a wide range of actions for the energy transition, the circular economy and technological evolution, with concrete and innovative projects that can make full use of the funding opportunities of the National Recovery and Resilience Plan (NRRP).

Taken as a whole, these elements provide the framework within which Hera, for some time now, has been making **specific public commitments** in various fields, finding itself already **on the road to climate neutrality by 2050 mapped out by the European Union**. And that is not all: the Group’s operations are fully in line with the transition designed by the **sustainable development goals that the United Nations Agenda sets for 2030**: seven of these, in particular, involve business planning and management, but Hera also contributes - more indirectly - to four further targets.

These range from the reduction of climate-changing emissions to the promotion of renewable energies, from the sustainable use of water resources and the development of a circular economy and recycling of plastics, through to commitments on human rights, diversity and inclusion. These are all quite different challenges, united however by the common thread of a commitment that runs through them all: leaving a mark, not a footprint.

Reporting the shared value generated by Hera through its businesses - introduced in 2016 to mark a change of pace in the **integration of sustainability in the Group’s strategy** and made even more relevant by the continuous occurrence of systemic crises - thus fits into a broader perspective, as is described below in the paragraph “Alongside the protagonists of change”. The very mechanism by which shared value is created, after all, is as essential as it is delicate, and therefore needs to be shared by all players involved.

And so, by keeping the focus on the drivers of shared value creation updated in 2020, this report also takes the form of a narrative of the **stakeholder company** that Hera has never ceased to be, further confirming a business model characterised by values and operating principles that the sixth and most recent edition of the **Code of Ethics** brings together in a mature representation. What emerges is a legacy made up of assets but also of relationships, both of which are fundamental aspects for overcoming the many challenges of a transition that will continue to make sense to the exact extent that it knows how to give itself, always, a human and equitable face as well.

A number of recognitions, in this sense, confirm the correctness of the path taken by the Group: the first Italian multiutility to be included for the fourth consecutive year in the Dow Jones Sustainability Index (Djsi), one of the world's most authoritative stock market indexes assessing the social responsibility of listed companies. Again in 2023, Hera is confirmed among the world sustainability leaders in both the Dow Jones Sustainability World Index and the Dow Jones Sustainability Europe Index, achieving the highest rating in the Environmental and Social areas.

How we do what needs to be done

In order to achieve the many targets implied by the three “P”s, Hera commits all its energy to enhancing the economic, social and environmental impact of the primary services it provides, following an approach that combines the positive effects produced by stakeholder relations with those generated by creating shared value. For this reason, Hera constantly analyses the external context and continues to map the shifting links between the “Global Agenda”, European objectives and the company's own strategy, all of which are fundamental for identifying the most effective guidelines on which to focus ideas, investments, people and actions.

All this takes place while moving towards a change that the Group pursues in full consistency with the European principles of the **Just Transition**, that is, recognising people as the vital link between development, essential to the future of the company, and sustainability, essential to the company of the future. On the other hand, Hera is well ahead of the Brussels guidelines and has always been consolidating a true philosophy of inclusion, which embraces all types of stakeholders under the banner of a two-pronged strategy: involving them in the distribution of the value created and, at the same time, in the creation of the value to be distributed. This value, most importantly, is enriched with new aspects year after year, which are not solely financial (however important this may be) and whose intangible capital represented by “hard” and “soft” skills is becoming increasingly important. Because the often disruptive nature of the changes to be faced does not cease to demand, alongside sometimes new skills, an increasingly fresh and original reading of the situation, which we believe is important to share and build with everyone.

Planet

All drivers of change with which Hera creates shared value act in the direct interests of an increasingly hot planet, whose climate balances are being eroded and whose natural resources are being compromised by development models that are slow to move away from the linear paradigm. For Hera, this translates into a multifaceted commitment.

It includes, for example, the many actions taken by the Group aimed at “**pursuing carbon neutrality**” throughout its value chains, with actions ranging from promoting energy efficiency to the energy transition and renewable energy.

Hera is committed to “**regenerating resources and closing the circle**,” involving all managed businesses in the protection and regeneration of the planet's natural capital and creating partnerships aimed at increasing the circularity rate of the broader socioeconomic system.

Hera also works to “**enable resilience and innovate**.” Here, the objective is to encourage the adaptation of the areas served through an increasingly smart and resilient infrastructure, to guarantee continuity and sustainability in essential supplies, and also to promote the ongoing consistency of the innovation process, which especially in digital terms is accompanied by adequate governance of their economic, environmental and social impacts.

People

Hera also believes in the core value of people and uses its range of action to try to promote an active role for individuals, both inside and outside the company. Part of its business activities, linked to **economic growth and social inclusion**, as well as to **job creation and development of new skills**, directly contributes to creating Shared-value Ebitda, giving the driver of change dedicated to “Local areas (and businesses)” additional content.

Hera's commitment to managing relations with two special categories is fundamental: **workforce** and **suppliers**. Crucial players in overcoming important challenges, these stakeholders are involved by the

Group in numerous initiatives aimed at promoting health, safety, and the enhancement of diversity on the one hand, and transparency, quality, and sustainability of partner companies, public tenders, and contracting on the other. The issue of corporate welfare and, even more so, of training, with which Hera intends to take up a challenge that concerns not only the new generations but also the reskilling of previous ones, whose jobs are rapidly evolving, is decisive on this front.

These categories are then joined by **customers**, whom Hera seeks to involve in so many fundamental battles on recycling, saving and efficient use of resources, as part of a society that sees the notion of citizenship evolving on the principle of “doing together.”

Prosperity

Lastly, all the impact areas involved in **creating shared value**, and the entire system of relations with stakeholders go beyond a rationale of profit only for the few, and contribute in various ways to fair and widespread prosperity, concerning the various parties that interact with the company and also the interests of future generations. In other words, Hera is committed to the lasting, balanced and sustainable growth of its businesses and the socio-economic fabric that surrounds them, consolidating year after year a governance model that in 2023 alone transferred **2,037 million euro** to its stakeholders.

Our Commitment to Just Transition

Guided by the principles of the three “P’s” (Planet, People and Prosperity) that marked the G20 presided over by Italy in 2021, Hera embraces an integrated concept that has not only always guided the Group’s business model and sustainable development, but has also become the distinctive cultural trait to which the European Union itself has more recently consecrated its commitment to the Old Continent’s carbon neutrality.

Strategy

Fully in tune with Brussels, therefore, the Hera Group is also committed to system change that links its chances of success to the harmony with which it is pursued, in the conviction that no step forward, especially when characterised by disruptive technological innovations, can ever be lasting and fruitful unless it is fully shared by all. All this is reflected in the numerous initiatives reported in this report and with which Hera intends to tangibly contribute to the Community objective of the so-called ‘Just Transition’, a transition capable of combining climate action and social inclusion, a Community objective that has been set out among the principles to be followed in the sixth edition of the Code of Ethics approved by the Board of Directors in February 2023.

In designing and reporting on these initiatives, Hera therefore follows its own **Code of Ethics**, and operationally acknowledges itself in the framework defined by the Grantham Research Institute on Climate Change and the Environment and the London School of Economics and Political Science, a document that guides investors and companies through all the dimensions to be overseen in the interest of a transition that truly has a human aspect.

Workers

In this context, the importance assumed by the people of Hera, the Group’s workers, becomes essential, and it is no coincidence that Hera has made it the cornerstone of its Code of Ethics, a document - moreover - that stems from listening within the company itself. This focus on people is also evidenced by the periodic climate surveys involving the entire company population, the results of which form the basis for new improvement measures.

Without resorting to social buffers, the Group continues to guarantee high levels of employment stability, with 95.6% of workers employed on permanent contracts, and flexible corporate welfare, tailored to the needs and choices of the individual worker. And that’s not all: since transition is first and foremost a human matter, since 2006 Hera has linked its incentive systems to sustainability objectives and since 2016 to the creation of shared value, developing new skills and continuing to invest in safety, not to mention its commitment to consolidating gender balance, diversity protection and inclusion policies. Hera’s commitment was also confirmed by the certification to UNI/PdR 125:2022 for gender equality achieved in 2023 for the 11 largest companies.

Central to all this is the issue of reskilling, which Hera is working on in the knowledge that the many professions involved in its various businesses are and will be subject to an evolution that must be anticipated and governed, also by seizing and exploiting the opportunities arising from the presence of old and new generations in the company. Already today, for example, the increasing digitisation of activities and processes has the Corporate Digital Responsibility approach to prevent environmental and social footprints, maximising the benefits for all stakeholders involved.

See the following chapters of the paper for more details:

Local Area (and Business) - Enabling resilience and innovation

- [Job creation and development of new skills](#)

People:

- [Strategic planning of desired and future skills and roles](#)
- [Management of skills and training](#)
- [Professional development](#)
- [Welfare](#)
- [Health and safety](#)

Suppliers

In line with its Code of Ethics, Hera is committed to ensuring that its suppliers operate within a framework of absolute legality, in full protection of human rights and the environment, and under a strategy geared towards the sustainable development of the local areas served, to which - not by chance - 71% of the total wealth produced by the Group is transferred. The multi-utility also acts as a growth partner that empowers its supplier, giving it access to knowledge and technologies capable of improving its performance and consolidating its future prospects. Hera also pursues stable working conditions in its contracts, with employment protection clauses that safeguard the incomes of the families involved. Suppliers are the subject of dedicated monitoring - aimed at verifying, incentivising and rewarding their results in terms of corporate social responsibility - and represent a fundamental link in the value chain along which Hera intends to pursue the reduction of climate-changing emissions and promote the circular economy.

See the following chapters of the paper for more details:

Local Area (and Business) - Enabling resilience and innovation

- [Job creation and development of new skills](#)

Suppliers

- [Qualification, selection and assessment of suppliers](#)
- [Contract management](#)

Local communities

Team logic also permeates the broader relationship with local communities, to whose transition Hera contributes with its services, continuing to invest in innovating an infrastructure asset that will be increasingly decisive in meeting the challenges, especially climate change, of the coming years. The Group also involves the various players in the region in numerous projects dedicated to the environment, social inclusion and digitisation, thus reinforcing - in line with the United Nations' 17th Sustainable Development Goal dedicated to partnerships - the overall resilience of its socio-economic system. Reported in the sustainability report, these projects are in addition to the HeraLabs, authentic listening tools aimed at involving the stakeholders of the communities served in defining new improvement measures.

See the following chapters of the paper for more details:

Local Area (and Business) - Enabling resilience and innovation

- [Innovation and digitisation](#)
- [Economic growth and social inclusion](#)

Governance and creating value

- [Communications with our stakeholders](#)

Customers

Hera is committed to ensuring that its supplies are also accessible to the most vulnerable social categories, with safeguards in addition to those provided for by law and specific protocols implemented in conjunction with local administrations to avoid arrears and disconnections, even in light of high energy prices. Hera also works to make all its customers leading players in the transition, fostering responsible and conscious consumption behaviour and enabling households and companies to embrace energy efficiency, renewable energy and the circular economy.

See the following chapters of the paper for more details:

Energy - Pursuing carbon neutrality:

- [Promoting energy efficiency](#)
- [Energy transition and renewables](#)

Local Area (and Business) - Enabling resilience and innovation

- [Innovation and digitalisation](#)

▪ [Economic growth and social inclusion](#)

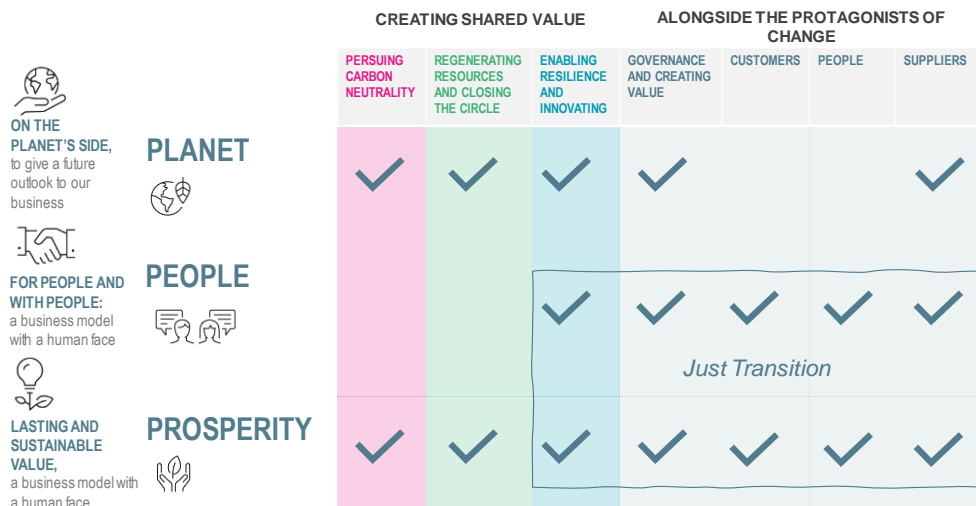
Policy and partnerships

In cooperation with its own trade association Utilitalia, but also with the academic world, Hera is committed to increasing the quality of public debate on transition issues, bringing tangible experience and scientific evidence, and making its know-how available to legislators, so that they may derive regulatory frameworks that are increasingly suited to the objective of a transition that is not only environmentally effective, but also harmonious, inclusive and fair.




Transparency and accountability

Implicitly present also in previous editions of the report, reporting on the dimensions of Just Transition is from 2021 highlighted and thematised as such. In particular, this encompasses the entire paragraph “Alongside the protagonists of change”, as well as the discussion of some of the impact areas of the drivers for creating shared value dedicated to “Enabling resilience and innovating”, with particular reference to job creation, the development of new skills and social inclusion. What emerges is a narrative that runs through, more or less under the surface, most of this report, appearing not as an additional topic but as a cross-cutting key to interpretation, which - as shown in the diagram below - qualifies the overall commitment to transition made by the Hera Group.

HOW THE JUST TRANSITION TAKES SHAPE FOR HERA



Shared value

	What we said we would do	What we did	SDGs	Progress*
Goals, outcomes and targets	2,302 million euro “shared value” investments in 2023-2026 (71% of total investments)	558.4 million euro investments in 2023 alone (68.5% of total investments)	All**	
	62% of total Ebitda: Shared-value Ebitda at roughly 906 million euro in 2026 (approximately +335 million euro compared to 2021)	776.0 million euro Shared-value Ebitda in 2023, or 51.9% of total Ebitda	All**	
*  Result achieved or in line with planning;  Result with moderate variance from planning;  Result with significant variance from planning.				
**this target cuts across all SDGs to which Hera contributes (4,5,6,7,8,9,11,12,13,14,17)				

What we will do	SDGs
2,774 million euro “shared value” investments in 2024-2027 (72% of total investments)	All**
64% of total Ebitda: Shared-value Ebitda at roughly 1,049 million euro by 2027 (+378 million euro compared to 2022).	All**
**this target cuts across all SDGs to which Hera contributes (4,5,6,7,8,9,11,12,13,14,17)	

Hera’s approach to shared value

For the Hera Group, the creation of shared value is the result of a **holistic approach** related to all the business activities and projects that generate **economic marginality** but at the same time respond to the new challenges imposed by the “global agenda,” i.e., the “**call to action**” imposed by regulations, from international to local, that point to the new direction of sustainability.

The definition of Creating Shared Value (CSV) is the result of a path of change that started in 2016, inspired by the academic contribution of Michael Porter and Mark Kramer, through the well-known article published in 2011 by the Harvard Business Review ‘*Creating Shared Value. How to reinvent capitalism - and unleash a wave of innovation and growth*’ and identified the group’s approach to shared value creation as **a new source of direction for future strategy**, consistent with the goals of the UN 2030 Agenda.

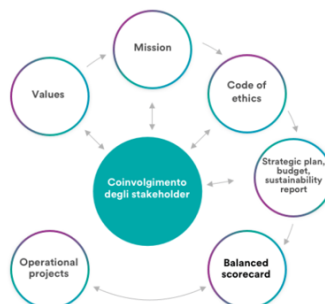
This approach also led to **a renewed version of the Sustainability Report**, enriched with new views and perspectives, including, since 2016, a quantification of both **Shared-value Ebitda generated by “Shared-value” activities and projects (CSV Ebitda)** and the investments made in this area.

The value added to Ebitda represents the portion of industrial income attributable to activities that **respond to the needs for change in the direction of sustainability** indicated by the “Global Agenda” and summarised in a reference framework: the Hera Group’s CSV framework. These activities thus produce value for the company while responding to the problems and challenges of the communities in which Hera operates.

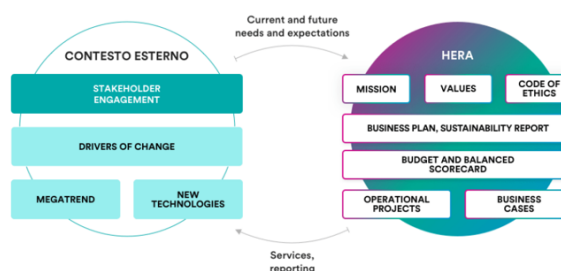
The method for calculating CSV Ebitda requires **specific calculation criteria**. Through an analysis of all the activities managed by the Hera Group, the ones that are consistent with the drivers and impact areas that make up the CSV framework are identified, and the related Ebitda produced is calculated. As of 2019, CSV Ebitda has been **audited by an external firm**. For more information on the method used, see the specific report available at bs.gruppohera.it and the related auditor’s verification statement.

HERA'S APPROACH TO CORPORATE SOCIAL RESPONSIBILITY (CSR) AND SUSTAINABILITY, PREVIOUS ELEMENTS CONFIRMED AND NEW ONES INTRODUCED

From an approach that integrates CSR in our strategy and business activities



...to an explicit connection between the «Global Agenda» priorities and business



The relationship between Corporate social responsibility (CSR) and Creating shared value (CSV) according to Hera

Since 2016, Hera's approach to CSR and sustainability has been enhanced by integrating a CSV perspective into the elements of sustainability that have been part of its strategy and business activities since the Group's establishment.

Thus, as of 2016, the Hera Group's approach to sustainability **integrates CSR with the CSV perspective**, resulting in activities and projects that:

- improve their own environmental and social sustainability performance, mainly related to the businesses they manage (including, but not limited to, legislation and sector regulations) (CSR);
- generate operating margins while responding to the priorities of the "Global Agenda" (CSV).

This latter point is a major development in the Hera Group's original approach to CSR, which will **increase the shared value generated** by overlapping business and "Global Agenda" priorities.



How we identify “Global Agenda” priorities and CSV areas

The needs for change in the direction of sustainability set out in the “Global Agenda” represent calls to action and, at the same time, **challenges and opportunities** for the Hera Group. Understanding this scenario is essential not only to make the Group’s sustainability reporting more up-to-date, but above all to **orient its strategy and operational processes towards addressing change, thus contributing to the Company’s competitiveness.**

The CSV framework is periodically checked and updated based on new and emerging global challenges. The most recent review that brought the framework to its current state took place in 2020, while in 2023 the analysis of the “Global Agenda” and the needs for change included in it continued with an in-depth examination of global, European, national and local policies.

Additional policies were added to the previous set of more than 100 policies analysed from 2016 to 2022 in the course of 2023, adding to the sustainability baseline. The main elements intercepted in 2023 were:

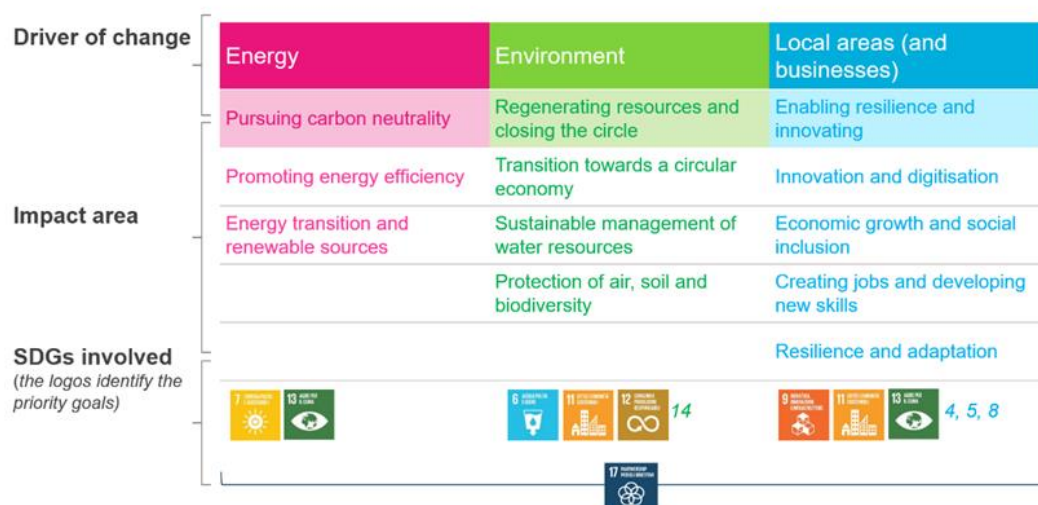
- **climate neutrality** and **energy transition** revived by the revision of the Renewable Energy Directive (RED) EU2023/2413, COM (2023) 62 which will be part of the Green Deal, the CBAM (carbon border adjustment mechanism) Reg. EU 956/2023 and the EU 2023/1791 Energy Efficiency EED Directive and COP 28 indicating the need to move away from fossil fuels in energy systems;
- better **management of water resources**, which is being pursued at national level through the enactment of Law 68/23, which converts into law Legislative Decree 39/2023 on urgent provisions for combating water scarcity and strengthening and upgrading water facilities;
- a more conscious **transition to the circular economy** thanks to European policies on the topic of recycled plastics and bioplastics, supported by COM (2022) 682 (EU policy framework on biobased, biodegradable and compostable plastics) adopted by the European Commission on the topic of sourcing, labelling and use of bio-based plastics and the use of biodegradable and compostable plastics, as well as by Reg. EU 1616/2022 on recycled plastic materials and items, as well as regulating the marketing of plastics with recycled content, including the collection and sorting of plastic input, and the establishment of a Union registry that includes recyclers and recycling facilities;
- reduced **soil and air pollution**, thanks in part to the introduction at the local level of the “Bologna città 30” Detailed Urban Traffic Plan, which envisions 30km/h becoming de facto normality on urban roads, making the driving style of residents more uniform and less polluting;
- a major boost to **innovation** thanks to the proposed Regulation of the European Parliament and European Council (COM (2022) 454 - Cyber Resilience Act) that strengthens cyber security standards to ensure more secure hardware and software products, as well as the proposed Regulation known as the Data Act, which establishes European rules on the sharing of data generated by the use of connected products or related services;
- **economic development** that is also **inclusive** and leaves no one behind, as reaffirmed at the European level by EU Regulation 2023/955 establishing a Social Climate Fund with the aim of providing financial support to member states for measures and investments included in their social climate plans, and by EU Directive 2023/970 on equal pay (in particular, pay transparency and access to justice for victims of pay discrimination and the gender pay gap). National legislation, in particular Law 56/2023, which converts Legislative Decree 79/2023, on urgent measures to support households and businesses in the purchase of electricity and natural gas, as well as on health and tax compliance and Legislative Decree 48/2023 for urgent measures for social inclusion and access to employment;
- regulations to increase **resilience and adaptation to climate change** also through national policies such as the National Climate Change Adaptation Plan (NCCAP) and the updated Flood Risk Management Plan (FMP).

The CSV framework is made up of three drivers of change and nine impact areas, which in turn are linked to the 11 UN Agenda goals to which the Group contributes, seven of which are identified as priorities, and on which most of this report’s 54 “What we will do” (future goals) are focused.

The seven **priority SDGs** for Hera Group are goals that are more **directly related to business activities** and on which the Group has a **direct impact**: goal 6, clean water and sanitation; goal 7, clean and affordable energy; goal 9, business, innovation and infrastructure; goal 11, sustainable cities and communities; goal 12, responsible consumption and production; goal 13, combating climate change; and goal 17, partnership for the goals. Goal 17 is one of the priorities, because **partnerships are indispensable** for achieving the entire set of important sustainability goals.

The **other four SDGs important** to the Hera Group are goals on which the Group has an **indirect impact through internal processes** (e.g., human resource management) **or business activities** (e.g., protection of vulnerable users): goal 4, quality education; goal 5, gender equality; goal 8, decent work and economic growth; and goal 14, life under water.

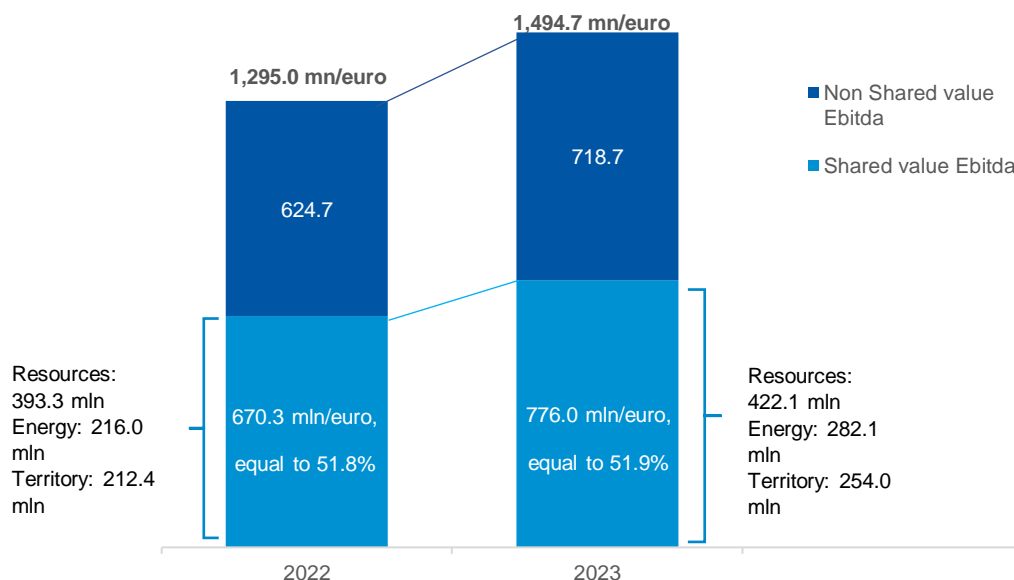
THE AREAS OF SHARED VALUE CREATION FOR HERA (CSV FRAMEWORK): DRIVERS OF CHANGE, IMPACT AREAS, AND UN 2030 AGENDA TARGETS OF INTEREST TO HERA



Shared-value Ebitda (CSV Ebitda)

Relative shared-value Ebitda in 2023 is 776.0 million euro (51.9% of total Group Ebitda), up 16% from 2022. Excluding the extraordinary and non-recurring increase of Ebitda related to the markets of last resort (default, last resort and protected) compared to 2022, Ebitda CSV stands at 55.6% of the total. This result is on the trajectory of the business plan built for Ebitda CSV to exceed EUR 1 billion and to correspond to 64% of the total in 2027 and to reach 70% of the total in 2030.

SHARED-VALUE EBITDA (CSV EBITDA) VS. OVERALL EBITDA



The portion of CSV Ebitda shown in the histogram does not correspond to the sum of individual drivers due to activities attributable to multiple drivers. Total Ebitda as per managerial statements.

The most significant contribution came from activities and projects related to the Environment driver, aimed at “Regenerating resources and closing the circle” (422.1 million euro), followed by those related to the Energy driver, aiming at “Pursuing carbon neutrality” (roughly 282.1 million euro). Projects and activities falling under the Local Areas (and Businesses) “Enabling resilience and innovating” driver contributed with 254.0 million euro in 2023.

The Shared-value Ebitda generated in 2023 mainly resulted from activities and projects that respond to the call to action of the Global Agenda for the Environment driver, aimed at **regenerating resources and closing the circle** (approximately 54% of total CSV Ebitda). As regards the impact area, the Group’s

important role in value creation emerges with activities related to **sustainable water resource management** (58 percent of CSV Ebitda related driver) and **transition towards a circular economy** (35%). Meanwhile, in **air and soil protection** (7%), the largest share of CSV Ebitda comes from remediation activities.

In contrast, 36% of shared-value Ebitda is implemented through activities in the areas aimed at **pursuing carbon neutrality**. 58% of this share of Ebitda is the result of measures aimed at **promoting energy efficiency**, through (i) commercial offers to energy customers including services and tools to reduce consumption, (ii) energy efficiency services for the Public Administration, businesses and condominiums, (iii) industrial cogeneration, (iv) gradual energy efficiency of the public lighting service (with particular reference to extending the number of municipalities in which only electricity from renewable sources is used, where electricity consumption per inhabitant equivalent is less than 50 kWh/inhabitant, and where all lighting points managed are LED). Meanwhile, 42% refers to **energy transition and renewables**. This area accounts for margins from: (i) sale of renewable electricity with Guarantee of Origin (Go) and methane gas with offsetting of greenhouse gas emissions (guaranteed to each domestic on the free market for the first 12 months after signing the contract), (ii) distribution of electricity (eligible activity and aligned with the EU Taxonomy), (iii) district heating (for the share of heat generated from geothermal source), (iv) renewable electricity production from biogas from anaerobic digestion of waste and landfills and from photovoltaics, (v) biomethane production.

Finally, the Hera Group generates about 33% shared-value Ebitda through activities in the areas that aim to **enable resilience and innovate**. In the area of “**innovation and digitisation**” (27%), the “shared value” Ebitda is pursued through the sale of telecommunication services, by means of Acantho, and through the development of projects and investments aimed at digitalising operational processes, services offered and cities. In the area of **economic development and social inclusion** (19 percent), a portion of Shared Value CSV is achieved through contracting and partnerships with social cooperatives resulting in the employment of disadvantaged individuals.

In order to highlight the Group’s commitment to mitigating the risks of adaptation to climate change and to the resilience of the services managed and consequently of the territory served, since 2002, the Shared Value Ebitda deriving from **resilience and adaptation** activities (54%) has been emphasised in the Local area driver. Specifically, the following were accounted for in the Local Area driver:

- the portion of aqueduct Ebitda determined by the percentage of residents served “covered” by water safety management plans; this share is also considered in the environment driver, in the sustainable water resource management impact area;
- the portion of Ebitda determined on the basis of the return on investment for the electricity grid resilience plan already considered in the energy driver, in the energy transition and renewables impact area.

The chart depicting the CSV drivers and their respective impact areas shows **overlaps** that are mainly generated by activities that by their nature may **respond to more than one call to action of the “Global Agenda”**, as pointed out in the case of the “resilience and adaptation” impact area just illustrated, or by the **methodology of accounting** for CSV Ebitda’s share that considers marginality net of the share responding to another impact area. The main activities that explain these overlaps are:

- District heating: an activity that responds to the call-to-actions related to the impact areas “air, soil and biodiversity protection” (Environment driver) and “energy transition and renewables” (Energy driver).
- Implementation of water safety management plans: an activity that responds to the call-to-actions related to the impact areas “sustainable water resource management” (Environment driver) and “resilience and adaptation” (Land driver).
- Power grid resilience plan: an activity that responds to the call-to-actions related to the impact calls “energy transition and renewables” (Energy driver) and “resilience and adaptation” (Land driver).
- Bill instalment payments for customers in difficulty: portion of CSV Ebitda related to the “social inclusion” impact area (Territory driver), calculated from the margins on gas, electricity and district heating sales net of the share already considered in the “energy transition and renewables” impact area (Energy driver).
- Environmental services outsourced to social co-operatives: the portion of CSV Ebitda in the “social inclusion” impact area (Territory driver), calculated starting from the marginality of urban hygiene net of the share already considered in the “transition towards a circular economy” impact area (Environment driver).

GROWTH IN CSV EBITDA IN 2023: +105.7 MILLION EURO (+16%) COMPARED TO 2022

CSV drivers	Main 2023 results and changes compared to 2022
ENERGY Pursuing carbon neutrality: 266.6 million (up 56.2 million from 2022)	<ul style="list-style-type: none"> Increased volumes of energy efficiency activities for public administrations, condominiums and businesses also as a result of the ecobonus Increase in gas and electricity contracts with energy efficiency services and solutions (29.7%, vs 27.1% in 2022); Increased electricity consumed in municipalities with consumption below 50 KWh/inhab or 100% renewable energy and 100% LED lights (80.3% compared to 74.4% in 2022).
ENVIRONMENT Regenerating resources and closing the circle: 422.1 mn (up 28.8 mn from 2022)	<ul style="list-style-type: none"> Increased volumes of gas sold with GHG emission offsets (20.4 percent compared to 14.2% in 2022); Increased volumes of electricity from renewable energy sources (42.8% compared to 41.1% in 2022); Increased margins from remediation, de-commissioning and global service activities due to the acquisition of A.C.R.; Technical closure of additional water safety management plans at water utilities (65.8% of inhabitants covered by the plans, vs 61.9% in 2022); Increase in reused/reusable purified wastewater (10.1% compared to 7.3% in 2022).
LOCAL AREAS (AND BUSINESSES) Enabling resilience and innovating: 87.3 million (up 20.8 million from 2022)	<ul style="list-style-type: none"> Increase in the number of instalments granted to customers (more than double the number in 2022) as a result of the flooding in Emilia-Romagna. 148.2 million investment in innovation and digitisation in 2023; increase in electronic gas meters installed by the end of 2023 (90% compared to 87% in 2022); Increased marginality of telecommunication and digitisation services provided by Acantho.

This table represents data for CSV Ebitda consistent with drivers and impact areas net of elisions. The changes highlighted do not correspond to the changes shown in the graphs above.

Shared-value Ebitda increases in the 2023-2027 business plan

The Group's 2023-2027 Business plan targets a 2027 Shared-value Ebitda amounting to 1,049 million euro, +55% compared to 2022 and accounting for approximately 64% of the Group's total Ebitda (70% in 2030).

The rise in Shared-value Ebitda over the period covered by the plan compared to 2022 (up 379 million euro, of which a minor amount due to M&As aimed at increasing shared value) is greater than the growth in overall Group margins (355 million euro) thanks to a significant contribution coming from increased activities in the CSV drivers: "pursuing carbon neutrality" (+128 million euro), "regenerating resources and closing the circle" (+223 million euro) and "enabling resilience and innovating" (+28 million euro).

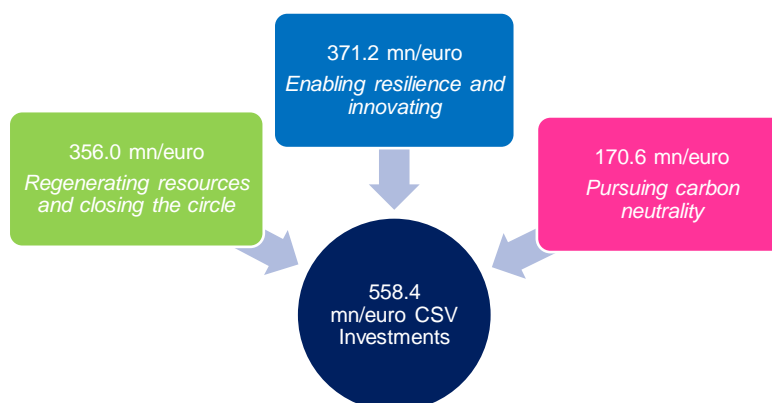
CSV drivers	Main actions and goals
Pursuing carbon neutrality: +128 mn euro	<ul style="list-style-type: none"> Further increase in offers for gas and electricity customers with energy efficiency solutions (customers making use of such offers: 42% at 2027); Increased volumes of electricity from renewable sources: 56% of total free market volumes to 2027; Increasing photovoltaic renewable electricity generation (over 152 MW, installed photovoltaic capacity by 2027) Increased PV capacity sold to customers;

CSV drivers	Main actions and goals
Regenerating resources and closing the circle: +223 mn euro	<ul style="list-style-type: none"> Progressive increase of users served in areas with a Water Safety Plan: 91% at 2027; Development of A.C.R.'s remediation, decommissioning and global service business; Increased volumes of waste sent for energy and material recovery at the HASI and subsidiary plants; Completion of the process of upgrading agglomerations >2,000 p.e. in the areas served in line with EU directives (100% agglomerations >2,000 p.e. upgraded by 2025); Development of district heating and increase in the volume served (+7% to 2027 compared to 2022); Progressive increase of reusable wastewater volumes compared to total volumes treated (about 14% to 2027).
Enabling resilience and innovating: +28 mn euro	<ul style="list-style-type: none"> Innovation and digitisation: investments in digital transformation to optimise operational processes and management; progressive rollout of electronic gas meters 2G electricity meters and electronic water meters (95% by 2027); Innovation and digitisation: development of Acantho's activities (telecommunications and connectivity).

Shared-value investments
[203-1]

In 2023, the Hera Group allocated resources of approximately **558.4 million euro** (+14% compared to 2022) for investments aimed at creating shared value. This amount represents **68.5% of the sum of investments** made by Hera Group before capital grants.

The chart below shows these investments broken down by CSV driver.



Part of the shared-value investments related to the driver “Regenerating resources and closing the circle”, and in particular part of the investments related to the integrated water service, are also related to the driver “Enabling resilience and innovating”, since they are aimed at improving the resilience of this service.

In 2023, the main investments for “**Pursuing carbon neutrality**” concerned:

- the acquisition of new electricity customers (approximately 51.1 million euro)
- Investments in the electricity distribution service (34.3 million euros)
- Investments aimed at energy efficiency in the water sector (20.6 million euro)
- investments in power generation (17.8 million euro)
- investments in efficiency upgrading of the district heating system (10 million euro)

With regard to the driver “**Regenerating resources and closing the circle**”, the main investments concerned:

- maintenance and remediation work on the distribution networks of the aqueduct service, work on upgrading the sewerage and purification compartment in order to ensure higher quality standards of water resources (about 20.8 million euro)
- Investments for the development of waste recovery and recycling activities, carried out by Aliplast, A.C.R., Hasi and subsidiaries, and Herambiente's sorting plants (approximately 68.2 million euro)
- investments in assets for the urban hygiene service, in particular for the purchase of new generation bins, bins and bells for sorted waste collection (40.0 million euro)

- investments to improve the efficiency of energy recovery from the Group's waste-to-energy plants (approximately 3.1 million euro)
- district heating service development interventions (14.7 million euro)

Lastly, under the driver “**Enabling resilience and innovating**”, investments were mainly aimed at:

- enhance the resilience of the Group's networks and facilities against physical risks such as hydro-geological instability and climate change and other business continuity risks reported in the Group's risk analysis of activities that create shared value (approximately 223.0 million euro) – “Resilience and Adaptation” impact area. Note that these investments are only one component of those reported in the business plan, which also includes the business continuity of other activities that do not generate shared value. These investments are also accounted for in the driver “Regenerating resources and close the circle”, since investments in resilience are transversal by nature;
- promoting a broader use of innovative technologies related to the energy transition, circular economy and digital transformation (approximately 148.2 million euro).

The investments aimed at creating shared value outlined in the 2023-2027 Business plan total roughly 3.5 billion euro (including the NRRP funds obtained), equivalent to 72.5% of total investments (taking into account financial investments and corporate acquisitions). The average annual investments in the 2023-2027 Business plan are approximately 65% higher than the average seen over the last three-year period (2020-2022). Approximately 2.0 billion will be invested in interventions associated with the driver “Regenerating resources and closing the circle”; interventions in the area of “Pursuing carbon neutrality”, on the other hand, will come to approximately 1.5 billion euro, while the remainder (approximately 523 million euro) will be related to investments for “Enabling resilience and innovating”. Shared-value investments include projects financed by the National Recovery and Resilience Plan (NRRP) and linked to Mission 2, “Green Revolution and Ecological Transition” projects; the amount of contributions obtained from the NRRP to finance the projects proposed by the Group comes to approximately 200 million euro.

Integrating sustainability in the Group's strategy

The Hera Group has recently approved the 2023-2027 Business Plan, which confirms the strategic aspects that meet the company's purpose: to generate sustainable value for all stakeholders, fostering a ‘just’ transition through the implementation of projects capable of combining company growth and local development. This strategic framework aims to address the challenges of the geopolitical environment in harmony with EU policies and in response to the contingencies facing the utility sector, resting on the pillars of **ecological transition, innovation, cohesion and social development**.

Consistent with Hera's history and industrial evolution, the Business Plan focuses on profitability and financial soundness through a balanced development of the supply chains, fuelled by the company's organic growth and opportunities for external lines, reducing volatility and risk factors.

Within the outlined strategic framework, the **ecological transition** emerges as an essential focus for the Group, which is committed to promoting the energy transition (by aiming to reduce climate-changing emissions through the development of renewable electricity and gas sources, as well as energy efficiency and recovery solutions), regenerating resources (by adopting and deploying circular business models) and increasing the resilience of infrastructures and services.

The enabling factor of **innovation** is an opportunity to accelerate the achievement of the environmental, social and economic-financial objectives that the Group has set itself, by providing organisational units with cutting-edge technologies and systems to optimise and reorganise processes and assets, supporting supply chains in the evolution and development of their businesses.

The business strategy projects an Ebitda target of 1.65 billion euro by 2027, for a reduction in the Net debt / Ebitda ratio steadily below the threshold of 3 over the Plan period.

Investments of around 4.4 billion euro are planned over five years, which is also an increase compared to the projection of the previous Business Plan (around +10%), despite the restrictive monetary policies of the Central Banks to cope with the gradual increase in inflation since July 2022.

The convergence between the Group's cumulative investments between 2023 and 2027 with the **goals set by the UN Global Agenda** is worth noting: more than 70 percent of financial resources will be allocated to projects that can generate shared value. More than EUR 2.6 billion will be invested to accelerate the commitment to the ecological transition (about 60% of the entire investment plan will be dedicated to decarbonisation and the circular economy), while about 40% will be reserved for measures to increase the resilience of managed assets; a commitment of more than EUR 1 billion (about 30%) is also planned in digitisation and innovation.












In light of the definition of the new objectives of the **European Taxonomy**, the Group estimates that 98% of eligible operational investments (about 2.5 billion euro) will be aligned with the dictates of the European framework, and will therefore be eligible for subsidised sustainable finance instruments, which will also benefit financial costs.

To ensure the construction of a medium- to long-term path in line with sustainability goals, the Group has also identified a set of **business goals to be achieved by 2030**. These include the Group's carbon footprint reduction target, calculated according to the criteria of the 'Science Based Target initiative', with the aim of reducing CO₂ emissions into the atmosphere by 37% by 2030 (compared to 2019) and with a projected reduction of 29% already by 2027.

The Plan to 2027 also foresees a development consistent with the other 2030 targets, referring to the Group's commitment to the circular economy, with a 150% increase in the amount of plastic recycled by Aliplast (compared to 2017), an increase in the packaging recycling rate of more than 80% and the reuse of 18% of waste water out of the total volumes treated.

As can be seen from the table below, **Hera's contribution in terms of the number of "What we will do..."** (goals for the future) contained in this report and consistent with the 2022-2026 Business Plan (considering SDGs impacted by ten or more goals) is preponderant in seven goals: Clean and affordable energy; Decent work and economic growth; Business, innovation and infrastructure; Sustainable cities and communities; Responsible consumption and production; Combating climate change; Partnerships for the goals.

THE "WHAT WE WILL DO..." SEEN FOR THE GOALS OF THE UN 2030 AGENDA.

	4	5	6	7	8	9	11	12	13	14	17
											
Shared value	2	2	2	2	2	2	2	2	2	2	2
Pursuing carbon neutrality				7	0	4	2	0	7		
Regenerating resources and closing the circle			7	1	5		5	4	1	4	3
Enabling resilience and innovating	1	1			5	1	1	1	1		2
Governance and creating value	1	1	1	1	3	1	2	1	1	1	2
Customers						2		1			
People	2				3	1					
Suppliers					4			3			
Total	6	4	10	11	22	11	12	12	12	7	9

Sustainability integrated into the management incentive system

The balanced scorecard approach enables us to assign "balanced" objectives to our management team in four areas (development, quality and corporate social responsibility, organisational integration and efficiency upgrading) and provides a methodology for defining strategy and turning it into daily activities and goals. The innovative aspect of this approach consists of considering the achievement of social and environmental sustainability goals as a condition for achieving economic and financial objectives over the medium and long term.

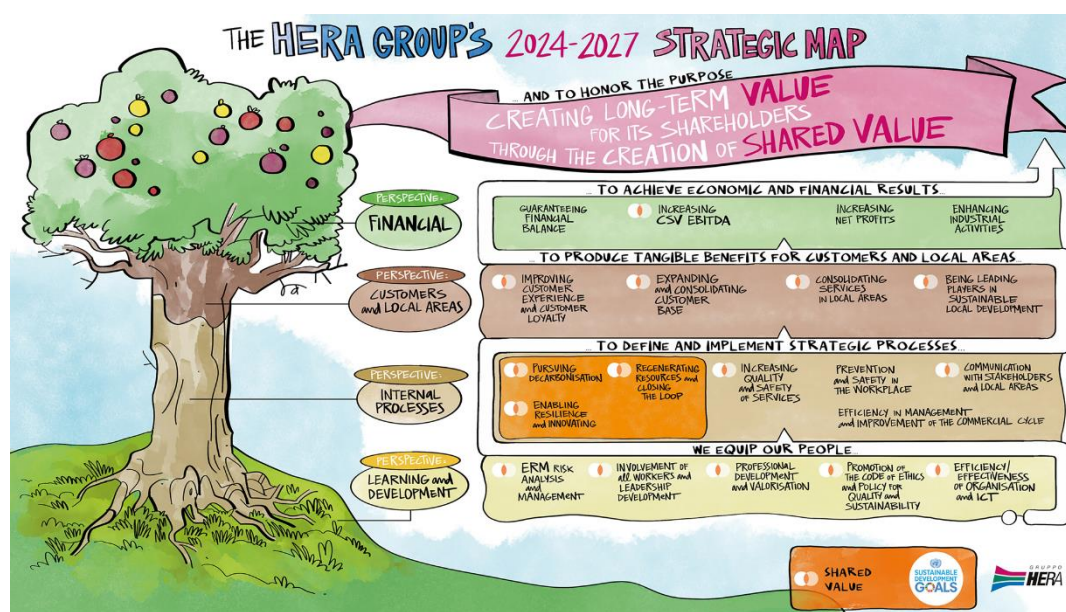
What the balanced scorecard is

The balanced scorecard is a strategic control system based on the link between strategy and the day-to-day management of the company. Devised in the early 1990s by the American academics R. Kaplan and D. Norton, it has also enjoyed considerable success among corporations in the USA and is now being taken up by major European players.

The **Strategic Map** is updated annually based on the contents of the business plan: it provides a **summary of the Group's strategic objectives** and its commitments to stakeholders, set forth in the Sustainability Report.

During the 2023 budget process, **24 priority projects** were defined to achieve the **26 strategic objectives** in the 2023-2026 Strategic Map. Of the 24 priority projects assigned during the year to the members of the Management Review Committee, 18 belonged to areas regarding **creating shared value** for the company, according to the CSV drivers defined in 2020. More specifically, four projects belonged to the area **Regenerating resources and closing the circle**, six projects to the area **pursuing decarbonisation**, four projects to the area **Enabling resilience and innovating**, while four projects were not linked to the three CSV drivers, but contributed indirectly to Creating shared value.

In December 2023, consistently with the priorities set out in the 2023-2027 Business plan, the Group's 2024-2027 Strategic Map was defined.



All projects contained in the Balanced Scorecard 2023 system were assigned to a manager and included in the incentive system involving the Groups managers and executives.

Each project identified:

- process and result indicators with targets consistent with the Group's budget and the corporate departments responsible for their achievement;
- the schedule of key actions to achieve the project targets in terms of time and cost.

The target projects identified were monitored on a quarterly basis by the Hera Spa Management Review Committee and in the individual budget units.

The definition of **target projects** and the related **quarterly monitoring system** of project variables are an important management tool that ensures:

- the integration of several perspectives of corporate performance evaluation, in addition to traditional economic and financial measures;
- the integration of business plan objectives into the daily work of managers and executives;
- the implementation of a continuous improvement process on strategic objectives and the related projects and indicators;
- the formalisation and tracking of the actions and the sub-goals required to achieve the targeted results;
- highlighting and analysis of critical situations and a definition of rapid corrective actions.

The commitments to stakeholders outlined in this report ("What we will do...") are contained in Hera's balanced scorecard. This guarantees consistency between the various tools used to manage and achieve the Group's strategy: Business plan, Sustainability Report, management reporting and incentive system.

Our commitment to sustainability in national and international networks

[2-28]

Hera's commitment to sustainability has become more concrete in recent years after joining important international networks.

The Hera Group was the second Italian company to become a member of the **Ellen MacArthur Foundation**, an international reference point for the circular economy, which aims to promote awareness of issues related to this issue, exchange experiences and launch partnership projects and collaborations in the field of research and development. 2023 was the fifth consecutive year in which progress was made in reporting on the **New Plastics Economy Global Commitment**, the Foundation's initiative to make the plastics sector more circular, which the Group joined in 2018 with challenging goals. Furthermore, in August 2022, acting through Hasi, the Hera Group provided a submission to the third edition of "**Circulytics**", a digital tool developed to measure circularity.

Hera is among the promoters of the **Circular Economy Network (CEN)**, a project established by the **Sustainable Development Foundation** and a group of companies and associations committed to the transition to a new circular economy model. Lastly, Hera is also a member of **ICSEP** (Italian Circular Economy Stakeholder Platform), a platform coordinated by ENEA that brings together Italy's main players in the circular economy.

Since 2020, the Hera Group has been a member of the **Alliance for the Circular Economy**, a network made up of 12 Italian companies aimed at promoting circularity in business strategies. During 2022, the Group took part in drafting two in-depth documents relating to the principles required to implement a framework that favours circular procurement processes and environmental statements with circularity features.

The Hera Group has been a member of the Global Compact since 2004, and in July 2017 it was included in the **Global Compact Network Italia Foundation**, an Italian network established in 2013 which currently counts more than 500 members from both business and non-business contexts.

Once again as part of the Global Compact, Hera joined the **CEO Water Mandate**, the UN Global Compact initiative promoted to boost companies' commitment to the sustainable management of water resources.

Hera is also a member of **Impronta Etica**, an organisation promoting corporate social responsibility, and is part of the **CsrEurope** network, and of **Sustainability Makers**, the Italian network of sustainability professionals.

Lastly, Hera is a partner of **Valore D**.



The CEO Water Mandate



1.03 CSV and sustainability KPIs

	2005	2021	2022	2023	2027	2030
Creating shared value						
Shared-value Ebitda (million euro)	-	570.6	670.3	776.0	1.049	-
Shared-value Ebitda (% of total Ebitda)	-	46.6%	51.8%	51.9%	64%	70%
Shared value investments (million euro) ¹	-	406.6	489.5	558.4	621 ²	-
Shared-value investments (% of total) ¹	-	69.1%	69.0%	68.5%	>70% ²	-
Creating shared value: Pursuing carbon neutrality						
ISO50001 energy saving interventions (% savings compared to 2013) ³	-	6.8%	6.9%	7.6%	9%	10%
Household gas and electricity contracts at the end of the year with at least one energy efficiency solution (% of total free market household contracts)	0%	32.1%	34.3%	35.7%	42%	43%
Renewable electricity sold to customers on the free market (% of total volumes sold on the free market) ⁴	-	45.5%	40.5%	42.8%	56%	>50%
Installed photovoltaic capacity (owned, sold and with third parties) (MW)	-	2.7	9.9	18.4	~300	-
Renewable gases produced (GWh)	-	75.8	72.2	80.6	184	200
CO ₂ emissions reduction compared to 2019 with SBTi calculation methodology (%) ⁶	-	-10.3%	-11.7%	-13.8%	-29%	-37%
Creating shared value: Regenerating resources and closing the circle						
Sorted waste (%)	28.9%	65.3%	67.8%	72.2%	78%	-
Plastic recycled by Aliplast (k tonnes)	-	80.9	79.2	84.6	120	149
Reusable and reused purified wastewater (% of total purified wastewater)	-	6.0%	7.3% ⁷	10.1%	13.6%	18%
Water losses (physical and administrative losses in the civil aqueduct) (m3/km of network/day)	-	8.1	8.1	-	7.4	-
Reduction in internal water consumption compared to 2017 (%) ⁸	-	-16.6%	-20.5%	-21.5%	-23.8%	-25%
Aqueduct users served in areas with a Water Safety Plan (% of total aqueduct users served)	-	22.6%	61.9%	65.8%	91%	100%
Urban agglomerations >2,000 population equivalents complying with waste water treatment legislation (% of population equivalents)	-	99.6%	99.6%	99.8%	100%	100%
Emissions from WTE plants vs legal limits (actual concentrations vs legal limits: optimum value <100%)	22.4%	13.8%	13.5%	13.6%	<20%	<20%
Re-use of soil in infrastructure construction (%) ⁹	-	78%	78%	76%	72%	>80%

	2005	2021	2022	2023	2027	2030
Creating shared value: Enabling resilience and innovating						
Value of supplies from local suppliers (% of total suppliers)	62% ¹⁰	67% ¹¹	65% ¹¹	72%	-	-
Workers with permanent contacts (annual average % of total workers)	95.5%	96.5%	96.6%	95.4%	97%	97%
Women in roles of responsibility (%) ¹²	19.9%	30.5%	31.1%	32.6%	33%	>33%
Employees with digital transition skills (% of total population)	-	49%	54%	56%	75%	90%
Employees with environmental transition skills (% of total population)	-	-	21%	32%	53%	60%
Employees with energy transition skills (% of total population)	-	-	28%	36%	53%	60%
District-based aqueduct (%) ¹³	-	49%	51%	55%	73%	-
Water network undergoing predictive maintenance (%)		9%	46%	90%	100%	
Remote-controlled plants (thousand)	2.0 ¹⁴	7.9	9.0	9.7	12	-
Electronic gas meters (%)	0%	67%	77%	88%	95%	-
Second-generation electronic gas meters (%)	0%	0%	6%	42%	91%	-
Electronic water meters (%)	0%	0%	0.3%	0.4%	21%	-

Alongside the protagonists of change

Added value distributed to stakeholders (million euro)	722.1	1,764.4	1,674.1	2,036.7	2,352	-
Average hours of training per capita (number)	18.5	30.3	30.8	31.5	≥26	≥26
Injury frequency index (number of injuries/hours worked x 1,000,000) ¹⁵	49.6	10.3	10.5	10.2	10.4	<10
Internal climate index (score from 0 to 100)	50	71	-	70	≥70	≥70
Customer satisfaction rate, residential customers (score from 0 to 100) ¹⁶	67	73	72	73	≥70	≥70
Procurement by most economically advantageous bid method: sustainability score (% of total)	-	38	39	39	~40	~40

¹ Corporate acquisitions included

² Average years 2023-2027

³ Data referring to Hera Spa, Inrete Distribuzione Energia, AcegasApsAmga, Marche Multiservizi, Herambiente, Hestambiente, Herambiente Servizi Industriali, and Frullo Energia Ambiente

⁴ The final accounts for the years prior to the reporting year were updated based on the latest GSE data available at the time the financial statements were prepared. The data does not include AresGas. The 2022 figures do not include the companies Eco Gas and Con Energia

⁵ In line with the validated science-based targets

⁶ Purpose 1+2+3 sale of downstream electricity and gas. Scope 3 data on methane gas sales for 2021 and 2022 does not take into account transient increases in emissions related to gas services of last resort. The Scope 3 data relating to the sale of natural gas for 2021 have been aligned with the calculation methodology used for the 2022 data.

⁷ Data referring to Hera Spa, AcegasApsAmga and Marche Multiservizi.

⁸ Data referring to the consumption of water from civil and industrial aqueducts of the Group's most "water-demanding" business units served by Hera Spa in Emilia-Romagna

⁹ Progressive data from 2018

¹⁰ 2007 data

¹¹ Excluding HSE

¹² Executives and managers. The percentage of women in the total workforce was 27.5 percent in 2023.

¹³ Data excluding Marche Multiservizi

¹⁴ 2006 Data

¹⁵ Only injuries with absence greater than or equal to three days

¹⁶ 2021 data excluding Marche Multiservizi

2. ENERGY - PURSUING CARBON NEUTRALITY

2.01 Objectives, performance and targets

What we said we would do	What we did	SDGs	Progress*
Promoting energy efficiency			
8.6% reduction in Group energy consumption by 2026 and 10% by 2030, compared to 2013.	7.6% reduction in energy consumption at the end of 2023, compared to 2013, thanks to the Group's interventions. (see page 43)	7, 13	●
34% of customers by 2026 and 37% by 2030 with at least one energy savings offer for gas and electricity, such as the Consumption Log (27.1% in 2022).	35.7% of family free-market customers by 2023 with at least one energy savings offer for gas and electricity, such as the Consumption Log. (see page 46)		
Continue to promote energy efficiency solutions for condominiums, public administrations and industrial customers.	The offer of energy efficiency solutions for condominiums, public administrations and industrial customers continued in 2023, resulting in a saving of 14.6 thousand tonnes of greenhouse gases. (see page 48)	7, 13	●
Continue with energy efficiency measures in public lighting, including replacement with LED light (59% 2026) bulbs (59% by 2026) (were 40.8% in 2022).	Energy efficiency measures in public lighting continued in 2023: 45.3% of light bulbs now LED. (see page 49)	7, 13	●
Energy transition and renewables			
44% renewable electricity sold on the free market in 2026 and >50% by 2030 (40.5% in 2022).	42.8% renewable electricity sold on the free market in 2023. (see page 59)		
21% natural gas sold on the free market with CO ₂ offsetting by 2026 and 27% by 2030 (14.2% in 2022).	20.4% of natural gas sold on the free market with CO ₂ offsetting in 2023. (see page 59)	7, 9, 13	●
Continue work on existing initiatives for developing hydrogen as an energy vector:	Initiatives to develop hydrogen as an energy vector continued:		
<ul style="list-style-type: none"> Complete the construction of a "power-to-gas" plant in Bologna. Start up, by 2026, the hydrogen production plant at the decommissioned landfill site in Modena, intended to power public transport and local production facilities. 	<ul style="list-style-type: none"> In Bologna, the authorisation process was finalised and authorisation was obtained for the construction of the power-to-gas plant at the wastewater treatment plant. (See page 56) In Modena and Trieste, planning of plants in disused industrial areas commenced and the start of authorisation procedures. (See page 57) 	7, 9, 11, 13	●
12 million cubic metres of biomethane produced by 2026 and 30 million by 2030, in new anaerobic digestion plants for the organic fraction of sorted waste (7.7 million by 2022).	8.5 million cubic metres of biomethane produced from organic waste in 2023. (see page 56)	7, 8, 9, 11, 12, 13	●
Internal and external development of photovoltaics:	Internal and external development of photovoltaics:		
<ul style="list-style-type: none"> Over 90 MW installed photovoltaic capacity by 2026. Over 2.3 thousand photovoltaic systems sold to Group customers by 2026 (1.5 thousand in 2022). Development of energy communities. 	<ul style="list-style-type: none"> 5.1 MW installed capacity by 2023, increasing by 3 MW also thanks to the plant installed at the Galliera landfill site. (See page 52) Over 2,400 thousand photovoltaic systems sold to Group customers by 2023 since the start of the offer (13.3 MW). (See page. 71) First pilot project of collective self-consumption in Bologna completed. (See page 58) 	7, 9, 13	●

What we said we would do	What we did	SDGs	Progress*
Develop smart grids to encourage the electrification of consumption, and increase the capacity of Trieste's electricity grid to receive and manage energy from renewable sources.	Collaboration agreements developed for the digitisation of electricity grids and the development of future smart grids. In Trieste, the design and procurement of preparatory assets to enable increased electrification of consumption continued. (See page 350)	7, 9	●
Climate change mitigation			
<ul style="list-style-type: none"> ■ -28% Scope 1 and Scope 2; ■ 100% electricity from renewable sources for domestic consumption (by 2023); ■ -30% Scope 3 from downstream gas sales; ■ -50% carbon intensity index of electricity sales. In brief: -37% reduction in greenhouse gas emissions by 2030 compared to 2019.	<ul style="list-style-type: none"> ■ -17.3% Scope 1 and Scope 2; ■ 100% electricity from renewable sources for domestic consumption; ■ -15.3% Scope 3 from downstream gas sales (excluding services of last-resort gas) ■ -23.8% carbon intensity index of electricity sales. In brief: -13.8% reduction in greenhouse gas emissions by 2030 compared to 2019 (excluding last-resort gas markets). (See page 70)	11, 13	●
Launch the Hera Net Zero project in 2023.	Hera Net Zero project launched: scenarios and decarbonisation levers deepened.		

* ● Result achieved or in line with planning; ● Result with slight variance compared to planning; ● Result with significant variance compared to planning;

What we will do	SDGs
Promoting energy efficiency	
9% reduction in Group energy consumption by 2027 and 10% by 2030, compared to 2013.	7, 13
42% of customers by 2027 and 43% by 2030 with at least one energy savings offer for gas and electricity, such as the Consumption Log.	7, 13
Continue to promote energy efficiency solutions for condominiums, public administrations and industrial customers.	
Continue with energy efficiency measures in public lighting, LED light bulbs 61% by 2027.	7, 13
Energy transition and renewables	
56% renewable electricity sold on the free market in in 2027.	7, 9, 13
184 GWh renewable gas produced by 2027 (200 GWh by 2030), through:	
<ul style="list-style-type: none"> ■ 770 tonnes/year hydrogen production by 2027 thanks to the construction by 2026 of plants at the decommissioned landfill in Modena and the waste-to-energy plant in Trieste; ■ Biomethane development: 17 million cubic metres by 2027 through new anaerobic digestion plants for the organic fraction of sorted waste collection and the power-to-gas plant at the Bologna Corticella purifier. 	7, 9, 11, 13
Internal and external development of photovoltaics: within 2027	
<ul style="list-style-type: none"> ■ 152 MW installed photovoltaic capacity at Hera sites and other areas (closed landfills, water cycle facilities, agrivoltaic parks, Energy Parks, etc.); ■ 150 MW of sold photovoltaic power, and development of energy communities. 	7, 9, 13
Development of smart grids to support the electrification of consumption, and increase of the capacity of electricity grids to receive and manage energy from renewable sources:	
<ul style="list-style-type: none"> ■ build 4 primary cabins and 20 additional secondary cabins by 2027; ■ robotise 1,260 secondary cabins by 2027. 	7, 9

Climate change mitigation

Reduction of the Group's greenhouse gas emissions to 2030 with SBTi method compared to 2019 emissions:

- 28% Scope 1 and Scope 2;
 - 30% Scope 3 from downstream gas sales;
 - 50% carbon intensity index of electricity sales;
 - 100% electricity from renewable sources for domestic consumption.
- In brief: -37% reduction in greenhouse gas emissions by 2030 compared to 2019.

11.13

Define the Net Zero commitment of the Hera Group and the Plan for 1.5° C climate transition.

2.02 Promoting energy efficiency

Hera Group's primary energy consumption

Hera's energy consumption reflects the multi-business nature of the Group. Hera mainly manages:

- **cogeneration plants** which produce thermal and electrical energy, to cover internal consumption and to power district heating service;
- **waste-to-energy plants** that dispose of waste resulting in electrical and thermal energy recovery;
- **turbo-expanders** that enhance the regulation of pressure in natural gas delivery cabins for distribution in managed local networks;
- **enthalpy geothermal heat recovery systems** in the Ferrara district heating system.

Through its continuous interventions, Hera pursues a policy aimed at **increasing energy efficiency** in all its activities. This energy policy has been made concrete by obtaining the **ISO 50001 energy** certification for Group companies with the highest energy consumption (98.2% of the Group's energy consumption occurs in companies with ISO 50001 energy certification).

[302-1]

The table below shows the **organisation's internal energy consumption**, calculated in terajoules according to the Global Reporting Initiative Sustainability Reporting Standard. The calculation is carried out from data collected mainly from measurements; in 2023 all conversion factors used to calculate energy consumption were updated, adopting the methodology defined by Eurostat ("Energy balance guide: Methodology guide for construction of energy balances & Operational guide for the energy balance builder tool" of 2019), used by the same body for drawing up national and EU energy balances.

The following items are taken into account in the calculation:

- energy consumption from purchased non-renewable fuels and sources (diesel, petrol, LPG, natural gas and waste-to-energy for the 49% non-renewable portion);
- consumption from purchased fuels and renewables (waste-to-energy for the 51% renewable portion);
- consumption of purchased energy vectors (grid electricity and solar thermal energy);
- self-produced energy not involving consumption of other energy sources (biogas from landfills, digesters and sewage treatment plants, biomethane from organic waste, thermal energy from geothermal, electricity from photovoltaics, thermal energy from solar thermal).

The **portion of produced energy sold or transferred to third parties** (electricity fed into the grid, thermal energy sold through district heating and energy services transferred to third parties, biomethane from organic waste sold) is then deducted from these items, to obtain the **net energy consumed within the organisation**.

ENERGY CONSUMPTION WITHIN THE ORGANISATION

Terajoule	2021	2022	2023
Waste (non-renewable share 49%)	6,338	6,136	6,638
Natural gas	6,602	6,324	5,803
Diesel	90	59	83
LPG	4	4	6
Diesel for motor vehicles	394	392	402
Petrol for motor vehicles	14	20	21
Natural gas (CNG) for motor vehicles	17	15	41
LPG for motor vehicles	8	8	7
Non-renewable fuels purchased for consumption	(+) 13,467	(+) 12,957	(+) 13,000
Waste (renewable share 51%)	6,196	6,387	6,849
Renewable fuels purchased for consumption	(+) 6,196	(+) 6,387	(+) 6,849

Terajoule	2021	2022	2023
Electricity from the grid	2,654	2,619	2,572
Solar thermal energy	2	1	1
Energy vectors purchased for consumption	(+) 2,655	(+) 2,620	(+) 2,573
Biogas from sewage treatment plants, digesters and landfills	1,156	1087	909
Thermal energy from geothermal energy	309	328	313
Biomethane from organic waste	277	264	294
Electricity from photovoltaics	8	8	13
Solar thermal energy	0	0	0
Self-generated energy not involving consumption of other energy sources	(+) 1,750	(+) 1,687	(+) 1,529
Electricity fed into the grid	3,573	3,709	3,660
Thermal energy sold	2,267	1,974	2442
Biomethane from organic waste sold	277	264	294
Biogas sold to third parties	168	158	-
Self-produced energy sold/transferred to third parties	(-) 6,285	(-) 6,105	(-) 6,395
Total energy consumption within the organisation	17,784	17,546	17,555

Data does not include Tri-Generazione, Aliplast's foreign subsidiaries and, with regard to fuel consumption, Vallortigara Servizi Ambientali, Recycla and Macero Maceratese. In 2023, the conversion factors used to calculate energy consumption were updated, adopting the methodology defined by Eurostat for drawing up national and EU energy balances.

Net energy consumed within the organisation in 2023 came to **17,555 Terajoules**, this remained stable compared to the previous year (+0.1%). On a like-for-like basis with the previous year, therefore excluding the consumption of the company A.C.R. acquired in 2023, consumption would decrease by 0.5%.

There was an increase in consumption of waste in waste-to-energy plants (+8%, also due to the restart of the special waste plant in Ravenna, which will be shut down for the whole of 2022), diesel for industrial purposes (+39%; on a like-for-like basis, consumption would decrease by 14%) and LPG for industrial purposes (+42%), as well as gasoline (+6%), diesel (+3%) and CNG (+171%) in vehicles (on a like-for-like basis, the difference would be +5%, -4% and -8%, respectively). Electricity consumption from the grid decreased by 2% (the acquisition of A.C.R. is residual in this case). Self-consumption from photovoltaics increased (+67%). Finally, thermal energy sold increased by 24%, especially from HSE plants serving industrial customers, public administration and condominiums.

The share of internally consumed energy from **renewable sources** (renewable share from waste, biogas, geothermal energy, solar thermal energy, grid electricity and photovoltaics) in 2023 was **48.2% of the total** (it was 46.1% in 2022).

Taking into account the reporting obligation E1-5 - Energy Consumption and Energy Mix, as required by the new European ESRS standard, the total energy consumption for the year 2023 is 6,571,376 MWh, this was up by 2% compared to 2022 (+1% on a like-for-like basis). Of this, 43.8% comes from renewable sources (42.8% in 2022). This indicator does not consider self-produced energy sold or transferred to third parties and biomethane produced from organic waste.

[302-2]

Considering the energy that is not consumed within the organisation, but is related to products or services provided by the Group, allows **energy consumed outside the organisation** to be quantified. This calculation includes the consumption of natural gas by customers, the consumption of electricity by customers, in public lighting and in services provided by HSE, the consumption of fuel in vehicles operated by suppliers for waste collection and transport, and the consumption of natural gas in power generation plants in which the Group has a minority interest.

Energy consumed outside the organisation in 2023 amounted to 158,505 Terajoules, 97.5% of which was energy consumed by customers as a result of the sale of natural gas and electricity.

Energy efficiency within the Hera Group

Energy intensity indices

[302-3]

The Group's energy performance can be represented by a number of indicators that show its evolution and prospective targets and illustrate the company's energy saving strategies. Comparing energy consumption with certain production and management indicators can provide **consumption intensity indices** that reflect the improvements achieved by efficiency measures and corporate energy management.

ENERGY CONSUMPTION INTENSITY AND EFFICIENCY INDICES

	2021	2022	2023
Aqueduct: electricity consumption (kWh) / volumes of water fed into the network (m3)	0.46	0.45	0.43
Purification: electricity consumption (kWh) / Volumes of water treated (m3)	0.40	0.43	0.38
District heating: energy consumption (toe) / equivalent energy produced (toe)	1.29	1.32	1.30
Waste-to-energy plants: energy consumption (toe) / equivalent energy produced (toe)	4.6	4.4	4.5
Venue management: energy consumption (toe) / (site volumes x degree days) (m3)	2.4	2.2	2.1
Public lighting: electricity consumption (kWh) / lighting points (no.)	272.3	248.7	217.7
Company fleet: fuel consumption (ktoe eq) / fleet route (km travelled)	0.12	0.13	0.15

This data refers to consumption of electricity, natural gas, diesel, LPG, petrol and waste. For public lighting, consumption takes place in plants and lighting points owned or managed by public administrations. In 2023, the conversion factors used to calculate energy consumption were updated, adopting the methodology defined by Eurostat for drawing up national and EU energy balances. Data does not include Aresgas. 2023 figures do not include A.C.R..

The energy intensity indicator related to the **aqueduct** had improved compared to previous years (-5%): against substantially stable (-0.5%) volumes fed into the grid, electricity consumption was up by 5%.

There was also an improvement in **wastewater treatment** (-11.5%): despite an increase in purified volumes (+10%), electricity consumption fell (-3%).

The **district heating and waste-to-energy sectors** showed an energy intensity in line with previous years (-1% and +0.7% respectively). In district heating, consumption was down by 14% and production was down by 13%. In waste-to-energy, waste consumption was up by 8%, and 7% more energy was produced.

The indicator for the Hera Spa **facilities** (which relates total energy consumption to volume and climate, expressed by degree days (-6%)) in 2023 showed further improvement over previous years, as a result of an increasingly mild climate.

Public lighting also showed an improvement during this year (-13%), thanks to the constant energy efficiency measures carried out on the lighting points managed: despite an increase of 10% in the number of lighting points managed, energy consumption was up by only 3%.

Finally, fuel consumption per km travelled by the **company fleet** increased (+15%): vehicles travelled 16% less distance, but fuel consumption was up by only 4%.

Energy improvement plans

[302-4]

The Group's focus on energy efficiency is evidenced by the **ISO 50001** certification of energy management systems for **11 Group companies**: Hera Spa, AcegasApsAmga, AresGas, Frullo Energia Ambiente, Hera Luce, Hera Servizi Energia, Herambiente, Herambiente Servizi Industriali, Hestambiente, Inrete Distribuzione Energia, and Marche Multiservizi. Overall, **ISO 50001-certified companies recorded a primary energy consumption equal to 98.2 of the Group's total in 2023** (this was up from 97.5% in 2022 due to Herambiente Servizi Industriali also obtaining certification in 2023).

The energy improvement plans drawn up since 2014 as part of the **ISO 50001 energy management systems** envisaged the achievement of the objective of reducing energy consumption by 3% (compared to 2013 consumption) by 2017. By virtue of the positive results obtained, Hera has set increasingly challenging objectives; in fact, the Group's industrial plan envisages that **by 2030** interventions will be implemented, to include the achievement of **savings equal to 10% of consumption** compared to the base year of the Plan (9% as of 2027). The objective is calculated as the average of the objectives that

Hera Spa, Inrete Distribuzione Energia, AcegasApsAmga, Marche Multiservizi, Herambiente, Herambiente Servizi Industriali, Hestambiente and Frullo Energia Ambiente have defined as part of their certification schemes.

To date, significant energy savings have been achieved in the **water cycle**, attesting to the great attention paid by the Group to the sector; in several cases it is a question of optimising purification plants, which have been the focus of huge investments in recent years. In **district heating**, the focus is on maximising heat recovery on existing cogenerators, including with innovative solutions, such as the installation of heat pumps. In several cases, the interventions of Herambiente and its subsidiaries concern **waste-to-energy plants**, which constitute a fundamental part of the Group's plant equipment, and consist of solutions and initiatives to maximise heat recovery and increase energy production. Marche Multiservizi also focuses on **public lighting**, replacing numerous light points and traffic lights with lamps and technologies with lower energy consumption and greater efficiency. Inrete Distribuzione's savings are mainly concentrated in the **natural gas distribution**, and are due both to technological interventions (turboexpanders and innovative control devices) and to behavioural measures. Finally, as regards the efficiency of the **corporate offices**, over the last few years various interventions have been implemented to replace the lighting fixtures of external areas as well as to replace refrigerating units and carry out maintenance on heat exchangers.

ISO 50001 ENERGY IMPROVEMENT PLANS (INTERVENTIONS CARRIED OUT AND PLANNED AT 2023)

Scope of intervention	Interventions carried out and planned (no.)	Annual savings from completed and planned interventions (toe)	Of which interventions carried out (no.)	Of which savings achieved (toe)	Company
Integrated water service	312	9,902	281	9,356	H-A-M
District heating	63	5,377	61	5,134	H
Waste-to-energy plants and landfills	55	3,489	48	3,043	HA
Public lighting	28	1,262	23	1,267	A-M
Energy networks	49	838	43	820	H-A-M
Offices	93	930	83	850	H-A-M
Vehicles and environmental services	23	739	23	739	H-A-M
Total	623	22,537	562	21,209	
Equal to 8.1% of consumption in the base year of the Plan (2023 Target: 7.7%)			Equal to 7.6% of consumption in the base year of the Plan (2023 Target: 7.4%)		

For Hera Spa, Inrete Distribuzione Energia and Marche Multiservizi the base year refers to consumption for 2013, for AcegasApsAmgail 2014, and for Herambiente, Hestambiente, Herambiente Servizi Industriali and Frullo Energia Ambiente 2020. The savings relate to the consumption of electricity and fuel.

The savings achieved from the actions included in the Energy Improvement Plan were quantified by analysing the consumption recorded in the 12 months following the intervention, and comparing them with the historical consumption prior to the intervention being carried out.

The **562 interventions** carried out at the end of 2023, and included in the Energy Improvement Plan from the base year, allowed a saving of over **21,000 TOE**, equal to 7.6% of base year consumption and corresponding to 888.0 TJ, thus **reaching the target** set for 2023 (7.4%). The 623 total interventions identified at 31 December 2023 to be implemented in the next few years will allow for a reduction in energy consumption of around 22,500 toe (943.6 TJ). The interventions identified by the action plan are mainly concentrated in the water cycle, where more than half of the interventions are expected to be carried out, and 44% of the overall savings in energy consumption will be achieved.

The initiatives of the ISO 50001 energy improvement plan are complemented by further energy efficiency measures planned by **Hera Servizi Energia** and **Hera Luce** on condominiums and other buildings, cogeneration plants at companies, and public lighting systems.

ENERGY EFFICIENCY MEASURES BY HERA SERVIZI ENERGIA AND HERA LUCE COMPLETED AND PLANNED AT 2023

Scope of intervention	Interventions carried out and planned (no.)	Annual savings from completed and planned interventions (toe)	Of which interventions carried out (no.)	Of which savings achieved (toe)
Businesses, condominiums and other buildings	897	6,472	727	5,246
Public lighting	128	14,436	25	12,378
Total	1,025	20,908	752	17,624

The savings relate to the consumption of electricity and fuel.

The 1,072 planned interventions (of which 804 were already completed by 2023, and others are in progress) will generate an expected saving of **21,000 toe** (875.4 TJ) per year, of which around 17,000 have already been achieved (737.9 TJ).

Overall, the Group's 1,314 energy efficiency measures implemented from 2013 to today have taken the form of **savings of approximately 39,000 toe per year** (1,625.9 TJ); also considering the interventions identified and not yet implemented, the expected savings rise to 43,000 toe with 1,648 interventions (1,819.0 TJ), which can be compared to the annual energy consumption of 35 "typical" families (four people consuming 2,700 kWh and 1,200 cubic metres of gas).

White certificates

The system of Energy Efficiency Certificates (Titoli di efficienza energetica, TEE) or **White Certificates** was devised in Italy in 2005 as an incentive tool for energy efficiency, and is based on the theory of tradable permits, which are associated with an economic value and a market. These certificates are obtained as a result of interventions that guarantee **measurable and certified energy savings** (1 TEE is equivalent to saving 1 toe of energy). The system provides for a supply and demand mechanism, with **savings obligations for natural gas and electricity distributors**, which are assigned annual targets to be achieved. The Ministerial Decree of 11/01/2017, last modified by Ministerial Decree 21/05/2021, sets out the obligations of distributors until 2024. These obligations are **increasing** in the 2021-2024 period, following a trajectory consistent with the expected contribution from the mechanism to the achievement of the **national objectives for the reduction of final energy consumption** by 2030, in line with the strategies at the European level. The market value of 1 TEE over time has reached the Parameter values currently predefined by the regulatory framework (€ 250-260/ TEE).

To fulfil its obligations, Inrete Distribuzione Energia makes use of Hera Spa as its **Energy saving company (Esco)**, which has been procuring white certificates for over fifteen years. In 2023 Hera Spa submitted to the Energy Services Manager (GSE) **ten new applications relating to energy efficiency measures**, located mainly in the areas served by the Group. Among those that concern the Group itself, there are efficiency measures on district heating systems and at systems for the management of the water cycle. Furthermore, AcegasApsAmga is active in the submission of public lighting service projects relating to redevelopment works implemented by Hera Luce in the municipalities in which it operates. The Hera Group's energy efficiency promotion activity continues both internally and externally, on the one hand with the implementation and improvement of the ISO 50001 certified energy management system, on the other with the participation at industry events and conferences.

WHITE CERTIFICATE TARGETS

toe	2021	2022	2023
Gas distribution	56,990	86,203	123,450
Electricity distribution	5,256	8,490	11,670
Total	62,246	94,693	135,120

In 2023, the Hera Group submitted to the GSE projects for energy efficiency certificates equal to 20,244 toe; in the same year, the GSE approved projects presented by the Group totalling 13,759 toe.

As part of the **initiatives to promote energy efficiency**, Hera Spa has continued the partnership started in 2019 with researchers from the **Milan Polytechnic University**, who are experts in behavioural psychology and statistical sciences to develop scientifically valid programs for measuring and verifying savings. The partnership provides for the **validation of the energy savings obtained as a result of optimisation interventions** inside homes, in industrial plants, in the tertiary sector and in the public administrations, due to the **induction of virtuous behaviours** achieved with methodologies that refer to Behavioural Sciences.

As part of the initiatives aimed at increasing customers' awareness of the impact of their behaviour, in 2020 Hera Comm launched the **"Consumption Log"** service, which allows customers and residents to receive personalised advice useful for saving energy and, more recently, of water and matter (see the case study "The Consumption Log" the attachments to this report for further information). The savings results were **certified by the Energy Services Manager**, which assessed a dedicated project presented by the Group eligible for the White Certificates mechanism. By the end of 2023, **5,077 toe of energy savings had been certified** (approximately 2.5%); these were related to the behaviour of the users involved in the initiative, through a subdivision into lots by which the project was gradually extended over time to new subjects.

Energy efficiency for families

Also in 2023, the Hera Comm Group's commitment to energy efficiency is confirmed with the offer of various value-added services that allow household customers to **monitor and reduce their consumption**.

All customers on the free market can request **free** activation of the **Consumption Log**, a digital service that allows them to receive personalised reports deemed useful for comparing their electricity, gas and district heating consumption not only with that of the previous year but also with that of similar customers in terms of size, type of house, province and energy use. The report, currently active on more than **one million energy supply points** (electricity, gas and district heating) in the free market, aims to make customers **constantly aware of their consumption habits over time** and the potential effects of their optimisation by sharing personalised information pills that help them consume less and better. All data is also accessible on the platform and in the dedicated section of the MyHera app.




The adoption of second-generation electronic meters (smart meters) and the consequent availability of high-frequency data makes possible more in-depth and diversified analyses of consumption and behaviour, hence greater customisation of reports, more dynamic content, and the design of new information strategies that are not only based on energy savings, but also on the distribution of usage within the day, and above all of the household.

HOUSEHOLD FREE-MARKET CONTRACTS WITH CONSUMPTION LOG

	%	2021	2022	2023
Electricity contracts		37.9%	37.7%	38.0%
Gas contracts		31.6%	30.4%	31.1%
District heating contracts		7.9%	7.4%	7.0%

Figures do not include the company AresGas. Figures for 2022 do not include the companies Eco Gas and Con Energia.

How does this initiative contribute to responsible digital transformation? Benefits obtained in the Corporate digital responsibility realm (see the dedicated paragraph entitled "Corporate Digital Responsibility")

Social		A customised service that helps customers effectively understand the environmental and economic effects of their behaviour and provides advice through applications for waste reduction. The report can be consulted on various apps (Online Services and MyHera App).
Environmental		Creation of a digital service aimed at promoting and communicating more sustainable behaviour, with less waste and greater customer awareness of consumption habits.
Economic		Quantification of savings related to the reduction of waste caused by more sustainable consumption habits.

The **Hera Led** option allows purchasing up to two **kits of ten LED** bulbs for each contract with a 30% discount on their market value, and can be combined with numerous free market offers from Hera Comm, both for those signing a new contract both for those who are already customers. Replacing an incandescent light bulb with a highly efficient LED one can lead to **energy savings of up to 80%**. From the technical specifications of the products, it can be seen that a 9W LED bulb is able to replace a 60W incandescent bulb: considering an average daily use of four hours a day, the consumption of a LED bulb is equal to about 13 kWh/year against the 88 kWh/year of an equivalent incandescent light bulb, with obvious savings for the bill and for the environment.

Since 2023, the “**Hera Led Smart**” offer has been added, which includes the sale of **LED bulb kits with advanced features** (such as remote on/off and colour and intensity modification) that combine the advantages of LED technology with greater convenience and a better user experience.

Hera Thermo is the option that allows **monitoring gas consumption** by the installation of a smart thermostat even remotely. Its use leads to greater attention to consumption methods: through a mobile app it is in fact possible to check the temperature set in the house at any time and check the functioning of one’s boiler. Such easy monitoring allows customers to become more aware of their consumption and to reduce any waste, for example, by decreasing the set temperature in certain time slots and optimising the system’s on and off cycles. The literature has demonstrated that reducing the temperature set in the home by 1°C leads to gas savings in the winter season of between 5% and 10% (Source: Enea).

The options **Hera Clima**, **Hera Caldaia** (enhanced by the **Hera Caldaia ibrida in pompa di calore** version) and **Hera Scaldacqua**, continued throughout 2023. These offer turnkey sales and installation of high-efficiency heat pump air-conditioners, condensing boilers, (for which customers can benefit from the tax deductions provided) and water heaters, respectively,

FREE MARKET HOUSEHOLDS END OF YEAR CONTRACTS WITH ENERGY EFFICIENCY SOLUTIONS

Number	2021	2022	2023
Electricity contracts at the end of the year with at least one solution for saving electricity (% of total free market household contracts)	36.1%	38.7%	40.0%
Gas contracts at the end of the year with at least one solution for saving gas (% of total free market household contracts)	28.8%	30.5%	31.9%
Electricity and gas contracts at the end of the year with at least one energy saving solution (% of total free market household contracts)	32.1%	34.3%	35.7%

Figures do not include the company AresGas. Figures for 2022 do not include the companies Eco Gas and Con Energia.

As of 2023, free market contracts with at least one energy efficiency service (Electricity Consumption Log, Hera Led, Hera Led Smart, Hera Clima, Gas Consumption Log, Hera Thermo, Hera Caldaia e Hera Scaldacqua) number more than 910,000 and represent **35.7% of the total** (about 2.6 million). These **were up 19%** compared to 2022 (they were about 762,000).

Specifically, contracts with at least one electricity saving solution accounted for 40.0% (481,000 contracts, +22%) of the total (1.2 million), while those with at least one gas saving solution accounted for 31.9% (429,000 contracts, +17%) of the total (1.3 million).

By 2027, the **target** is to reach 42% of free market energy contracts with at least one energy saving option active (43% by 2030).

The indicator is calculated excluding contracts relating to safeguarding, default and last-resort supply services since, by their nature, it is not possible to propose offers in line with the Group’s commercial strategy in these markets. Including the service under safeguard, 29.7% of contracts have at least one energy efficiency service active (27.1% in 2022). In this case, the target for 2027 is to reach 33% of energy contracts on the free, protected and gradual protected markets with at least one energy saving option.

Finally, if last resort services are also considered, the indicator shows a spread of such options at 29.2% of customer households (26.6% in 2022).

Energy efficiency for condominiums

The Hera Group, through its subsidiaries **Hera Servizi Energia (HSE)**, actively operates in the energy efficiency sector with a wide range of services, mainly addressing condominiums, large industrial customers and the public administrations.

HSE is active in the field of **energy upgrading of condominiums**, with interventions on opaque and transparent surfaces as well as modernisation of thermal or electrical energy production units through the installation of **renewable systems** (solar thermal and photovoltaic) and **high-efficiency thermal power plants**. Modernisation of energy production units combined with the development of **thermoregulation systems** makes it possible to achieve significant reductions in condominium consumption. The replacement of a gas-fired power plant with a photovoltaic and heat pump system allows zero greenhouse gas emissions from energy consumption.

For the above-mentioned condominiums, **complete thermal energy management** is also envisaged through "Energy Service" contracts. At the end of 2023, there were 400 condominiums with an active energy service (they were up compared to 236 in 2022), and estimated savings with this integrated solution are equal to approximately **20% of total gas** consumption.

Condominiums that carried out simultaneous energy upgrades on surfaces combined with the upgrading of thermal energy production units achieved **savings from 30% to over 50% of consumption**.

As a result of the credit transfer and the energy service contract, moreover, interventions resulted in low and in many cases even zero outlays for customers. Indeed, the commercial solutions are **integrated with the transfer of credit** relating to so-called 110% Super Ecobonus, Ecobonus and Sismabonus for the energy and structural redevelopment of buildings, leaving the possibility for each condominium to independently choose the solution that best suits their own resources. The customer can choose whether to bear the cost of the interventions carried out and therefore deduct the amount on his tax return, transfer the tax deduction and pay the excess amount at the end of the work, or opt for the solution that allows no-cost works by integrating the transfer of credit with the financing of the residual amount, also combined with an energy service with a guarantee of energy savings and, therefore, a reduction in heating costs.

The professionalism and experience of HSE allowed the management of a total portfolio of **approximately 1,600 condominiums** energetically upgraded during 2023, with an improvement of at least two energy classes, divided between energy service and redevelopment works, confirming the trend of previous years (and 1,150 in 2022).

Energy efficiency for companies

The Hera Group offers multi-year **service contracts for the decarbonisation of consumption** through the creation and management of **renewable photovoltaic energy production** or **efficient energy in cogeneration and trigeneration** set-up dedicated to guaranteeing all the primary energy needs of customers.

With **photovoltaic energy** it is possible to significantly reduce the greenhouse gas emissions required for customers' production processes, just as with **cogeneration** and **trigeneration** it is possible to simultaneously produce electricity, heat and cooling and save primary energy compared to traditional consumption configurations, reducing emissions, achieving greater energy efficiency and reducing supply costs. Examples of industries in which this service is offered are plastics, food, pharmaceuticals, ceramics and the large tertiary sector (condominiums, museums, shopping centres, and wellness centres).

The offer envisages the **supply of all energy carriers** by Hera Servizi Energia (HSE), reducing a customer's financial and management commitments. Based on the customer's energy needs, HSE identifies the characteristics of the technological system, takes care of preparing all the permit documents, and runs and manages the system.

At the end of 2023, there were **28 active customers with decarbonisation contracts** managed by HSE, including one with photovoltaic production units, six in trigeneration and 21 in cogeneration. The goal for 2027 is to reach 50 industrial customers for HSE energy services. The **environmental benefits** achieved by these plants in 2023 can be quantified in lower emissions of **around 14,500 tonnes of greenhouse gases** and in primary energy savings of 6,630 toe (equivalent to the average annual energy consumption of around 5,400 typical households).

Drawing from its extensive experience in the energy upgrading of public lighting systems, **Hera Luce** has recently broadened its field of action by also proposing itself as a partner for companies and private entities for **energy efficiency upgrades of indoor lighting systems**.

In fact, an energy efficiency project for the private sector was carried out in 2023, with **lighting and energy upgrades** at the workplaces of a ceramic factory. Artificial lighting systems had to be optimised for all spaces:

- lighting requirements in terms of intensity and spectral content were identified;
- spaces and activities were planned so as to optimise the use of natural light;
- specific luminaires were selected for professional uses, in line with the minimum specifications indicated by the UNI EN 1246-1 standard (Light and lighting - Lighting of workplaces - Part 1: Indoor workplaces);
- finally, staff were trained in the efficient use of luminaires.

Estimated energy savings as a result of this project is of 26%.

In view of this experience, which is positive for both parties involved, Hera Luce intends to propose energy efficiency solutions to an increasing number of customers and private companies.

Finally, Hera Spa enters into **agreements with companies** throughout Italy, collaborating in the field of energy efficiency through the mechanism of Energy Efficiency Certificates (White Certificates) for which, through its subsidiary Inrete Distribuzione Energia, it is an Obligated Party pursuant to Ministerial Decree 28/12/2012. Specifically, the company assists businesses in obtaining Energy Efficiency Certificates, ensuring they receive the majority of the associated economic benefits. In 2023, there will be 12 active contracts.

Energy efficiency for public administrations

On the market for **public administrations**, Hera Servizi Energia (HSE) operates by means of tenders for works and integrated services also related to public-private partnership proposals, a contractual formula that allows for significant **investments aimed at reducing greenhouse gas emissions** through the production of renewable electricity through photovoltaics, the production of efficient thermal energy through solar systems, new condensing boilers and heat pumps, as well as the reduction of the energy necessary to maintain the comfort of buildings by insulating the building structures with the installation of thermal insulation and the replacement of more performing windows.

The most energy-relevant solutions proposed to customers concern interventions on buildings in which, in addition to energy upgrading, **seismic improvement** and “**net-zero-emission**” conversion or construction is combined.

The offer is completed by a modern integrated energy management through the “Energy Service” and “Energy performance contract” contract models. The above proposals make it possible to finance energy efficiency interventions with the same energy savings that the interventions generate, keeping unchanged the current expenditure of the institution receiving the proposal.

HSE is also involved in public administration tenders in the areas of facility management and operation and maintenance.

As a result of the energy service tenders won, HSE made **energy efficiency interventions coming to more than 15 million euro** during 2023.

Savings from 6 to 49% can be achieved with several interventions, based upon consumption and interventions already carried out on buildings, and which can be combined with the seismic retrofitting of buildings. Thanks to the demolition and construction of buildings with zero net emissions, even greater savings can be achieved. The environmental benefits achievable in 2024 due to the main energy upgrades carried out in 2023 are quantifiable in lower emissions of about **153 tonnes** of greenhouse gases. The target for 2027 is to carry out upgrades that will achieve environmental benefits of about 14 thousand tonnes of greenhouse gases saved.

Energy efficiency in public lighting

Two Hera Group companies, **Hera Luce** and **Marche Multiservizi**, manage **638,000 lighting points** (+5% compared to 2022) ensuring the efficiency of the public lighting service in 210 municipalities in 12 regions: Emilia-Romagna, Veneto, Friuli-Venezia Giulia, Marche, Umbria, Lombardy, Lazio, Tuscany, Piedmont, Abruzzo, Sardinia and Valle d'Aosta. In some local areas, traffic light installations are also operated, totalling more than **10,000 traffic lights**.

LIGHTING POINTS AND TRAFFIC LIGHTS MANAGED

Number	2021	2022	2023
Municipalities served (no.)	184	197	210
Lighting points at 31/12 (no.)	562,775	608,370	637,956
<i>of which LED (%)</i>	<i>39.4%</i>	<i>40.8%</i>	<i>45.3%</i>
<i>of which with management systems for optimising consumption (%)</i>	<i>80.2%</i>	<i>74.5%</i>	<i>80.3%</i>
Traffic lights (n.)	10,402	10,744	10,342
<i>of which LED (%)</i>	<i>65.6%</i>	<i>58.5%</i>	<i>60.7%</i>

At **80.3%** of the lighting points operated by the two companies, **management systems for optimising consumption** (reduction of intensity, partial switch-off, etc.) are in operation, a ratio that increased compared to the previous year as a result of the installation of these solutions on the numerous lighting points acquired. The managed lighting points in which LED lamps are used were up (**45.3%**, +4 p.p.). Lastly, **95.6%** of lighting points managed use **low energy consumption lamps** (understood as non-mercury vapour lamps, class G according to the application of the energy qualification system developed by Hera Luce on the basis of the Minimum Environmental Criteria), a value compared to the previous year that was slightly down in percentage terms (they were 96.7%) but was up in absolute terms (+4%) as a result of the numerous lighting points acquired during the year on which these solutions have not yet been fully installed.

The goal is to reach 61% LED lamps in managed lighting points by 2027.

Also in 2023, Hera Luce's commercial effort aimed at consolidating the area served and expanding the area of influence, offering potential customers smart solutions for their respective cities. Among these proposals, of particular relevance is the **commitment to energy efficiency**, which is possible thanks to the installation of **low-consumption systems and, above all**, the latest **technology LEDs**. Considering the municipalities managed by Hera Luce in 2023:

- in 118 municipalities **only electricity from renewable sources** is used; the consumption of electricity in these municipalities is equal to 52.9% of total consumption;
- in 102 municipalities electricity consumption is **less than 50 kWh/inhabitant** (calculated considering residents and tourists); 54.9% of total electricity is consumed in these municipalities. The threshold of 50 kWh/inhabitant was defined taking as reference the European average of consumption for public lighting, equal to 51 kWh/inhabitant (Censis Report 2017);
- in 48 municipalities **all lighting points managed are LED** (13.9% of total consumption).

In total, 145 municipalities served by Hera Luce have implemented one or more of these three good environmental practices (use of renewable sources, low electricity consumption, LED lamps) with a consumption equal to 80.3% of the total.

Furthermore, Hera Luce is engaged in the finalisation of numerous public-private partnership projects through the project finance instrument. The projects presented provide for the **energy upgrading** and **safety** of public lighting systems, in compliance with the minimum environmental criteria for public lighting (Cam) for **lighting fixtures** (which came into force in 2017) and for the **public lighting service** (entered into force in 2018). Among the criteria for awarding tender procedures, **references to the circular economy** and the drafting of a specific document capable of demonstrating a particular efficiency deriving from the ability to recycle and dispose of the resources are becoming increasingly more frequent. Hera Luce has put forward Project financing proposals for which it has been appointed the Sponsor in four municipalities.

During 2023, Hera Luce completed energy efficiency works in 23 municipalities. Overall, the interventions carried out by Hera Luce in 2023 resulted in an **annual saving of 20,552 MWh of electricity** (about 3,840 toe): considering the average electricity consumption of a 'typical' family (four people consuming 2,700 kWh per year), this annual saving can be estimated at about 7,600 households and in **avoided greenhouse gas emissions of about 5,200 tonnes**.

Hera Luce has also initiated the assignment and management of projects aimed at enhancing the efficiency of public lighting systems in 29 municipalities.

The most representative municipalities in terms of absolute toe savings in 2023 are: Ferrara (Lot I and Lot II), Limbiate (MB), Scandicci (FI) and Lignano Sabbiadoro (UD).

Hera Luce continues **development activities** linked to a variety of actions and partnerships established in previous years:

- updating of the Minimum environmental criteria for public lighting and definition of the new lighting Services Cam, as a member of the dedicated working group set up by the Ministry of the Environment, and Land and Sea Protection;
- dissemination of the “culture of light”;
- system for monitoring the performance of lighting fixtures in line with the Cams, in collaboration with the Ministry of the Environment, and Land and Sea Protection;
- development of models aimed at offering local administrations tools that allow them to understand the process of analysis and evaluation of energy efficiency activities, obtain information on the actions to be undertaken for an energy upgrading programme, and obtain an initial estimate of the costs of the interventions and the achievable benefits;
- analysis of new lighting technologies with evaluation of costs/benefits and future development possibilities in collaboration with various universities;
- development of projects aimed at making public lighting evolve towards the development of smart cities using the public lighting infrastructure;
- development of partnerships with private companies for energy-efficient indoor lighting systems;
- support for the development of Loomer, a lighting fixture for urban environments developed and manufactured from recycled plastic by Aliplast in partnership with Niteko. Loomer by Lorelux is an “infinitely circular” streetlight because it is made from recycled plastic and at the end of its life can be recycled again in a perfect example of circular economy. Furthermore, Loomer can be disassembled, a feature that allows the lighting body to be easily repaired, thus counteracting planned obsolescence and extending the product’s useful life. At Ecomondo 2023, Niteko and Hera Luce presented Loomer-IN, the new luminaire dedicated to lighting interior spaces;
- development of the project on the circular economy, with the drafting of the specific document capable of demonstrating a particular efficiency deriving from the ability to recycle and dispose of the resources used, for projects presented in the tender, using a tool for measuring the circularity of materials by third parties in 2022 (see the case study “[The evaluation and measurement of circularity in Hera Luce](#)” for additional information).
- participation in the preliminary and final public enquiry of the Uni En 11820 standard to measure its level of circularity to reaffirm its commitment to sustainability.

2.03 Energy transition and renewables

Renewable energy production facilities and overall production

The Herambiente Group produces energy from the **combustion of waste** through nine waste-to-energy plants, with a total installed electrical power of 126.6 MW. Eight of these waste-to-energy plants are dedicated to **urban waste** and, as better described later, their power and the energy they produce can be considered **51% renewable** (equal to the biodegradable portion of the processed waste). Furthermore, thermal energy is also recovered in four of these waste-to-energy plants: three of them are dedicated to feeding the nearby district heating networks (in Ferrara, Forlì and Granarolo dell'Emilia), and one feeds the neighbouring waste treatment plant (in Modena).

The Ferrara district heating plant is also thermally supported by **geothermal wells** located in Casaglia, for a potential 14.0 MW, thanks to which heat is drawn from the subsoil: in this case, geothermal energy represents the priority source of the district heating, to which is added the energy supplied by the waste-to-energy plant and, lastly, by traditional back-up boilers.

Herambiente owns the **anaerobic digestion plants** of Sant'Agata Bolognese and Spilamberto, dedicated to the production of biomethane (14.4 MW in total), and the **biodigestors** in Rimini, Voltana di Lugo and Rimini Ca' Baldacci, where there are **cogeneration biogas plants** for a total electrical power of 2.5 MW. A number of biogas exploitation plants are also active in 11 **landfills** (27.0 MW in total).

As part of the integrated water system, 3.5 MW of electricity are installed in **biogas cogeneration plants** located in seven wastewater **treatment** plants managed by the Group (Bologna, Cesena, Forlì, Modena, Padua, Savignano sul Rubicone and Trieste). The electricity produced is typically self-consumed within the sites themselves.

Photovoltaic plants are also installed at various sites, with a total capacity of about 5.1 MW. This includes the installation in 2023 of three plants with a capacity of 1.0 MW each at the Galliera landfill site in Bologna, the Biorg site in Spilamberto, and the Ducati Energia site in Bologna (the latter managed by HSE and not yet active as of 2023).

In addition to the aforementioned renewable energy production plants, the Hera group also manages plants that produce energy efficiently, including the **Imola cogeneration plant** (82.0 MW of electricity) and other smaller **cogeneration and trigeneration plants** (another 61.7 MW of total electricity) installed both to serve some district heating networks and industrial customers.

Finally, in the gas distribution branch, Inrete Distribuzione Energia and AcegasApsAmga manage six **turboexpanders** for approximately 8.4 MW of nominal electrical power located in Bologna, Ferrara, Forlì, Padua and Ravenna, which produce electricity starting from the pressure reductions inside some suitable gas cabins, without direct greenhouse gas emissions.

Overall, the Hera Group has 105 energy production plants, for a **total of 345.3 MW** installed. Of these, 128.6 MW are **renewable sources** (37.2% of the total).

HERA GROUP ENERGY PRODUCTION PLANTS BY LOCAL AREA (2023)

Province	Biogas and biomethane	Photovoltaic	Geothermal	Waste-to-en.	Turbo-expand.	Cogeneration
Bologna	7 plants* (24.7 MW)	7 plants (2.2 MW)	-	1 plant (26.5 MW)	2 plants (1.6 MW)	11 plants (108.0 MW)
Ferrara	-	1 plant (3 kW)	1 plant (14.0 MW)	1 plant (13.1 MW)	1 plant (2.1 MW)	-
Forlì-Cesena	5 plants (3.5 MW)	1 plant (20 kW)	-	1 plant (10.9 MW)	1 plant (1.4 MW)	11 plants (14.3 MW)
Modena	3 plants* (6.2 MW)	2 plants (1.0 MW)	-	1 plant (18.9 MW)	-	4 plants (5.8 MW)
Padua	1 plant (0.3 MW)	-	-	1 plant (14.0 MW)	1 plant (2.3 MW)	2 plants (0.6 MW)
Pesaro-Urbino	-	1 plant (5 kW)	-	-	-	1 plant (1.0 MW)
Ravenna	4 plants (10.3 MW)	6 plants (0.9 MW)	-	1 plant (5.0 MW)	1 plant (1.0 MW)	2 plants (3.0 MW)
Rimini	1 plant (1.0 MW)	2 plants (0.2 MW)	-	1 plant (10.9 MW)	-	-

Province	Biogas and biomethane	Photovoltaic	Geothermal	Waste-to-en.	Turbo-expans.	Cogeneration
Trieste	1 plant (0.3 MW)	4 plants (0.2 MW)	-	1 plant (14.0 MW)	-	-
Other provinces**	1 plant (1.3 MW)	3 plants (0.6 MW)	-	1 plant (13.4 MW)	-	8 plants (10.9 MW)
Total	23 plants (47.5 MW)	27 plants (5.1 MW)	1 plant (14.0 MW)	9 plants (126.6 MW)	6 plants (8.4 MW)	39 plants (143.7 MW)

The data in this table does not include the thermal energy production plants from thermal plants managed by Group companies, and thermal power is considered only for the geothermal plant.

* of which one biomethane production plant

** Florence, Perugia, Isernia, L'Aquila, Piacenza, Pordenone, Treviso, Udine and Vicenza

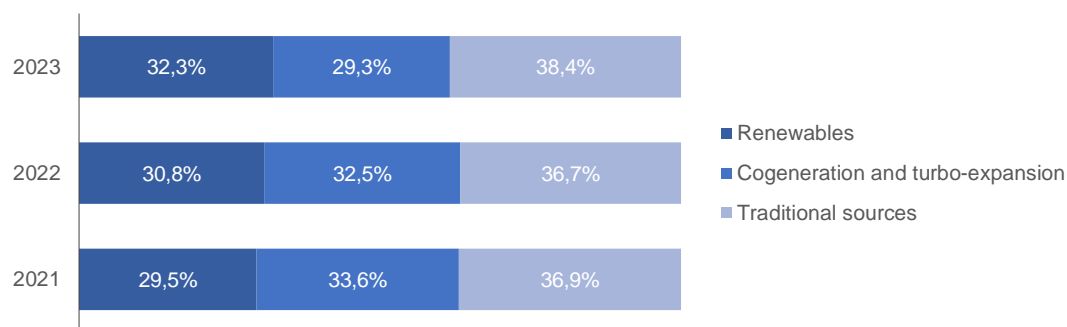
TOTAL ENERGY PRODUCTION

GWh	2021	2022	2023
Waste-to-energy (51% renewable)	453.5	474.6	501.4
Geothermal	85.7	91.2	87.0
Biomethane	75.8	72.2	80.6
Combustion of biogas from landfills	39.1	35.4	36.1
Combustion of biogas from digesters	25.5	25.2	23.2
Combustion of biogas from waste treatment plants	16.5	15.3	12.5
Photovoltaic	2.2	2.2	3.6
Total renewable sources	698.3	716.1	744.3
Cogeneration	514.1	511.5	406.5
Industrial cogeneration at third parties	268.2	231.9	261.3
Turbo-expansion	8.3	12.2	7.6
Total cogeneration and turbo-expansion	790.6	755.6	675.4
Waste-to-energy (49% non-renewable share)	455.8	456.0	483.0
Thermal power stations	414.7	398.1	405.3
Total traditional sources	870.5	854.1	888.3
Total electricity and thermal energy produced	2,359.4	2,325.8	2,308.0

The data in the table refers to the items Self-generated energy not involving consumption of other energy sources and Self-produced energy sold/transferred to third parties of the GRI 302-1 indicator.

The total energy generated by the Group's plants in 2023 (electricity, heat and biomethane) amounted to **2,308.0 GWh**, which is stable compared to the previous year (-0.8%). Of this, 61.5% comes from **renewables** or **cogeneration** and **turbo-expansion plants**, and was down slightly from 63.3% in 2022 due to increased production in traditional sources (+4%).

TOTAL ENERGY PRODUCTION



In detail, **energy generated from renewable sources** in 2023 is 744.3 GWh, i.e. **32.3% of the total**, was up by 4% compared to the previous year due to more waste combusted in waste-to-energy plants (+6%), greater production from photovoltaic energy (+67%; of note here is the installation of two plants of 1 MW each, one by the Biorg company and one at the Galliera landfill), and greater production of biomethane (+12%). On the other hand, the production of energy from the combustion of biogas generated by landfills, digesters and waste treatment plants (-5%) and extraction of Geothermal energy (-5%) was down.

The share of energy produced by **cogeneration plants and turbo-expanders** is 29.3% and was down 11% mainly due to lower production from the Group's cogenerators (-21%) and turbo-expanders (-38% due to revamping work on the Ravenna Bassette plant). On the other hand, production from HSE plants installed at industrial customers increased (+13%).

Electricity production

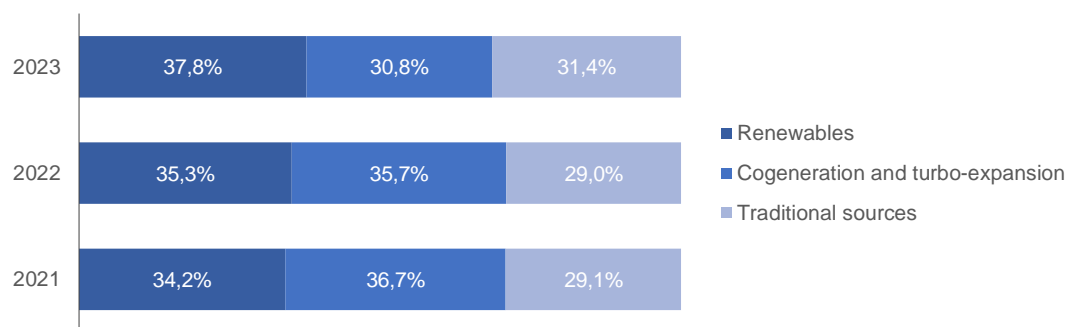
The following table shows the **gross electricity production** of the Group's plants, which also considers the energy necessary to meet consumption that is required for production itself (auxiliary consumption).

ELECTRICITY PRODUCTION

GWh	2021	2022	2023	Installed power (2023, MW)
Waste-to-energy (51% renewable)	386.3	411.2	442.1	62.0
Combustion of biogas from landfills	39.1	35.4	36.1	13.4
Combustion of biogas from digesters	25.5	25.2	23.2	3.0
Combustion of biogas from waste treatment plants	7.6	7.4	6.6	3.6
Photovoltaic	2.2	2.2	3.6	4.1
Total renewable sources	460.6	481.3	511.5	85.2
Cogeneration	322.2	330.3	263.7	117.1
Industrial cogeneration at third parties	163.2	144.3	146.0	30.1
Turbo-expansion	8.3	12.2	7.6	8.5
Total cogeneration and turbo-expansion	493.8	486.9	417.3	155.6
Waste-to-energy (49% non-renewable share)	391.2	395.1	426.1	64.6
Total traditional sources	391.2	395.1	426.1	64.6
Total electricity	1,345.6	1,363.2	1,354.8	305.5

The **total gross electricity** generated by the Group's plants in 2023 is equal to **1,354.8 GWh**, this was a slight increase compared to the previous year (-0.6%). **68.6% comes from renewable sources and cogeneration and turbo-expansion plants** (71.0% in 2022).

ELECTRICITY PRODUCTION



In particular, the production of **electricity from renewable sources** in 2023 is 511.5 GWh, **37.8% of the total**. This value increases by 6% thanks to greater production from waste-to-energy plants (+8%) and photovoltaics (+67%); on the other hand, the contribution from the combustion of biogas produced by landfills, digesters and sewage treatment plants was down by 3%.

Production from **cogeneration and turbo-expansion** accounted for 30.8% of the total, due to less use of the Group's cogenerators (-20%) and revamping work at the Ravenna Bassette turbo-expander (-38%).

Finally, the electricity produced from traditional sources increased by 8%, which in 2023 constitutes 30.8% of the total generated; however, this is **highly efficient** production, as it derives from the waste-to-energy treatment for the portion exceeding 51% (considered biodegradable) and, therefore, classified as energy from recovery processes.

The incentive for the production of electricity through **green certificates** is granted to plants fuelled by renewable sources, which entered into operation by 31 December 2012, and to cogeneration plants combined with district heating networks, which entered into operation by 31 December 2009. Since 2016, any residual right to the issue of green certificates has been converted into a tariff ("**GRIN**" **Tariff**), as envisaged by the Ministerial Decree of 6 July 2012.

In the case of electricity obtained from **waste**, the energy allowed for incentive purposes, and to which the aforementioned multiplier coefficients are applied, is limited to the portion produced from the biodegradable fraction of waste, as it is considered a renewable source by European and national standards. The Ministerial Decree of 6 July 2012 defines the criteria for evaluating this quota on a flat-rate basis, set at **51%** in the case of waste-to-energy plants fuelled by urban waste downstream of separate waste collection. In calculating the share of energy produced from renewable sources, therefore, 51% of both electrical and thermal energy produced by the waste-to-energy plants was considered by applying the flat-rate criteria. This percentage was hypothetically applied to all the waste disposed of in waste-to-energy plants (urban and special) and for all three years considered, in order to have homogeneous and defined terms of comparison in line with current legislation. An exception is the special waste waste-to-energy plant in Ravenna, whose production, taking into account a practically zero biodegradability coefficient in the special waste disposed of due to its origin from industrial-type processes, is considered entirely non-renewable.

For cogeneration plants, the Ministerial Decree of 4 August 2011, implementing Legislative Decree 20/2007, establishes the methods for calculating the production from cogeneration, and for determining the efficiency of the cogeneration process for the purposes of qualifying as **high-efficiency cogeneration**. The subsequent Decree of the Ministry of Economic Development of 5 September 2011 established the support mechanism for cogeneration: the incentive is part of the **white certificates** market and is recognised by the Energy Services Manager, after the recognition of the qualification of "High efficiency cogeneration", based on the actual primary energy savings. This incentive is valid for 10 years, 15 if the plants are combined with district heating networks. In 2023, there were five plants covered by the support mechanism (Barca, San Biagio, Bufalini, Ecocity and Giardino following refurbishment of one of the three production units), as the rest have exhausted their incentive period.

Thermal energy production

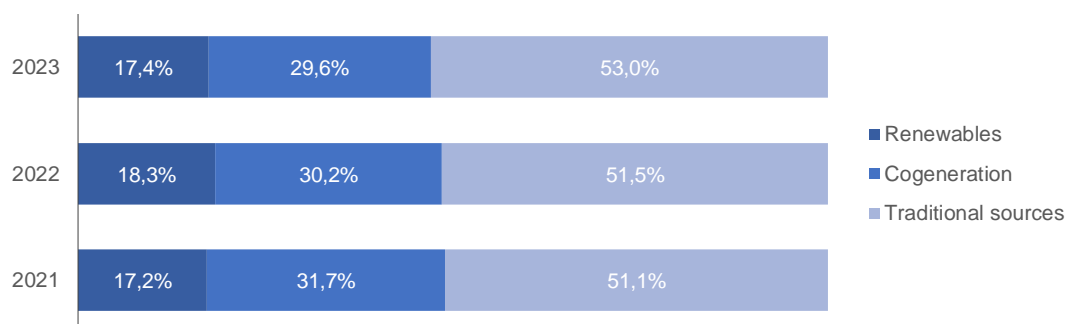
The following table shows the **production of thermal energy** from the Group's plants.

THERMAL ENERGY PRODUCTION

GWh	2021	2022	2023	Installed power (2023, MW)
Waste-to-energy (51% renewable)	67.2	63.4	59.3	38.7
Geothermal	85.7	91.2	87.0	14.0
Combustion of biogas from waste treatment plants	8.9	7.9	6.0	1.8
Total renewable sources	161.8	162.5	152.2	54.6
Cogeneration	191.9	181.2	142.8	109.7
Industrial cogeneration at third parties	105.0	87.6	115.3	30.2
Total cogeneration	296.9	268.8	258.1	139.9
Thermal power stations	414.7	398.1	405.3	516.0
Waste-to-energy (49% non-renewable share)	64.6	60.4	57.0	37.2
Total traditional sources	479.3	459.1	462.3	553.2
Total thermal energy	938.0	890.4	872.6	747.7

The total **thermal energy** generated by the Group's plants in 2023 is equal to **872.6 GWh**, and was down by 2% compared to the previous year. **47.0% comes from renewable sources and cogeneration plants** (48.4% in 2022).

THERMAL ENERGY PRODUCTION



Specifically, **thermal energy production from renewable sources** in 2023 was 152.2 GWh (-6% compared to 2022), constituting 17.4% of the total generated: energy recovery from waste-to-energy plants (-7%) and from the combustion of biogas in wastewater treatment plants (-25%), as well as extraction of geothermal energy (-5%) were down.

Thermal production from **cogeneration**, which accounts for 29.6% of the total, decreased by 4% overall due to less use of the Group's cogenerators (-21%).

Finally, the electricity produced from traditional sources remains stable, which in 2023 constituted 53.0% of the total. However, 12.3% of this production is **highly efficient** as it derives from the waste-to-energy treatment for the portion exceeding 51% (considered biodegradable) and, therefore, classified as energy from recovery processes.

Biomethane development

In 2023, the **total production of biomethane** reached **8.5 million cubic metres** (corresponding to 80.6 GWh), of which 7.0 from Herambiente's Sant'Agata Bolognese plant, which has now been in operation

for five years, and 1.5 from the Spilamberto plant of the subsidiary Biorg, which saw its first year of full operation in 2023. The two plants also produced **24,000 tonnes of compost**.

This production was achieved through the treatment of **approximately 160,000 tonnes** of municipal organic waste, lignocellulosic waste, sludge and other liquid agro-industrial waste. Part of the digestate produced by the Spilamberto plant was then sent for recovery in the composting plant in Nonantola, also managed by Biorg, with another approximately 17,000 tonnes of waste, sludge and scraps.

The biomethane produced in the network and **destined for automotive use** through various distributors in Emilia-Romagna (which can be used by residents with methane-powered vehicles) and two refuelling points for the Tper Bologna **public transport**.

The results of the Spilamberto plant are slightly less than half of the expected production, but this is in line with what happens in the first year of start-up of a plant during which it is necessary to proceed to the optimal setting of the equipment in order to reach the expected industrial production. In 2024, the Spilamberto plant is expected to operate at its nominal capacity, as well as to maintain the production performance achieved in past years at the Sant'Agata Bolognese plant; this will make it possible to approach the production target of 12 million cubic metres of biomethane per year two years early.

The Group's goal for **2027** is to **produce 16 million cubic metres per year of biomethane from organic waste** (corresponding to about 148 GWh), also due to the construction of new plants in the coming years.

An innovative **power-to-gas plant** closely integrated with the municipal wastewater treatment process is also being built at the **Idar wastewater treatment plant in Bologna-Corticella**. With this technology it is possible to convert renewable electricity into synthetic methane (similar to biomethane).

In detail, due to the installation of **an 1 MW electrolyser**, it will be possible to exploit surplus renewable electricity, which is difficult for the electricity distribution network to manage, to produce green hydrogen through the electrolysis of water; inside a special **biological methanator**, the hydrogen will then be combined with the carbon dioxide naturally present in the biogas produced in the treatment plant itself (in the digesters or from sewage sludge) and converted into methane. It is estimated that 300,000 cubic metres of synthetic methane will be produced each year.

By integrating the electricity grid with the gas grid (**sector-coupling**), this technology can be exploited to ensure, in the future, greater sustainability and flexibility of the national energy system through the decarbonisation of the production and end-use sectors of energy.

Also at the Idar purification plant, the installation of a membrane upgrading system is also planned for the production of **additional biomethane** (800,000 cubic metres) from biogas, also coming from the wastewater treatment plant's digesters.

In 2023, the authorisation process was completed with the acquisition of the construction permit, and the execution of the project commenced to facilitate the procurement of materials. The plant is expected to start up by 2025.

Through these initiatives at the Idar wastewater treatment plant, it is estimated that the total biomethane production will reach **1.1 million cubic metres annually**, equivalent to approximately 10 GWh.

Development of hydrogen

The Hera Group is evaluating new business opportunities in the field of **hydrogen development** precisely in public transport and in "hard-to-abate" sectors, also in partnership with other important economic operators and with various entities in the geographical areas served.

In **Modena** and **Trieste**, activities commenced to convert disused industrial areas into new "**hydrogen valleys**", with the aim of achieving an annual production of green hydrogen of 770 tonnes (corresponding to about 26 GWh) by 2027. See the case study "[The development of the hydrogen supply chain: Hydrogen valley](#)" for more information on this topic.

In Castelfranco Emilia, still in the Modena area, activities relating to the injection of **hydrogen into the gas distribution networks** continue. In particular, Inrete Distribuzione Energia launched the **first national trial of hydrogen for civilian use**, with two temporary releases at the end of 2022 and the end of 2023. The project involves some forty homes and 12 industrial and institutional partners to study all the technical and environmental aspects of using mixtures of hydrogen (which by its nature has no carbon content) and natural gas in existing gas distribution networks. This can make a concrete contribution to **decarbonising household consumption** and reducing the energy dependence that characterises

traditional fossil fuels (in fact, hydrogen is a vector that can be produced in “zero km” industrial processes, and specific characteristics and infrastructural equipment have been identified in the Modena area).

This trial is part of the Hera Group's broader strategy for developing hydrogen, in a twofold perspective. On the one hand, it will see the Group's **assets evolve**, first and foremost its own gas distribution networks, and on the other, **new business opportunities** will be created, which Hera can seize by leveraging its multi-business skills, including partnerships with other major industrial operators.

The project was also designed to **acquire direct technical data** on the distribution and use of mixtures of hydrogen and natural gas using the existing gas network, and is included in the broader set of activities aimed at certifying the Hera Group's supply chain as qualified to use green gas. These also include the development and introduction on the networks managed by Inrete and AcegasApsAmga of “**hydrogen-ready**” **gas meters**: in fact, the installations of **NexMeter**, the gas meter that is innovative both for the cutting-edge technologies used and for its advanced safety functions, also in terms of reducing gas dispersion into the atmosphere, are continuing.

Development of photovoltaics

In 2023, the new 1.0 MW photovoltaic plant built on the **landfill** site in Galliera (Bo) went into operation, in early 2024 authorisation was obtained for the construction of another plant of about 4.2 MW on the closed landfill in Castel Maggiore (Bo), and the authorisation process for the construction of a further 7.5 MW plant at the Ravenna landfill is underway.

Photovoltaic development activities are also underway at the main **water utility plants**, e.g. at the Santa Giustina purification plant in Rimini (3 MW), the San Vitale waterworks in Calderara di Reno (4 MW), and other Group plants in Modena, Forlì and Ravenna (1.9 MW in total). In Bondeno, near Ferrara, following the acquisition of the company Tiepolo, an 8.9 MW photovoltaic park is planned.

In total, more than **150 MW in photovoltaics are planned to be installed by 2027 on owned sites** (landfill sites, water utility plants and hydrogen valley) and at external sites (energy park and agrivoltaic plants).

See case studies in the attachments to this chapter for further details on the [production of green hydrogen](#) and on [development of energy parks and agrivoltaics](#).

Development of energy communities

Following legislative and regulatory updates relating to the development of **widespread self-consumption** in Italy, the Hera Group has elaborated new models for the development of these configurations, **supporting the various stakeholders** in the construction of production plants from the start-up phase through to the long-term management of the initiatives. The above configurations are in line with the Group's strategy in that they **promote the development of renewable energies** through the construction of new plants that can be made available to so-called **energy communities** or that are built for them, creating shared value in the area.

In 2023, specialised support was provided to local administrations to participate in the call for tenders issued by the Emilia-Romagna Region to **support the development of renewable energy communities**, which grants non-repayable contributions for the expenses to be incurred to set up and for the technical-economic evaluation of initiatives. The Group provided support both during the application stage and in the execution of technical-economic feasibility studies to enable the diffusion of new energy communities in Italy. Following the establishment of the legal entity by the founding members, Hera will provide support for the promotion of initiatives and the collection of expressions of interest to participate as community members. In this way, all those who cannot install a plant on their own will be given the opportunity to play an active role by consuming energy in the vicinity of the plants, thus obtaining environmental, economic and social benefits.

Hera proposes itself as a **partner** that can make its expertise available by studying the regulatory framework in the process of completion, following the delicate stages of setting up legal entities, in the provision of newly built plants, and in the long-term technical-administrative management of communities.

In the area of collective self-consumption, continuing the activities started in 2022, the **first pilot project in Bologna**, one of the first experiences in Emilia-Romagna, was completed in 2023. A group of self-consumers acting collectively was set up in the condominium concerned, with **18 household customers joining it**. Hera provided support in setting up the configuration, in supplying the **20 kW** photovoltaic system (which was connected to the grid and went into regular operation in May 2023), in the process for accessing the shared energy incentive (successfully concluded in July 2023), in defining the internal

rules and the way in which the economic benefits are shared, and will continue to accompany the condominium in its management in the coming years.

The experience of the first pilot project is spreading to other initiatives in the area, and the Group is developing new supply models to facilitate the implementation of these configurations.

Renewable energy for Hera Group

In 2023, the electricity consumption of the main Group companies was **100% covered by energy from certified renewable sources**, achieving the target envisaged and validated by Science Based Targets initiative.

CONSUMPTION OF ELECTRICITY FROM RENEWABLE SOURCES

GWh	2021	2022	2023
Consumption of electricity from the grid from renewable sources (GO)	471.2	555.4	554.1
Total electricity consumption from the grid	572.8	555.4	554.1
Consumption of electricity from the grid from renewable sources (%)	82.3%	100%	100%

Renewable energy for our customers

In order to support the Hera Group's objectives of contributing to the achievement of carbon neutrality for its customers and citizens served and of reducing its own greenhouse gas emissions by 37% by 2030, also in 2023 Hera Comm guaranteed solutions for the **reduction of its customers' carbon footprint**, through the supply of **electricity from certified renewable sources** (with Guarantee of Origin) and of **natural gas with offsetting of greenhouse gas emissions**, for the first 12 months from the subscription of the offer, through carbon credits certified by international standards.

The carbon credits cancelled in 2023 (919,000) contributed to the performance of the following projects:

- A **280 MW hydroelectric plant in Turkey** (506,000 credits), capable of generating around 800 GWh/year of energy, with an estimated benefit of around 470,000 tonnes of greenhouse gases avoided each year. Support for this project has also made it possible to create jobs for the local community during the construction and management phases, and to avoid floods downstream of the project's activities, contributing, at the same time, to the protection of some animal species in the area, such as migratory waterfowl.
- A 25 MW **wind farm in India** (30,000 credits) built by local know-how and which gave employment to and fostered economic development in the local community, with an estimated reduction of around 30,000 tonnes of greenhouse gases per year.
- A 700 MW **hydroelectric power plant in Brazil** (383,000 credits) contributes to the reduction of 600,000 tonnes of greenhouse gases and contributes to access to cheap and reliable energy for the local population.

Customers that choose these offers also contribute to reducing paper consumption, thanks to the electronic delivery of bills, and no need to travel, thanks to direct wire transfers.

ELECTRICITY AND GAS CONTRACTS AT THE END OF THE YEAR WITH "GREEN OFFERS"

	2021	2022	2023
Electricity contracts at the end of the year with the supply of renewable energy (% of total electricity contracts on the free market)	41.9%	63.9%	79.4%
Gas contracts at the end of the year with offsetting of Gas emissions (% of total gas contracts on the free market)	29.7%	35.6%	63.3%
Electricity and gas contracts with "green" offers (% of total electricity and gas contracts on the free market)	35.4%	49.2%	71.3%

Figures do not include the company AresGas. Figures for 2022 do not include the companies Eco Gas and Con Energia.

In 2023, customers who have chosen the supply of "green" energy are over 2.1 million, and represent **71.3% of the total** contracts, they were up by 67% compared to 2022 (were around 1.3 million).

Specifically, contracts with renewable electricity supply accounted for 79.4% (2.1 million contracts, they were up by 48% from 2022), while congas with greenhouse gas offsetting accounted for 63.3% (937,000 contracts, double the previous year's figure).

The indicator is calculated excluding contracts relating to safeguarding, default and last-resort supply services since, by their nature, it is not possible to propose offers in line with the Group's commercial strategy in these markets. Including these segments as well, 56.4% of energy contracts provide for the supply of "green" energy (71.0% of electricity contracts and 45.0% of gas contracts).

As of 2021, the range of renewable energy offers also includes the **Hera Fotovoltaico** option, which allows the purchase of photovoltaic systems through a turnkey service starting from the technical inspection to the management of administrative and tax paperwork. 2023 saw the addition of the **Hera Fotovoltaico Kit Fai da te**, option, the offer for the sale of so-called "plug & play" micro-plants designed for those who do not have the possibility of installing a system on their roof (in fact, it can be installed on the home's balcony, in the garden or on the terrace, and can be connected to a normal dedicated electrical socket via a power cable). The power of the micro-system is **300 W**, much less than normal roof-mounted systems (typically at least 3,000 W), but it still allows to produce the energy needed to cover the average needs of a household appliance or stand-by at home.

In 2023, 1,130 photovoltaic panels were sold for a total installed power of 6,286 kW. The total since the start of the offer is **2,427 systems**, with a capacity of **13,276 kW**. The target by 2027 is to sell 150 MW of photovoltaic power of the plants sold and with the development of energy communities.

Sales of "green" energy

In 2023, **5,479.6 GWh of renewable energy** were procured for the free market, equal to **42.8% of the total** (vs 40.5% in 2022). Of these, 4,895.0 GWh were covered by Guarantee of Origin (GO) certificates, while the remainder is represented by the residual share of renewable electricity present in the national complementary energy mix.

RENEWABLE ELECTRICITY SOLD ON THE FREE MARKET

GWh	2021	2022	2023
Renewable electricity sold	4,620.9	4,311.6	5,479.6
Electricity sold on the free market	10,159.5	10,658.2	12,795.3
Renewable electricity sold (% of volumes sold on the free market)	45.5%	40.5%	42.8%

The calculation takes into account the Guarantees of Origin purchased by Hera and, for the remaining part of electricity, the latest GSE data available relating to the national complementary energy mix. The final balances for the years prior to the reporting year have been updated on the basis of the latest GSE data available at the time the Financial Statements were drawn up. The data does not include Company AresGas. The data does not include Eco Gas and Con Energia.

In detail, the household segment covered its consumption at 77.0% from renewable sources, companies at 29.1%, condominiums at 64.5%, and the Consip segment at 22.1%.

Also considering the enhanced protected, gradual protected and safeguarded service markets, **in 2023 a total of 5,606.7 GWh of renewable energy were sold, equal to 38.6% of the total** electricity sold (vs 36.3% in 2022). By their nature, these markets do not allow customers to be proposed offers in line with the Group's commercial strategy (the law does not provide for the service offered to these customers to include the supply of energy from renewable sources). For the enhanced protected service, the purchase of electricity which is sold to customers is the responsibility of the Single Buyer (also in this case, the share of renewable electricity present in the national complementary energy mix is considered at 7.4%, based on the latest available data).

The goal by 2027 is to sell 56% of renewable electricity on the free market.

Sales of **methane gas with offsetting of CO2 emissions** (active for the first 12 months after subscribing to the offer) grew further in 2023, after the start of the marketing of this offer in 2019: the share sold with offsetting of emissions on the free market increased from **0.8% in 2019 to 20.4% in 2023** (14.2% in 2022).

METHANE GAS SOLD ON THE FREE MARKET WITH GREENHOUSE GAS EMISSIONS OFFSETTING

million sm3	2021	2022	2023
Natural gas sold with greenhouse gas emissions offsetting	288.3	379.6	461.6
Natural gas sold on the free market	2,578.6	2,676.6	2,261.4
Natural gas sold with greenhouse gas emissions offsetting (% of volumes sold on the free market)	11.2%	14.2%	20.4%

The data do not include AresGas.

Also considering the protected markets and those relating to default services and last-resort supply, the total methane gas sold with greenhouse gas emissions offset in 2023 was 15.0% (10.8% in 2022).

2.04 Climate change mitigation

Hera for the climate

The challenge of climate change and Hera Group's commitment

Climate change is one of the greatest challenges humanity must face today. Accepting this challenge means starting an **ecological transformation** of technology, economy and society. Fossil fuels are among the main causes of climate change, and it is, therefore, essential to reduce their consumption to limit the increase in the main gas responsible for the greenhouse effect: carbon dioxide.

The Group's commitment in this area starts from a variety of actions undertaken in terms of **mitigation and adaptation** discussed in this chapter.

The Group's strategy for the mitigation of climate change mainly takes the form of:

- choice of **renewable electricity** to power one's activities;
- increase in the **production of energy from renewable sources** (in particular, biomethane and geothermal energy to support district heating, green hydrogen as an energy vector and photovoltaics);
- initiatives and projects to **reduce one's carbon footprint**. For example: ISO 50001 certified energy efficiency plans and lower environmental impact on the company fleet;
- of solutions for **reducing the carbon footprint of residents and customers** in all segments (households, condominiums, businesses and public administration). For example: sale of electricity from renewable sources and methane gas with offsetting of greenhouse gas emissions, additional services to households and businesses for energy efficiency, development of district heating, energy efficiency and renewable electricity in public lighting, energy upgrading of buildings, and support for urban electric mobility;
- promotion and implementation of **circular economy** initiatives, such as sorted waste collection, commitments on plastic recycling and production of biomethane from organic waste;
- implementation of **technological and plant innovation projects and initiatives** for a higher environmental sustainability of the activities;
- assessment and feasibility study for carbon dioxide capture system.

Since 2006, the Hera Group has been a member of CDP, an independent non-profit organisation which offers companies and countries a system for measuring, detecting, managing and sharing information on climate change and the sustainable use of water resources on a global level. Membership of the CDP requires the participants to **measure and report** on all performance and the initiatives and strategies implemented to reduce greenhouse gas emissions. In 2023, Hera was assessed with **level A-** (on an A-D scale), an improvement on level B in 2022 and **above the European average (B)**, the "Energy utilities network" **sector average (B)** and the **global average (level C)**.

The CDP also provides an assessment of the strategy, actions and engagement practices adopted to mitigate climate change **along the company's value chain**: the Hera Group scored B in 2023. Again, the score is higher than the European average (B-), the energy utilities network sector average (B-) and the global average (C level).

Once again in the context of **reporting**, this assessment contains:

- the results of the process of **alignment with the Recommendations of the Task Force on Climate-related Financial Disclosure (TCFD)**, which began in December 2019 and involved numerous Departments and all the Group's Business Units;
- reporting of greenhouse gas emissions validated by the **Science Based Targets initiative** in March 2021.

TCFD recommendations

In 2015, the Member States of the United Nations Organisations signed the **Paris Agreement**, by which they undertook to keep the increase in the global average temperature below 2°C compared to pre-industrial levels, and possibly limit its increase to 1.5°C by the end of the 21st century (the latter objective also confirmed by the latest COPs in Glasgow and Sharm El-Sheikh). In the same year, the G20 **Financial Stability Board (FSB)** established the **Task Force on Climate-related Financial Disclosures (TCFD)** with the aim of supporting organisations towards greater transparency about the financial opportunities and risks associated with climate change. In 2017, the TCFD published its reporting recommendations (updated in 2021), which today represent an international reference for the management of climate risks by companies. The **TCFD recommendations** are applicable to organisations across all sectors and classified into four areas: Governance, Strategy, Risk management, and Metrics & targets.

The Hera Group has decided to adopt the approach proposed by the TCFD by launching a process of alignment with the recommendations in December 2019, the results of which were published in the 2020 Dnf (Non-financial declaration) and in the **“Hera for climate” report**. The working group dedicated to TCFD consists of: The Shared Value and Sustainability Department, Enterprise Risk Management, Central Department of Regulation Strategy and Local Authorities, and Energy Management. At some stages, the following were also involved: Central Innovation Department, Central Administration, Finance and Control Department, Central Personnel and Organisation Department, Quality, Safety and Environment Department, and the Business Units.

Governance related to climate change

At the level of the **Board of Directors**, the supervision of the risks and opportunities related to climate change is supported by the **Control and Risk Committee**, by the **Risk Committee** and, indirectly, by the **Ethics and Sustainability Committee**, whose duties include monitoring the implementation of sustainability policies and the preventive evaluation of the sustainability report to be submitted to the Board of Directors.

The **Chief Executive Officer** is responsible for ensuring the implementation of the sustainability and shared-value guidelines, through the Shared Value and Sustainability Department, whose duties include the coordination of the **balanced scorecard** system. The **Chair of the Board of Directors**, in addition to presiding over the Executive Committee, is responsible for defining the strategic guidelines and for decisions relating to the **allocation of capital**. In fact, the Central Department for Regulation Strategy and Local Authorities reports directly to him.

The **Control and Risk Committee** is the advisory body set up in application of the Self-Regulatory Code, in order to support the decisions and assessments of the Board of Directors relating to the internal control and risk management system, including those deriving from climate change, with adequate preliminary activities.

At management level, the **Risk Committee** defines risk management policies and develops specific guidelines and objectives for the business units. In 2021, its functions were updated by making climate change explicit in the list of significant risks that the Committee must deal with.

The **Shared Value and Sustainability Department** has among its responsibilities some of the key elements to ensure the good management of climate risks and opportunities. In fact, the Management coordinates the process of defining the balanced scorecards, prepares the Company guidelines and reporting in the area of Shared Value and Sustainability, and develops new sustainability projects. Furthermore, the head of the Department is also a member of the Group's **Ethics and Sustainability Committee**.

The **Central Strategy, Regulation and Local Authorities Department** plays a key role in the resilience of the Group's strategy. The Management's prospective and future-oriented analysis skills were fundamental in performing the **first analysis of the Hera Group's climate scenarios**. Among the initiatives identified to seize the opportunities defined through scenario analysis, the most promising have been included in the Business plan.

The **Central Administration, Finance and Control Department**, as it pertains to the management of climate-related opportunities and risks, in particular for the activities of defining the annual budget and raising capital, and the **Energy Management department**, which supports the Chief Executive Officer in the development of energy saving initiatives, play a role in the organisational structure of the Hera Group.

With the aim of **strengthening the governance of climate change aspects**, the following internal documents were updated during 2021: Management system manual, Group risk management policy (guidelines), Management control planning (guidelines), Management system management review (procedure), Investment authorisation process (procedure) and Business impact analysis methodology and risk assessment (procedure). In particular, the reference to the analysis of medium-long term climate scenarios was introduced in the **“Group Risk Management Policy”** guideline, while the **“Management Control Planning”** guidelines specify that the strategic planning process must include the medium-to-long term industrial development in line with the corporate **“Purpose”** and, therefore, with the pursuit of carbon neutrality, one of the three areas of shared-value creation.

The management system and Enterprise risk management

The quality, safety, environmental and social responsibility **management system** is the set of interrelated or interacting elements that support the implementation of the Hera Group's policies and objectives in a large number of areas, including those relating to climate change.

As regards the processes for **identifying, assessing and managing climate risks**, the organisational structure adopted by the Hera Group makes it possible to manage exposure to risk deriving from its

businesses and, at the same time, to preserve the effectiveness of management along the entire value chain.

In the corporate governance system, the **Control and Risk Committee**, within the Board of Directors, has the task of supervising the operation of the internal control system, the efficiency of corporate operations, as well as compliance with laws and regulations.

The Control and Risk Committee regularly receives information from the **Risk Committee**, which represents the main body for guidance, monitoring and information relating to risk management strategies, including those pertaining to climate. The Risk Committee is responsible for defining the guidelines for the **Enterprise Risk Management** process, the mapping and monitoring of company risks and the definition of the **Risk Policies**, to be submitted to the approval of the Board of Directors.

The specific risk analyses are conducted by the **Enterprise Risk Manager** or by the Risk Specialists, who play an essential role in the identification, assessment and control of risk management methods. Climate-related risks, both physical and transitional, are included among the risk categories for which an analysis has been initiated by the Enterprise Risk Manager.

Starting from 2020, the **climate scenario analysis** conducted by the cross-functional working group has led the Enterprise Risk Manager to define new quantification methodologies in order to estimate the potential financial impact of the most significant climate risks.

Analysis of climate-related scenarios

Scenario analysis is a methodology used to test the **resilience of business plans** under different assumptions of future developments. In the context of climate change, the study of scenarios makes it possible to understand how physical and transitional climate **opportunities** and **risks** can affect business over time.

To carry out its analysis, the Hera Group selected the **two most relevant scenarios** from the nine taken as a starting point.

The **IEA ETP 2DS transition scenario**, developed by the International Energy Agency, was selected as the “ambitious” climate scenario, which describes a future evolution characterised by strong decarbonisation processes to keep the increase in average temperatures below 2°C.

IEA ETP 2DS TRANSITION SCENARIO: KEY PARAMETERS BY 2050

Energy	<ul style="list-style-type: none"> Energy intensity (TWh/GDP): -67% vs. 2013 Production of advanced biofuels: 20-fold increase from 2020 to 2025 Natural gas import price: \$ 10.2 /MBTU (2017: \$ 5/MBTU)
	<ul style="list-style-type: none"> Strong increase in renewable electricity production Emission factor: <40 gCO₂/kWh (2017: 484 gCO₂/kWh) 50% of solar generation from domestic panels (distributed generation) Electricity demand: +68% vs. 2017
	<ul style="list-style-type: none"> CO₂:emissions: -54% vs. 2017 CO₂ price: up to \$210/t (2017: 5.8 euro/t) Carbon capture utilization and storage (Ccus): 3,500 MtCO₂ (2017: 2.4 MtCO₂)

The **IPCC RCP 8.5 physical scenario** was selected as a “pessimistic” scenario, to understand the possible impacts on the Hera Group’s strategy in the event of a “business-as-usual” trajectory and consequent sharp increase in the average temperature (about 4°C). The indicators available in the models that simulate the RCP 8.5 scenario were selected starting from the results of an analysis previously conducted by Enterprise Risk Management, which involved the business units, to identify the climate-related events to which they are most exposed.

RCP 8.5 PHYSICAL SCENARIO: KEY PARAMETERS

	Size	Parameter	1980-2005	2050 Trends
Rainfall		Days with heavy rainfall	23 days	↘
		Rainy days	90 days	↘
		Consecutive days without rain	25 days	↗
Temperatures		Average maximum temperature	17.5°C	↗↗
		Average minimum temperature	8.5 °C	↗↗

Size	Parameter	1980-2005	2050 Trends
	Heating degree days	1950 days	↘↘
Sea	Sea level	+8 cm (vs. 1990)	↗↗

Timelines have also been defined in order to distinguish and classify risks, opportunities and impacts among those in the short, medium and long term. This strategic approach makes it possible to go beyond the traditional time frame of the Business plan.

Short term	Medium term	Long term
0 to 5 years	5 to 10 years	10 to 30 years
Business plan time period	Decarbonisation targets time period	European Green Deal time period

Risks and opportunities resulting from climate change

[201-2]

The analysis of the ETP 2DS and RCP 8.5 climate scenarios made it possible to identify **eight physical risks, eight transition risks and 15 opportunities**. Each risk and each opportunity has been associated with:

- a time period;
- a priority level (defined as a combination of the level of probability that the context in which Hera operates will change according to what is described by the risk/opportunity and the impact of the risk/opportunity on the business);
- one or more management methods (for risks) and one or more business initiatives (for opportunities).

Physical risks

The analysis of the RCP 8.5 climate scenario conducted by the Hera Group, combined with the investigations already carried out by Enterprise Risk Management and the support of the business units, made it possible to identify **eight physical risks** distributed over the medium- and long-term time horizons, consistent with the notion that the impacts of climate change will become increasingly evident. To mitigate, manage or transfer these risks, **21 management** methods have also been identified, which allows the Group to be better prepared in view of possible future changes.

Some of the management methods envisaged in the 2023-27 Business plan are indicated in the following paragraph: Hera's strategy for the climate".

RCP 8.5 SCENARIO: OVERVIEW OF PHYSICAL RISKS AND MANAGEMENT METHODS

8 Physical risks		21 Management methods (no. and risk categories)
Changing weather and climate phenomena	2 medium term 2 long term	6 Acute 8 Chronic
Temperature rise	2 medium term 1 long term	2 Acute 3 Chronic
Sea level rise	1 long term	2 Chronic

Short-term time horizon: 2023-2027; Medium term: 2028-2030; Long term: 2031-2050

Of the eight physical risks assessed, those characterised by a higher level of priority were subjected to in-depth studies to simulate the related **impacts**. In particular, the risk associated with the **drop in the consumption of gas and district heating** for civil use following the increase in temperature was considered significant in the long term. For further details on the simulations of the quantifications of the impacts, also financial, of this risk, see paragraph 1.02 "Risk Factors: Actors, Methodology and Scope of Management" of the Report on Operations, while for the evaluations related to the potential effects in terms of impairment test, please refer to paragraph 2.02 "Notes" of the Consolidated Financial Statements.

As part of the risk management activities carried out within the Hera Group, in 2022 the company **assessed the risks correlated with weather-climate events**, with particular reference to floods and their effect on the Group's assets; in this regard, it completed a risk assessment project called "**Analysis of hydraulic risk in the climate change**". See the paragraph "[Resilience and adaptation](#)" for additional details in this regard.

Transition risks

The climate transition risks have been identified mainly through the analysis of the ETP 2DS scenario of the International Energy Agency. The analysis led to the mapping of eight **transition risks**, mainly concentrated in the medium term and distributed over two of the three categories of the classification suggested by the TCFD. To mitigate, manage or transfer these risks, **13 management methods** have also been identified, which allows the Group to be better prepared in view of possible future changes.

Some of the management methods envisaged in the 2023-2027 Business plan are indicated in the following paragraph: "Hera's strategy for the climate".

IEA 2DS SCENARIO: SUMMARY OF TRANSITION RISKS AND MANAGEMENT METHODS

8 Transition risks		13 Management methods (no. and risk categories)
CO ₂ : -54% by 2050	4 medium term	1 Regulatory policy/Reputation 2 Regulatory policy 1 Market 1 Reputation
Electricity: increase in demand and share of renewable energy sources	3 medium term 1 long term	3 Technology 3 Market 2 Regulatory policy

Short-term time horizon: 2023-2027; Medium term: 2028-2030; Long term: 2031-2050

Transition risks prioritised are subjected to in-depth studies to simulate their **impacts**. The risks relating to **energy efficiency** trends and the **electrification of consumption**, and the extension of **carbon pricing** systems, deserve further evaluation. Management methods and monitoring indicators have been outlined for each risk class.

Assessments are also underway on the effects of transitional risks from **electrification of consumption** for the electricity and gas distribution networks, and for the end customer market. For the evaluations related to the potential effects in terms of impairment test, please refer to paragraph 2.02 "Notes" of the Consolidated Financial Statements.

Opportunities

The opportunities deriving from the decarbonisation processes have been identified by the Hera Group through the study of the ETP 2DS scenario of the International Energy Agency. The analysis led to the identification of **15 opportunities**, mainly associated with forecasts for the reduction of greenhouse gas emissions produced, the increase in the demand for electricity and greater penetration of renewable energy sources, and the development of advanced biofuels. Most of the opportunities are foreseen in the short term and **39 initiatives** have been identified to seize them.

There are 11 opportunities classified as relevant **in the short term** (by 2027). The initiatives designed to collect the most promising opportunities have been further developed to inform the new Hera Group **2023-2027 Business plan**. The following paragraph describes how the new Plan seizes the opportunities to participate in the decarbonisation process, and which initiatives will be implemented to achieve the objectives (indicated over the short term).

IEA 2DS SCENARIO: SUMMARY OF OPPORTUNITIES AND INITIATIVES

15 Opportunities		39 Initiatives (number and categories of opportunities)
CO ₂ : -54% by 2050	6 short term 1 long term	10 Resource efficiency 9 Energy sources 8 Products and services 1 Markets
Electricity: increase in demand and share of renewable energy sources	3 medium term 3 long term	5 Energy sources 4 Products and services 1 Resource efficiency
Energy: increase in advanced biofuels	1 short term 1 medium term	5 Energy sources 2 Resource efficiency
Short-term time horizon: 2023-2027; Medium term: 2028-2030; Long term: 2031-2050		

Hera's climate strategy

The Hera Group's 2023-2027 Business plan confirms the sustainability guidelines of European policies as a reference and the **Sustainable Development Goals** at the basis of the creation of shared value.

The reference framework of the new Business plan is made up of **three strategic dimensions** that represent the great challenges of the sector: **ecological transition, innovation and cohesion and social development**. The Group's projects hinge on these strategic dimensions in all businesses supervised, with the aim of combining the industrial development of the multi-utility with that of the context in which the Group operates, promoting well-being for all stakeholders and generating shared value ("Shared-value" Ebitda).

The "Shared-value" Ebitda indicator measures the portion of the Group's consolidated Ebitda generated by business activities that respond to the drivers of change and the related impact areas identified in the shared-value creation model that guides Hera's approach to sustainability.

In the shared-value creation model, updated last year, one of the three drivers of shared value creation is the **pursuit of carbon neutrality**, for managed services and for the benefit of customers and the reference territorial ecosystem. The actions envisaged to combat climate change, therefore, play an important role in the environmental sphere and in the model of creating shared value.

The strategic structure looks beyond the period covered by the Plan, reaching 2030. Here the objectives for reducing greenhouse gas emissions in line with the criteria of the Science Based Targets initiative stand out in particular, in relation to which it is possible to find ample discussion in the following paragraph.

The procedures for managing physical and transition risks and the business initiatives associated with the opportunities are shown below.

Physical risk	Time period	Priorities	Management method
Floods with consequent landslides and mudslides	Medium term 2028-2030	Medium-high	<ul style="list-style-type: none"> Interventions for the infrastructure upgrading of drainage networks, accumulations and purification plants Increased alert capacity for extreme events in sensitive areas
Rising temperatures	Long term 2031-2050	Medium-high	<ul style="list-style-type: none"> Market strategies oriented towards the development of strategic environmental assessments (VAS) dedicated to customers to integrate and enrich the offer portfolio
Extreme weather phenomena	Medium term 2028-2030	Medium-low	<ul style="list-style-type: none"> Resilience plan and upgrading of the electricity distribution network in view of extreme winter events, with interventions on overhead lines and substations
Changes in the time distribution of annual precipitation and average rainfall quantities	Long term 2031-2050	Medium-low	<ul style="list-style-type: none"> Strengthening and expansion of supply sources to increase the resilience of the aqueducts Creation of interconnections between water networks Enhancement of the application of advanced leak detection techniques to increase the level of efficiency of network

Transition risk	Time period	Priorities	Management method
Electrification of energy consumption and development of renewable energy sources	Medium term 2028-2030	Medium-high	<ul style="list-style-type: none"> Proposal aimed at the development and sale of photovoltaic systems, consumer and utility scale, and the development of sustainable mobility Acquisition of increasing shares of customers in the electricity sector, as a result of the energy carrier switch Development of gas networks for flexibility needs in the use of renewable gases Greater presence in the electricity distribution sector
Limits on the generation of greenhouse gas emissions	Medium term 2028-2030	Medium-high	<ul style="list-style-type: none"> Reduction of the Group's carbon footprint with energy efficiency projects, increasing the optimised management of consumption and the use of zero-emission energy sources
Introduction of measures that require structural and non-structural efficiency measures	Medium term 2028-2030	Medium-high	<ul style="list-style-type: none"> Specific projects activated in the field of energy efficiency Strengthening of advanced techniques aimed at limiting the use of primary resources, in the field of: <ul style="list-style-type: none"> water (reduction of water leaks, reuse of water resources) waste (initiatives to enhance recovery and recycling)

Opportunities	Time period	Initiative	Area
Policies on air quality and urban emissions, with associated incentives intended to promote efficient district heating systems	Short term 2023-2027	<ul style="list-style-type: none"> Saturation of production capacity of current district heating systems Conversion of district heating systems to "Efficient District Heating Systems" Interconnection of district heating systems Geothermal source enhancement 	<ul style="list-style-type: none"> District heating Gas sales
	Middle term 2028-2030	<ul style="list-style-type: none"> "CLIMA" project and other initiatives to optimise leak detection and reduce gas network losses Installation of capture, use and storage of CO₂ for waste-to-energy plants 	<ul style="list-style-type: none"> Gas distribution Waste treatment
	Short term 2023-2027	<ul style="list-style-type: none"> Energy efficiency services for buildings 	<ul style="list-style-type: none"> Gas sales Electricity sales
Tax relief for energy efficiency and EU incentives for decarbonisation	Short term 2023-2027	<ul style="list-style-type: none"> Sale of electricity from renewable sources and gas with emissions offsetting Green loyalty programs and value-added services for energy efficiency and carbon neutrality Sale of heat pump systems Digitisation of documents and bills 	<ul style="list-style-type: none"> Gas sales Electricity sales
Customer awareness and growth of green offers by Utility companies	Short term 2023-2027	<ul style="list-style-type: none"> NexMeter metres installation 	<ul style="list-style-type: none"> Gas distribution Gas sales
Technological optimisation and plant efficiency	Short term 2023-2027	<ul style="list-style-type: none"> Energy efficiency measures and optimisation of plants through revamping 	<ul style="list-style-type: none"> Energy consumption
Promotion of the circular economy and growth in the demand for recycled plastic and/or bioplastic	Short term 2023-2027	<ul style="list-style-type: none"> Expansion of plastic recycling business 	<ul style="list-style-type: none"> Waste treatment
Dissemination of renewable energy communities and	Short term 2023-2027	<ul style="list-style-type: none"> Development of energy communities 	<ul style="list-style-type: none"> Electricity sales

Opportunities	Time period	Initiative	Area
environmental communities, and growth in the demand for distributed renewable energy		■ Sale of photovoltaic systems	■ Electricity sales
		■ Development of smart grids	■ Electricity distribution
Development of electric mobility and increased demand for electricity along road infrastructures	Short term 2023-2027	■ Fleet conversion to low-carbon	■ Company fleet
		■ Installation of electric charging infrastructures	■ Company fleet ■ Electricity sales
Production of biomethane through recovery processes (possible eligibility for incentives)	Short term 2023-2027	■ Production of biomethane from organic waste	■ Waste treatment
Production of syngas and/or green gas (hydrogen, biogas) for the decarbonisation of the gas supply chain and for the management of any surplus production of renewable energy	Short term 2023-2027	■ Construction of a power-to-gas plant for the accumulation of electricity	■ Management of the water cycle
		■ Green hydrogen production initiatives	■ Gas sales ■ Waste treatment
		■ Experiments with the injection of hydrogen into the gas network	■ Gas distribution ■ Gas sales
Strengthening of Hera's positioning as a reference for the sustainability of local area and cities	Short term 2023-2027	■ Creation of an Energy Park	■ Electricity sales
Development of photovoltaic fields on land available to Hera and not usable for other purposes	Short term 2023-2027	■ Installation of photovoltaic panels on landfills, water service plants and other external sites(agrivoltaics)	■ Energy consumption ■ Electricity sales
Increased access to capital to match benchmarks	Long term (2031-2050)	■ Net Zero Project	■ All scopes

Climate performance and targets

The Hera Group's strategy for **seizing the opportunities** associated with decarbonisation and **mitigating the risks** of climate change is also governed by monitoring specifically defined **metrics**.

On the one hand, the indicators relating to **greenhouse gas emissions** and the related intensity indexes measure the Company's overall ability to reduce its impact on the climate and minimise risks. On the other hand, the **metrics that influence emissions**, reclassified in line with the guidelines of the TCFD (Guidance on metrics, targets, and transition– 2021). These quantitative measurements, which also include economic-financial indicators, capture the ways in which the Hera Group is redesigning its internal processes and, above all, the commercial offer to seize the opportunities offered by regulatory, technological and market evolutions related to decarbonisation.

The following table summarises types and number of indicators envisaged for each monitoring area. The indicators are shown in the attachments to this Report.

Monitoring scope	Indicators	Of which with target / forecasts
Emissions	12	10
Emission intensity indices	6	2
Risks and opportunities	4	0
Investments and use of capital	5	0
Remuneration	2	0
Other metrics - Energy	13	10
Other metrics - Resources	7	7
Total indicators	49	29

Hera Group's greenhouse gas emissions

The **Group's total greenhouse gas** emissions (Scope 1 + market-based Scope 2 + Scope 3) in 2023 amounted to approximately **12.6 million tonnes of CO₂e**.

In particular, the emissions directly produced by the Group (**Scope 1**) are approximately 936 thousand tons of CO₂ and represent 7.4% of the Group's total emissions. Indirect emissions deriving from the electricity consumed by the Group (**Scope 2**), calculated using the market-based method, are zero thanks to the total coverage of consumption with energy from renewable sources certified by the Guarantee of Origin.

The emissions caused indirectly by the Group's activities (**Scope 3**) are approximately 11.7 million tonnes of CO₂ and, or 92.6% of the Group's total emissions. Scope 3 emissions can be divided into "upstream" (upstream activities in the supply chain) and "downstream" (downstream activities in the supply chain) categories. Scope 3 of the Hera Group includes the following emission categories:

- upstream activities (5.0 million tonnes of CO₂, 39.8% of total Group emissions): production of fuels used to generate non-renewable electricity sold to customers; production of natural gas sold to customers; production of fuel consumed in industrial cogeneration plants installed at third parties' locations; production of fuels consumed in owned vehicles; production of fuels consumed for the generation of non-renewable electricity consumed internally; network losses of electricity consumed internally; use of suppliers' vehicles for waste collection; use of Herambiente vehicles to transport waste; production and printing of paper bills;
- downstream activities (6.7 million tonnes of CO₂e, 52.8% of total Group emissions): consumption by customers of methane gas sold; energy production from joint venture plants; and, waste recycling operations from sorted collection.

[305-1]
[305-2]
[305-3]

BREAKDOWN OF GREENHOUSE GAS EMISSIONS

thousands of tonnes CO ₂ e	2021	2022	2023	Delta 2023/2022
Waste treatment (waste-to-energy plants and municipal waste landfills)	569.7	527.7	558.8	+6%
District heating	197.7	195.6	163.8	-16%
Energy services of HSE, and other fuel consumption	170.5	165.8	164.8	-0.6%
Gas network leaks	13.7	16.7	15.6	-5%
Company fleets	30.2	30.8	32.4	+5%
Total direct emissions (Scope 1)	981.8	936.6	935.7	-0.1%
Indirect emissions deriving from energy consumption (Scope 2, market-based)	46.6	0.0	0.0	-
Total emissions Scope 1+2 (market-based)*	1,028.4	936.6	935.7	-0.1%
Sale of methane gas – downstream emissions*	6,561.6	6,898.4	6,100.1	-12%
Sale of electricity*	3,170.3	3,357.1	3,914.1	+17%
Sale of methane gas – upstream emissions	1,122.9	1,175.2	1,007.3	-14%
Emissions related to energy production and consumption (not included in Scope 1 and 2)	359.6	283.0	214.2	-24%
Other indirect emissions related to managed services	509.0	537.5	456.6	-15%
Total indirect emissions (Scope 3)	11,723.5	12,251.1	11,692.4	-5%
Total emissions Scope 1+2 (market-based) + Scope 3	12,751.9	13,187.7	12,628.1	-4%

The calculation criteria are aligned with the methodology of the Science-Based Targets initiative. The calculation specifications adopted are detailed in the Attachments. Data does not include Tri-Generazione, and Alipplast's foreign subsidiaries. Scope 1 data on fuel consumption do not include the companies Macero Maceratese, Vallortigara Servizi Ambientali and Recycla. The Scope 1 data relating to gas network leaks do not include AresGas. The Scope 3 data relating to the sale of electricity and methane gas does not include AresGas. Scope 3's 2022 data for electricity sales does not include Eco Gas and Con Energia. Scope 3's data for natural gas sales for 2021 has been aligned with the calculation methodology used for 2022 data.

*Indicators with validated science-based target. For the sale of electricity, the target relates to carbon intensity (t CO₂e/MWh). See the dedicated paragraph “Reduction of Greenhouse Gas Emissions: Objectives, Results and Targets” for additional information.

In 2023, total greenhouse gas emissions (Scopes 1, 2 and 3) were down by 4% compared to 2022.

Specifically, direct emissions (**Scope 1**) and indirect emissions from electricity consumption (**Scope 2**) remain stable (-0.1%; on a like-for-like basis with the previous year, thus excluding the consumption of the A.C.R. company acquired in 2023, emissions would improve by 0.7%). Emissions from waste treatment plants increased (+6%, due to restarting the waste-to-energy plant for special waste in Ravenna, which will be shut down for the whole of 2022 due to revamping works) and from the corporate fleet (+5%; on a like-for-like basis would go up by 5%). On the other hand, emissions from district heating service plants were down (-16%, due to a lower thermia during the year, the building efficiency measures of the last few years, and reduced functionality of cogenerators) and methane fugitive emissions from gas distribution networks (-5%). Finally, emissions from fuel consumption in HSE plants serving industrial customers and Group plants remain stable (-0.6%; on a like-for-like basis would go up by 2%)

The Scope 2 emissions of 2023 are **zero** thanks to the total coverage of electricity consumption with certified renewable energy. Scope 2 emissions are calculated with the “market-based” method, making the most of the organisation’s specific procurement choices, i.e., the purchase of renewable energy with certificates of Guarantee of Origin and, therefore, zero impact; the emission factor relating to the national “residual mix” is applied to the portion of electricity purchased without certificates (the latest available is equal to 457.2 g CO₂e/kWh). If calculated with the “location-based” method, thus applying a national average emission factor (equal to 255.6 g CO₂/kWh) which does not consider the Company’s specific purchasing decisions, Scope 2 emissions amounted to approximately 141 thousand tonnes (154,000 in 2021, 0.7%).

The total indirect emissions of the **Scope 3** type in 2023 amount to approximately 11.7 million tonnes of CO₂e, these **were down by 5%** compared to the previous year.

Emissions from the sale of natural gas were down by 12%, due to lower volumes sold in all segments, with the exception of those to the last resort market, which remained stable.

With regard to electricity sales, emissions were up by 17%: volumes sold from renewables increased (+1.2 TWh, or +37%) but to a lesser extent than overall volumes (+2.4 TWh, or +21%).

Indirect emissions related to energy consumption and production were down by 24%, mainly due to lower energy produced by plants in which Hera holds a minority stake.

Finally, other indirect emissions related to managed services were down by 15%, in this case due to lower fuel consumption in vehicles operated by suppliers for waste collection and transport.

For a more detailed analysis of the trend in indirect emissions from the sale of methane gas and electricity, see the paragraph below relating to the greenhouse gas reduction objectives.

Greenhouse gas emissions under the EU-ETS program

The **European Union Emissions Trading System (EU ETS)** is a cornerstone of European policies to combat climate change, and represents a key tool for a cost-effective reduction of greenhouse gas emissions. The system covers about 40% of the emissions of the countries involved; its fourth phase of application began in 2021, and will end in 2030. On an annual basis, the plants in the regulated sectors must report the greenhouse gas emissions recorded, then void a number of **emission permits** (“European Union Allowances”, 1 EUA = 1 ton of carbon dioxide equivalent) made available on the market in a calibrated measure, and decreasing over time to **encourage a progressive reduction of emissions** in accordance with long-term Community objectives.

The contribution to the achievement of greenhouse gas emission reduction targets by 2030 (**-55% on a 1990 basis**), translates for the sectors covered by the EU ETS into a reduction of -62% compared to 2005. Finally, the EU ETS Directive with which the EU introduced and regulated the scheme was updated with Directive (EU) 2023/959 of 10 May 2023.

In the Hera Group, there are **nine** plants subject to the **EU ETS regulation** in 2023, all attributable to the activity of energy production serving the **district heating** networks. Emissions in 2023 (127,521 t CO₂) were lower than in 2022 (149,421 tCO₂) considering the effect of a milder climate.

To take into account the fact that district heating is a **public utility service** and that it meets environmental sustainability criteria, the burden associated with the final emissions imposed by the System is partly mitigated through the free assignment of emission permits, or a maximum amount of permitted emissions within which no costs are foreseen. In 2023, Hera’s total carbon dioxide emissions amounted to 34,249 metric t CO₂. Specifically, 8,476 t CO₂ were allocated as free European Union Allowances (EUAs). It’s noteworthy that excluding the Fair system acquired in 2022, the allocation of

EUAs free of charge is diminishing in accordance with the **decreasing trajectory over time** aimed at promoting the attainment of long-term greenhouse gas reduction goals.

In 2023, the emissions of plants under the Eu-ETS regime amounted to 13.6% of the Group's total direct emissions (in 2022 they were 16.0%).

Carbon intensity indices [305-4]

The Group's emissions results can be represented by means of a number of indicators which mark its evolution and prospects, giving an overview of the Company's performance in terms of reducing the impact of greenhouse gases released. By comparing direct (Scope 1) and indirect emissions from energy consumption (Scope 2) with some economic and demographic indicators, it is possible to obtain **carbon intensity indices** that reflect improvements generated.

CARBON INTENSITY INDICES

	2021	2022	2023
Total Scope 1 and 2 emissions (t CO ₂ e)	1,028,381	936,590	935,657
Ebitda (mn€)	1,224	1,295	1,495
Carbon intensity index (t CO ₂ e Scope 1 and 2 / gross operating margin in mn€)	840	723	626
Residents served (thousands)	4,224	4,194	4,201
Carbon intensity index (t CO ₂ e Scope 1 and 2 / thousands of residents served)	244	223	223

The calculation criteria are aligned with the methodology of the Science-Based Targets initiative. The Scope 1 data relating to gas network leaks do not include AresGas.

The emission intensity index calculated by comparing Scope 1 and 2 greenhouse gas emissions to **Ebitda** further improved compared to the previous year (-13%) thanks to the GOP increase (+15%), against stable emissions (-0.1%). The **resident**-based ratio remains stable. Finally, the ratio on a customer basis went up slightly (4.5 tonnes per customer).

Considering the reporting obligation E1-6 - Gross Scope 1,2 and 3 greenhouse gas emissions and total greenhouse gas emissions, as required by the new European ESRS standard, the ratio of the Hera Group's total emissions to revenues for the year 2023 is 848 tonnes per million euro, up 29% compared to 2022 due to a decrease in revenues (-26%).

CARBON INTENSITY INDEX FOR ELECTRICITY SALES

	2021	2022	2023
Emissions from the sale of electricity (thousands of t CO ₂ e)	3,170.3	3,357.1	3,914.1
Electricity sold (TWh)	11,301.3	11,641.8	14,054.6
Carbon intensity index of electricity sales (t CO ₂ e / MWh) *	0.281	0.288	0.278

*Indicator with validated science-based target: -50% to 2030 compared to 2019. See the dedicated section 'Reducing greenhouse gas emissions: objectives, results and targets' for more details. Scope 3 data on electricity sales does not include AresGas. The data does not include Eco Gas and Con Energia.

The **carbon intensity index of electricity sales** in 2023 improves to 0.278 t CO₂e/MWh (-3% compared to 2022) and stands at -24% compared to the base year (2019) used as a reference for setting the Science Based Targets. The improvement in the indicator stems from a smaller increase in absolute emissions (+17%) than the increase in volumes sold (+21%).

Reduction of greenhouse gas emissions: objectives and results

As part of the process of aligning reporting with the TCFD recommendations, the Company evaluated the climate and transition scenarios with a horizon of 2050. On the basis of these insights, 15 development opportunities for the businesses managed by the Group were identified and translated into initiatives during the preparation phase of the Business plan. These initiatives, together with the evolution of the energy and climate scenario, will lead to a reduction in the Group's both direct and indirect greenhouse gas emissions.

On the basis of the above, **objectives** have been defined for **reducing emissions by 2030** compared to 2019, consistent with the methodology of the **Science-Based Targets initiative** (as regards, in particular, the "Well-below 2°C" level, aimed at limiting the increase in the Earth's average temperature well below 2°C), and included in the **2023-2027** Business plan approved in January 2024. The scope of the objectives regards both the emissions of the Group (Scope 1 and 2) and those of customers (Scope 3, relating to the sale of electricity and the sale of downstream methane gas) and, therefore, relates to 86.5% of the Group's total emissions for 2019. The objectives thus defined were submitted to the Science-Based Targets initiative at the end of January 2021, and subsequently updated in March 2021 in response to the request of the Science-Based Targets initiative.

The objectives for reducing greenhouse gas emissions consistent with the "Well below 2°C" scenario validated by the Science-Based Targets initiative are:

- Scope 1+2: **absolute reduction of 28%** by 2030 compared to 2019 (includes biogenic emissions deriving from the consumption of bioenergy and from the combustion of the biodegradable fraction of municipal solid waste);
- Scope 2: to **increase from 83% to 100%** by 2023 the share of certified renewable electricity purchased to cover internal consumption;
- Scope 3 sale of downstream methane gas: **absolute reduction of 30%** by 2030 compared to 2019;
- Scope 3 electricity sales: **reduction of carbon intensity (t CO₂e/MWh) by 50%** in 2030 compared to 2019 in line with the Sector decarbonisation approach (Sda).

Based on these objectives, the reduction of greenhouse gas emissions for the defined perimeter is expected to be 37% in 2030 compared to 2019.

These objectives will be achieved thanks both to the reduction initiatives described above and to exogenous aspects made explicit in the Cen energy scenario developed by Terna and Snam and taken as a reference for the definition of the targets: decarbonisation of electricity production, increase in energy efficiency, and electrification of consumption.

Below is a table with the trend for the last three years of the indicators with 2030 targets validated by SBTi. The 2027 forecast is also reported as per the 2023-27 Business plan. To more correctly represent the trend of emissions with respect to the medium and long-term objectives, the final data from this balance are presented in an "adjusted" version, which sterilizes the increase in emissions associated with gas volumes sold in last-resort services, which, since the end of 2021, have recorded an extraordinary and transitory increase as a result of the sharp increase in the prices of energy vectors.

GREENHOUSE GAS EMISSIONS AND "SCIENCE-BASED" REDUCTION TARGETS

	2019 (base year)	Delta 2022/2019 (adjusted)	Delta 2023/2019 (adjusted)	2027 (forecast)	Target 2030
Direct and indirect emissions Scope 1+2 (market-based)	1,131.0 kt CO ₂ e	-17%	-17%	-21%	-28%
Scope 2 indirect emissions (market-based) *	48.4 kt CO ₂ e	-100%	-100%	-100%	-100%
Indirect emissions Scope 3 downstream from the sale of methane gas	6,263.5 kt CO ₂ e	-2%	-15%	-24%	-30%
Carbon intensity of electricity sales - Scope 3 upstream	0.365 t CO ₂ e/MWh	-21%	-24%	-46%	-50%
Total SBT target perimeter	11,781.2 kt CO₂e	-12%	-14%	-29%	-37%

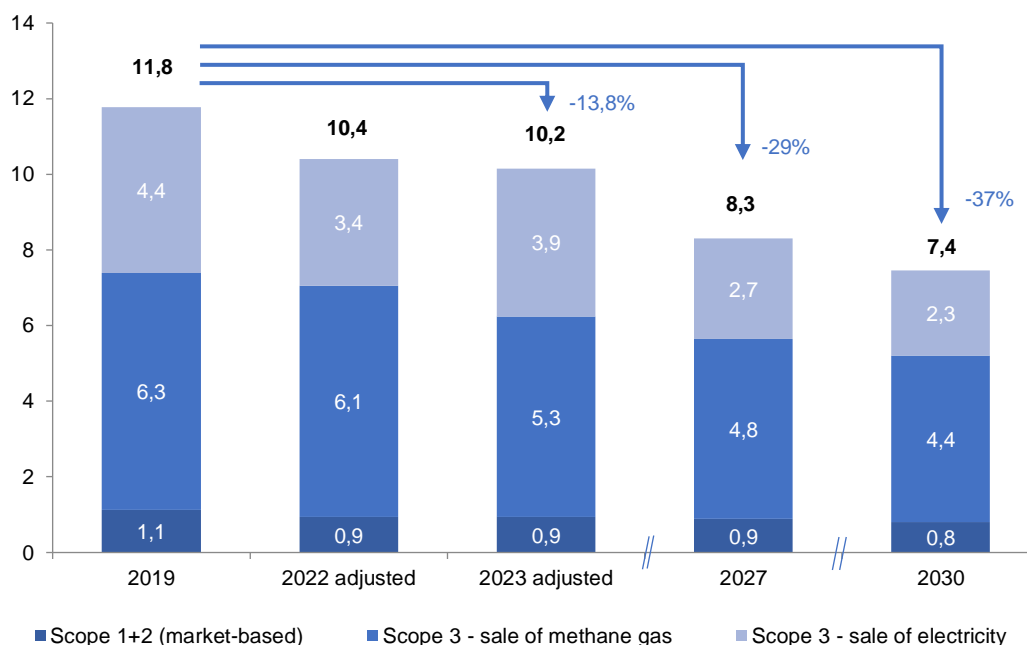
*corresponding to 100% renewable electricity purchased for internal consumption.

The calculation criteria are aligned with the methodology of the Science-Based Targets initiative. The 2019 figure includes the data relating to EstEnergy, Amgas Blu, Ascotrade, Ascopiave Energia, Blue Meta, Etra Energia, merged into Hera at 31/12/2019. Data does not include Tri-Generazione, and Aliplast's foreign subsidiaries..Scope 1 data on fuel consumption do not include the companies Macero Maceratese, Vallortigara Servizi Ambientali and Recycla. The Scope 1 data relating to gas network leaks do not include AresGas. The Scope 3 data relating to the sale of electricity and methane gas does not include AresGas. Scope 3's 2022 data for electricity sales does not include Eco Gas and

Con Energia. Scope 3's data for methane gas sales does not take into account transitory increases in volumes sold in services of last resort.

In addition, the following graph shows the greenhouse gas emissions in the 2019-2023 period, those forecast for 2027 on the basis of the business plan and the 2030 targets validated by SBTi.

HERA GROUP GREENHOUSE GAS EMISSIONS (IN MILLIONS OF T CO₂e)



The calculation criteria are aligned with the methodology of the Science-Based Targets initiative. The 2019 figure includes the data relating to EstEnergy, Amgas Blu, Ascotrade, Ascopiave Energia, Blue Meta, Etra Energia, merged into Hera at 31/12/2019. Data does not include Tri-Generazione, and Aliplast's foreign subsidiaries. Scope 1 data on fuel consumption do not include the companies Macero Maceratese Vallortigara Servizi Ambientali and Recycla. The Scope 1 data relating to gas network leaks do not include AresGas. The Scope 3 data relating to the sale of electricity and methane gas does not include AresGas. Scope 3's 2022 data for electricity sales does not include Eco Gas and Con Energia. Scope 3's data for methane gas sales does not take into account transitory increases in volumes sold in services of last resort.

During the 2019-2022 period, Scope 1 and 2 emissions were down by 17%: this was achieved mainly due to: the reduction of emissions from waste treatment plants, thanks to the closure in 2020 of the waste-to-energy plant for urban waste in Ravenna, the gradual reduction of urban waste sent to landfills, and the plant shut-down for revamping work on the waste-to-energy plant for special waste in Ravenna for the whole of 2022; the purchase of only renewable electricity for the whole Group; the lower internal consumption of fuels deriving partly from energy efficiency measures and partly from climatic conditions; to a lesser extent, lower fugitive losses from the gas network and lower gas consumption in district heating service plants, again due to energy efficiency measures and climatic conditions.

Compared to 2022, Scope 1 and Scope 2 emissions remained stable in **2023**: emissions from waste-to-energy plants increased (also due to the restart of the Ravenna special waste-to-energy plant) and from the corporate fleet (as a result of the change in the perimeter for the acquisition of A.C.R.). On the other hand, emissions from landfills for municipal waste (due to the progressive reduction of waste delivered) and district heating service plants decreased (due to lower temperatures during the year, the building efficiency measures of the last few years) and methane fugitive emissions from gas distribution networks (also due to predictive maintenance). Finally, emissions from fuel consumption in Group plants and HSE plants serving industrial customers remained stable (excluding the change in perimeter due to the acquisition of A.C.R. consumption would decrease). On a like-for-like basis, thus excluding A.C.R. which was acquired in 2023, Scope 1+2 emissions would improve by 0.7% compared to 2022.

Compared to 2019, the 2023 reporting shows a **17% reduction in Scope 1 and 2 emissions** (-18% on a like-for-like basis).

With regard to **Scope 3 emissions related to the sale of methane gas** (downstream), the emissions recorded during the 2019-2022 period were down by 2% (+10% also considering the extraordinary and transitory increase in volumes sold to the services of last resort gas) in proportion to the contraction in volumes sold resulting from milder temperatures, more efficient behaviour by household, condominium

and corporate customers, and also due to the effect of the sharp increase in energy carrier prices, specifically during the second half of 2022; these reductions were only partly offset by the increase in sales to Consip.

Compared to 2022, in **2023** Scope 3 emissions from gas sales were down by 13%, again this year due to milder temperatures, more virtuous behaviour by customers and in spite of a drop in energy carrier prices also during the early months of the year. Including the increase in volumes sold to gas utilities of last resort, emissions were down by 12% compared to 2022.

Compared to 2019, the 2023 reporting shows a **15% reduction in Scope 3 emissions from methane gas sales** (-3% also considering the increase in volumes sold to gas utilities of last resort).

As regards absolute **Scope 3 emissions from electricity sales**, the reduction recorded during the 2019-2022 period was 23.5% due to higher volumes from renewables sold to the free market (from 30.2% in 2019 to 40.5% in 2022) against a decrease in volumes sold (-3%). At the same time, the carbon intensity index of electricity sales was down by 21%.

Compared to 2022, in **2023** absolute emissions were up by 17% due to an increase in volumes sold from renewable sources (+1.2 TWh, or +37%) that is lower than the increase in total volumes sold (+2.4 TWh, +21%, due to the increase in the customer base, including in the safeguarding service); however, the intensity index was up by 3% due to higher volumes from renewables sold on the free market (40.5% in 2022 and 42.8% in 2023).

Compared to 2019, the 2023 reporting shows an **11% reduction in absolute Scope 3 emissions from the sale of electricity and a 24% reduction in the carbon intensity index**.

In summary, considering the scope of greenhouse gas emissions for which the reduction objective by 2030 has been defined, the **fourth annual report** after the validation of the objectives by SBTi allows us to determine, keeping in mind the same volumes sold in last-resort gas services, these showed a **decrease of 14%** compared to 2019. Also considering the increase in volumes sold in last-resort gas services, significantly influenced by the trend of the energy market in the last period, the overall emissions relating to the perimeter of the SBT target are reduced by 7% compared to the base year.

Hera Net Zero

During 2023, Hera explored the opportunity to communicate its **Net Zero ambitions** with a **climate transition plan** in line with science and the Paris Agreement.

To this end, a project was launched and a working group set up, coordinated by the **Shared Value and Sustainability** and **Strategy, Regulation and Local Authorities** directorates, which saw the involvement of numerous other functions, directorates and business units such as Energy management, Enterprise risk management, Investor relations, Renewable energy production, Ecological transition, Hera Comm, Herambiente and HSE.

Numerous meetings were held to understand the **challenges** involved in preparing an **ambitious, solid and credible** climate transition plan and thus to identify and seize the **opportunities** arising from the transition to a low-carbon economy.

After benchmarking the ambitions disclosed by other companies and reviewing reference standards and frameworks, possible **levers for decarbonisation** were identified, specifically: energy efficiency, the use of renewable energy for internal consumption, renewable energy production, carbon capture and storage, electrification of its customer base and the sale of renewable electricity. In-depth sessions were then organised on the scenarios and on **Hera's positioning in some key areas**:

- evolution of gas and electricity demand;
- carbon capture, storage and utilisation (CCUS);
- development of renewable energy from **photovoltaics**;
- **carbon credits** for emission offsetting and carbon sequestration;
- development of **energy efficiency in buildings**;
- development of the market for **renewable energy guarantee of origin certificates**.

At the time of writing, these investigations are ongoing with the aim of **drafting** a climate transition plan for all Scopes (1, 2 and 3) **in the coming months** and **notifying stakeholders** of its Net Zero commitment.

Emissions avoided, offset or absorbed

[305-5]

GREENHOUSE GAS EMISSIONS AVOIDED, OFFSET OR ABSORBED

thousands of tonnes CO ₂ e	2021	2022	2023
Avoided emissions	902.6	913.3	974.5
Offset emissions	582.8	765.2	941.0
Sequestered emissions	0.8	1.5	2.3
Total avoided, offset or sequestered emissions	1,486.2	1,680.0	1,917.8

Thanks to the activities managed by the Group, around **1.9 million tonnes** of greenhouse gases were avoided overall in 2023. Comparing this value to the number of residents served, **457 kilogrammes of greenhouse gases per person were avoided**.









The emissions avoided as a result of the following activities have been considered in the calculation:








- separate collection sent for recovery;
- Aliplast's sale of recycled plastic compared to the sale of virgin plastic;
- production of electricity from renewable sources sold to the grid compared to the national thermoelectric mix;
- use of district heating compared to traditional heating with methane, LPG and diesel boilers;
- consumption of biomethane produced compared to fossil methane gas;
- HSE energy efficiency interventions on industrial customers and public administration buildings that are not customers of the Group;
- development of public recharging infrastructures;
- to a lesser extent, use of recycled paper for printing bills compared to bills printed on non-recycled paper and digitisation of documents compared to the use of paper.




In addition, **emission offsets** from the sale of methane gas to customers are also included in the calculation (see section "[Renewable energy for our customers](#)" for more details) and, to a lesser extent, **CO₂ sequestration** from trees planted as a result of the Group's initiatives, which can be estimated at 2,300 tonnes for 2023 (as per disclosure requirement E1-7 - Greenhouse gas absorption and greenhouse gas mitigation projects financed with carbon credits; see case study 'More than 24,000 trees planted by 2024' for more details).

3. ENVIRONMENT - REGENERATING RESOURCES AND CLOSING THE CIRCLE

3.01 Objectives, performance and targets

What we said we would do	What we did	SDGs	Progress*
Transition towards a circular economy			
77% sorted waste collection by 2026 (67.8% in 2022) also thanks to a strong investment focused on the engagement of residents and businesses (78% Hera, 68% AcegasApsAmga, 81% Marche Multiservizi).	72.2% of sorted waste collection in 2023, up on 2022 (74.4% Hera, 57.7% AcegasApsAmga, 72.5% Marche Multiservizi). (see p. 85)	11, 12	
73% recycling rate of packaging by 2026 and >80% by 2030 (higher than the EU 2030 targets).	66% packaging recycling rate in 2022. The overall recycling rate was 61% in 2022. The 2023 data will be reported in the "Tracking waste" report.	11, 12	
<p>Increase in recycled plastic: +102% recycled plastic from Aliplast by 2026 and +150% by 2030 (compared to 2017).</p> <p>Complete an innovative plant by 2024, for the production of high-quality recycled polymers for the IT and electronic sector in Modena.</p> <p>Complete a new plant by 2025, for the recycling of carbon fibre, which is especially reusable in the automotive sector, also thanks to NRRP funds.</p>	<p>+42% plastic recycled by Aliplast in 2023 (compared to 2017).</p> <p>The innovative plant for the production of high-quality recycled polymers for the IT and electronics sector in Modena will be completed in the first half of 2026, having obtained the environmental authorisation to start construction in late 2023.</p> <p>Construction of the carbon fibre recycling plant began in 2023, and the plant will be fully operational in mid-2024. (see p.111)</p>	11, 12, 17	
13% by 2026 and 18% by 2030 reusable wastewater out of total wastewater.	10.1% by 2023 of reusable wastewater out of the Group's total wastewater. (see p. 111)	6, 8, 12, 14	
22% reduction in internal water consumption by 2026 and 25% by 2030 compared to 2017 consumption. Extending the water management project to Herambiente	<p>21.5% reduction in household consumption in 2022 compared to 2017 consumption due to specific water-saving activities.</p> <p>The Water management project is also being extended to Herambiente. (see p.108)</p>	6, 8	
380,000 customers with a "Water consumption Log" by 2026, equal to 52% of the total (260,000 customers in 2022, equal to 35% of the total).	325,046 household customers with the "Water Consumption Log" at the end of 2023 (37.5% of resident household customers; they stood at 35% at the end of 2022). (see p.114)	6, 8, 17	
-6% linear water leakages in 2026 compared to 2021. 27 thousand km of network analysed in 2023-2026 (there were 2.8 thousand in 2020-2021).	<p>Linear water losses to 2022 were stable (8.1 cu m/km/day) compared to 2021 (8.1 cu m/km/day) (see p. 114)</p> <p>27 thousand km of network analysed in a search for leakage (see p. 121)</p>	6, 8	
Development of paper and plastic sorting/pre-sorting plants (Pesaro, Padua, Vicenza): 60k ton/year of paper and cardboard and 40k ton/year of plastic processed in the new plants.	The paper and plastic sorting/pre-sorting plant in Padua is in the planning stage, the one in Pesaro is in the feasibility study stage while the Vicenza project has not been finalised.	11, 12	

What we said we would do	What we did	SDGs	Progress*
Sustainable management of water resources			
<p>100% urban agglomerations >2,000 p.e. upgraded by 2025 thanks to the continuation of the modernisation plan of the purification sector. In addition, upgrade all of the 239 agglomerations managed with a size of between 200 and 2,000 p.e. by 2026, of which:</p> <ul style="list-style-type: none"> ■ 44 to be upgraded out of 202 agglomerations managed with a size of between 200 and 2,000 p.e. in Emilia-Romagna; ■ 1 to be upgrade out of 37 agglomerations managed with a size of between 200 and 2,000 p.e. in Triveneto. <p>Implementation by 2030 of a further 27 interventions in agglomerations with a size of between 2,000 and 10,000 and more than 10,000 p.e. in relation to the requirements laid down in resolutions 201/2016, 569/2019 and 2153/2021 of the Emilia-Romagna Region regarding the upgrading of urban wastewater discharge treatment.</p>	<p>99.8% urban agglomerations >2,000 p.e. upgraded by 2023 thanks to the continuation of the modernisation plan of the purification sector (1 agglomerate upgraded in 2023). In addition, 186 upgraded agglomerations out of 229 managed with a size of between 200 and 2,000 p.e. at 2023, of which:</p> <ul style="list-style-type: none"> ■ 42 to be upgraded out of 192 agglomerations managed with a size of between 200 and 2,000 p.e. in Emilia-Romagna (two agglomerates upgraded in 2023); ■ 1 agglomerate remains to be upgraded out of 37 managed with a consistency between 200 and 2,000 p.e. in Triveneto (it will be upgraded by 2026 interventions carried out in agglomerations of between 2,000 and 10,000 and more than 10,000 p.e. (in Emilia-Romagna) in relation to the requirements laid down in resolutions 201/2016, 569/2019 and 2153/2021 of the Emilia-Romagna Region regarding the upgrading of urban wastewater treatment by 2023. (vedi pag. 115) 	6, 14	
Complete by 2025 all 14 interventions envisaged by the Rimini seawater protection plan (10 interventions completed by 2022).	No intervention concluded, as expected. Of the remaining 4 interventions, 3 will be completed in 2025 and 1 in 2026. (see page 115)	6, 14	
90% of users served in areas with a Water Safety Plan defined by 2026 and 100% by 2030 (61.9% by 2022).	65.8% users served in areas covered by a Water Safety Plan. (see p. 112)	6	
Protection of air, land, and biodiversity			
887,000 square metres of land reused by 2026 in infrastructure constructions (over 80% of the total land involved in constructions completed between 2018 and 2026).	662 thousand square metres of land reused in the construction of infrastructures from 2018 to 2023 (76% of the total land involved). (see p. 140)	8	
<ul style="list-style-type: none"> ■ 7% increase in the volume served by district heating in 2026 compared to 2021 to the benefit of the air quality in the cities served. ■ 75% of energy from district heating from renewable sources, cogeneration and recovery by 2026. ■ In Bologna, continue the construction of the interconnection of four systems (CAAB Pilastro, Berti, Bologna Fiere and Navile facilities) aimed at obtaining a substantial reduction in CO₂ and NO_x emissions. ■ Development of geothermal production in Ferrara and extension of the interconnection of the district heating system in Forlì, also thanks to NRRP funds. 	<ul style="list-style-type: none"> ■ 6% increase in the volume served by district heating in 2023 compared to 2021 (stable compared to 2021). ■ 66% of the energy produced in 2023 will come from renewable sources, cogeneration or recovery. ■ Work continues in Bologna and Forlì on city system interconnections, financed by NRRP funds. ■ In Ferrara, work has been carried out to further improve production from geothermal energy. (see p.126) 	7, 11, 13, 14	
Over 5,000 charging infrastructures (public and private) installed by 2026 for electric mobility (around 1,800 in 2022)	Over 2,100 public and private charging points installed by 2023 for electric mobility.(see p. 140)	11, 17	
Ecotrees Initiative: 10 thousand trees planted and maintained in the three-year period 2022-2024 through customer purchases of sustainable solutions (about 5,700 as of 2022).	Donated additional trees to the area through the initiative, reaching the goal of 10,000 trees planted and maintained a year early. (see p. 383)	7, 11, 12, 17	

*  Result achieved or in line with planning;  Result with moderate variance from planning;  Result with significant variance from planning.

What we will do	SDGs
Transition towards a circular economy	
78% sorted waste collection by 2027 also thanks to a strong investment focused on the engagement of residents and businesses (80% Hera, 68% AcegasApsAmga, 74% Marche Multiservizi).	11,12
72% recycling rate of packaging by 2027 and >80% by 2030 (higher than the EU 2030 targets) (65.7% by 2022).	11,12
Increase in recycled plastic: +122% plastic recycled by Aliplast by 2027 and +150% by 2030 (compared to 60 thousand tonnes in 2017).	
Start work on an innovative plant in Modena in 2026 to produce high-quality recycled polymers for the IT and electronics industries. Complete by 2024 a new plant for recycling carbon fibre, reusable particularly in the automotive sector.	11,12,17
13.6% by 2027 and 18% by 2030 reusable wastewater to total wastewater.	6,8,12,14
24% reduction in household water consumption to 2027 and 25% to 2030 compared to 2017 consumption.	6,8
560,000 customers with a "Water consumption Log" by 2027, equal to 77% of the total (325,000 customers in 2023, equal to 37,5% of the total).	6,8,17
-8.6% linear water leakages by 2027 compared to 2022. 30 thousand km of aqueduct analysed from with predictive algorithms by 2027.	6,8
Sustainable management of water resources	
100% urban agglomerations >2,000 p.e. upgraded by 2025 thanks to the continuation of the modernisation plan of the purification sector. In addition, upgrade all of the 226 agglomerations managed with a size of between 200 and 2,000 p.e. by 2027, of which:	
<ul style="list-style-type: none"> 42 to be upgraded out of 189 agglomerations managed with a size of between 200 and 2,000 p.e. in Emilia-Romagna; 1 to be upgrade out of 37 agglomerations managed with a size of between 200 and 2,000 p.e. in Triveneto. Implementation by 2030 of a further 24 interventions in agglomerations with a size of more than 10,000 p.e. in relation to the requests of resolution 201/2016 of the Emilia-Romagna Region on the upgrading of the treatment of urban wastewater discharges. 	6,14
Complete by 2026 all 14 interventions envisaged by the Rimini seawater protection plan.	6,14
91% of users served in areas with a Water Safety Plan defined by 2027 and 100% by 2030.	6
Protection of air, land, and biodiversity	
828,000 square metres of land reused by 2027 in constructions of infrastructure (70% of the total land involved in constructions completed between 2018 and 2027).	8
<ul style="list-style-type: none"> 2% increase in the volume served by district heating in 2027 compared to 2022 to the benefit of the air quality in the cities served. 79% of energy from district heating from renewable sources, cogeneration and recovery by 2027. In Bologna, continue the implementation of the interconnection of two systems (Caab/Pilastro, Sede Berti/San Giacomo) by 2026 aimed at achieving substantial reductions in CO₂ and NOX emissions. Doubling of geothermal production in Ferrara and extension of district heating system interconnection to Forlì by 2026. 	7,11,13,14
Over 5.1 thousand charging infrastructures (public and private) installed by 2027 for electric mobility.	11,17

3.02 Transition towards a circular economy

The circular economy of municipal waste

Waste management, while not exhausting the measures which are necessary to ensure a transition to a circular economy, represents one of the most urgent areas, on which European directives have been focused for several years.

The Hera Group plays a primary role in managing urban waste, serving **188 municipalities in five regions for a total population of 3.2 million inhabitants**. In Emilia-Romagna, Hera Spa manages the urban cleanliness service in six provinces totalling 136 municipalities. In addition to these municipalities, Hera Spa manages three others in the province of Florence. Furthermore, through Marche Multiservizi, it serves 44 municipalities in the provinces of Pesaro-Urbino and Ancona. It has, since 2013, through AcegasApsAmga, served eight municipalities in the provinces of Padua and Trieste.

TOTAL MUNICIPAL WASTE COLLECTED BY REGION

Thousands of tonnes	2021	2022	2023
Emilia Romagna	1,477.5	1,474.6	1,633.0
Triveneto	255.3	244.5	248.5
Marche	153.6	153.5	150.0
Total	1,886.4	1,872.6	2,031.5
Kilograms per inhabitant	586	586	635

In 2022, the quantities of waste collected by the Group are not perfectly comparable with those of 2021, following an interpretative comparison with the Emilia-Romagna region regarding the transposition of Legislative Decree 116/2020 for which it was possible to include the volumes relating to inert waste, mitigating the effect of the legislation which last year instead had led to a reduction in the total waste collected. With the same regulations, waste collected would decline by -2%. Considering instead the effect of the new interpretation, the volumes relating to waste collected in 2022 recorded a slight decrease of -0.7%.

In addition to the above, it should be noted that 2023 saw the introduction of Legislative Decree No. 213/2022 amending the previous Legislative Decree No. 116/2020, going on to consider residually as municipal waste also inert waste produced by households, considerably increasing the overall waste stream. In the light of the above, there is consequently a significant increase in the volume of waste collected both in Emilia-Romagna (+11%) and in Triveneto (+2%), with per capita production increasing by 8.3% at Group level.

Moreover, compared to 2022, in 2023, in line with the regional reporting criteria, sandy waste (both ordinary collection and collection related to emergency situations) as well as waste deriving from natural disasters that hit the Emilia-Romagna area were also counted. The total amount of waste collected during the flood emergency was 119.2 thousand tons, mainly concentrated during the second half of May, including 77.8 thousand tons of municipal waste, mainly bulky waste, and 39.1 thousand tons of municipal sandy waste, collected on the coast.

Net of the aforementioned regulatory change introduced in 2023 as well as the flooding that affected the local areas served by the Group, the total waste amount as well as the per capita production of municipal waste remained stable.

The area served by Hera Spa and Marche Multiservizi is characterised by a high level of assimilation which determines an **annual per capita production of waste which is among the highest in Italy**; in these local areas about 574 kilograms per inhabitant are produced (633 kilograms per inhabitant in Emilia-Romagna, 516 in the Marche) compared to a 2022 national average of 494 kilograms. While in the Triveneto area, annual per capita waste production was lower than the national average: 477 kilograms per inhabitant collected in 2022 (Source: ISPRA, Municipal Waste Report 2023)

The Group's waste management system is characterised by five main services:

- **local collections:** these are collections spread throughout the area and are aimed at family users and small non-household users and can be carried out through;

- **streetside containers**, with a deployment oriented according to the basic recycling centre model which provides for the concentration of the main collection chains grouped in individual locations (sometimes even underground); in recent years, electronic traceability systems for the control of deliveries are becoming increasingly common in combination with roadside containers (e.g. “waste containers with a lid” model for unsorted waste or lock for sorted collection of waste chains);
- **curbside collections**, carried out at the users premises, where the resident puts out the waste on pre-established days and times for collection.
- **home collections** from “target” users: they are aimed at non-household users who produce specific waste assimilated to urban waste, such as cardboard in shops, glass or cans in bars, organic waste in canteens and restaurants;
- **sorted waste collection centres**: also known as drop-off centres or ecological stations, these are infrastructures present in almost all Hera municipalities which complete the service offer to residents for the sorted disposal of urban waste. The use of collection centres is becoming a real habit for residents: a very wide range of municipal waste categories (even certain wastes that are considered hazardous) can be safely brought in, as well as the dropping off of bulky and heavy waste. Furthermore, in many areas there is a system of discounts which rewards the provision of various categories of differentiated waste.

The system is moreover supplemented by the collection of bulky waste at homes (free of charge by calling or making an appointment), by the collection of green waste, as well as by the collection of some types of hazardous waste such as batteries and medicines, at specific establishments. Finally, the collection of WEEE (waste from electrical and electronic equipment) and used vegetable oils on the streets or in shopping centres is gradually spreading.

To increase effectiveness, collection services are **differentiated by homogeneous local area** (historic centres, residential areas, tourist areas, extra-urban areas, industrial areas). For each area, that collection system that best integrates with the urban, environmental, and local area characteristics is identified. The aim is to **maximise the percentage of sorted waste collection** as well as its quality through a technically and economically sustainable service.

MAIN WASTE COLLECTION SYSTEMS USED

Number of municipalities served	2021	2022	2023	2023 (% of the number of residents)
Street collection	74	57	42	12%
Streetside collection with delivery control mechanisms	38	37	44	45%
Mixed system (unsorted household waste and streetside sorted waste collection)	44	59	64	21%
Curbside collection	33	35	38	22%
Total	189	188	188	100%

In 2023, municipalities with a simple container-based **streetside collection** system dropped from 57 to 42 and the number of municipalities with a “**mixed**” system (combination of street and door-to-door collection for at least two fractions) increased from 59 to 64, mainly because of the alignment of waste collection systems in the provinces of Ravenna, Modena, Bologna, and Forlì-Cesena with what is envisaged by the new concessions. Up from 37 to 44 are municipalities with **delivery control systems** that allow user identification at delivery for the introduction or readiness for the start of unit pricing, while those with **curbside collection** systems increased by three (from 35 to 38). In **Emilia-Romagna**, in view of the gradual introduction of unit pricing in the local area, and thus of systems to control conferment, activities to reorganise services to enable the identification and measurement of conferment are underway and will continue in the coming years.

Sorted waste collection

The main types of waste collected in a sorted manner are:

- **packaging and similar**: paper and cardboard, plastic, glass, aluminium and steel cans, wood;
- **durable goods**: iron, waste electrical and electronic equipment (WEEE) and bulky items;
- **compostable waste**: kitchen organic waste and “green” waste from mowing and pruning;

- **other waste:** inert waste from households and which does not result from business activities, spent mineral and food oils, batteries and accumulators, medicines and other hazardous municipal wastes.

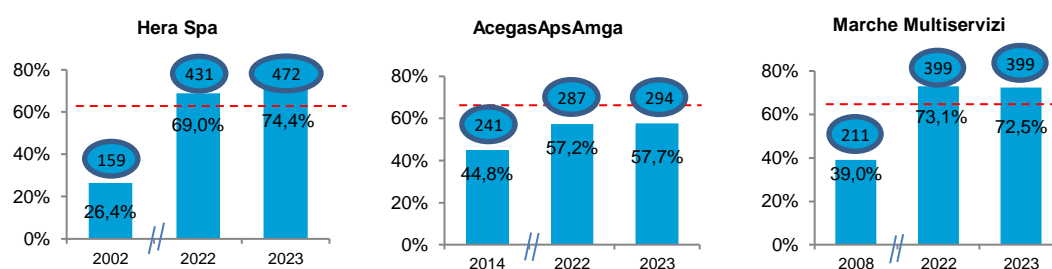
In **Emilia-Romagna**, the Regional Law 16/2015 on the circular economy had set the objective of launching the **pay-as-you-throw** system throughout the region; this objective was reconfirmed with the new 2020-2025 mandate program of the Region presented in June 2020 and taken up by the Regional Waste Management and Reclamation Plan, which set the sorted waste collection portion in Emilia-Romagna at 80% by 2027. The pay-as-you-throw system foresees that the payment of the environmental hygiene service is no longer linked only to the living area and the number of tenants of the house, but also to the quantity of unsorted waste produced.

As regards local collections, which intercept the largest share of flows, the various systems that Hera is implementing in the area are therefore **oriented towards the future application of unit pricing**:

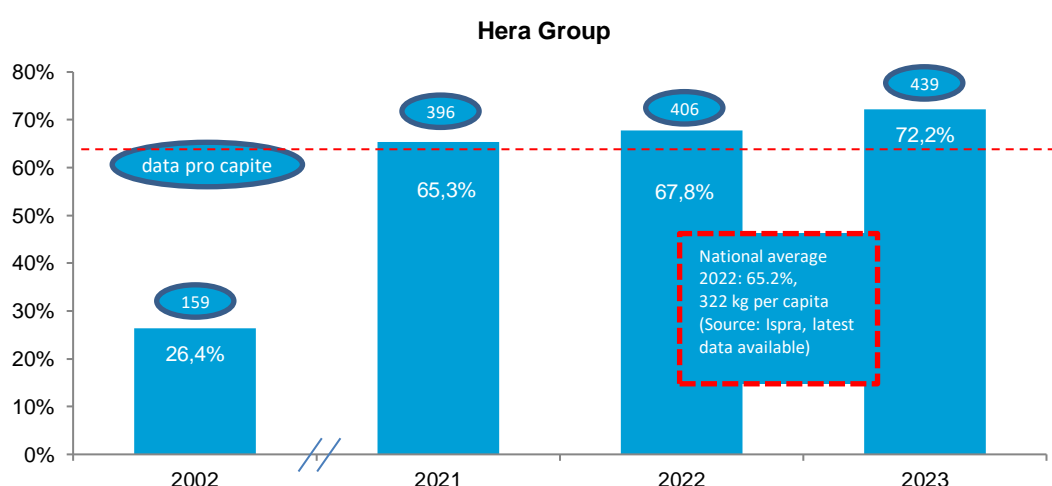
- roadside containers with user control and recognition system (hood);
- home collections with containers equipped with tag-transponders;
- collection centres with weighing systems and user registration.

In other local areas as well, where the Group provides the urban hygiene service, sorted waste collection objectives have been defined through the regional plans. The **Veneto Region** has defined 84% as the portion of sorted waste collection to be reached by 2030, while the **Friuli-Venezia Giulia Region** has set 75% by 2027. In the **Marche region**, on the other hand, the Region has not updated the local area plan or approved the provincial one; in the old plan, the sorted waste collection target was set at 70% by 2020.

SORTED WASTE COLLECTION



The baseline indicated in the graphs corresponds to the first year for which data are available.



Sorted waste collection is calculated according to Decree of the Regional Council No. 2218/2016: thus, excluding neutral waste (streams from stranding, cemetery, and CERs not allowed as municipal) and including the estimate of household composting waste allowed by the Region. In 2023, as a supplement to the current regulations, it was established that waste collected because of the natural disasters that affected Emilia-Romagna and Tuscany was considered a "neutral waste" and was therefore excluded from the waste stream. Pursuant to the Decree of the Regional Council. 2218/2016, street-sweeping and recovery was counted as sorted waste collection. Waste like municipal waste sent for recovery by the producer and waste collected by voluntary associations or directly by the

Municipalities are also considered among the sorted waste collections. The total amount of waste is constituted by sorted collection (CERs admitted initiated for recovery, community composting and household composting allowed) and unsorted (urban solid waste, street sweeping for disposal, bulky waste for disposal and any waste collected which has been sorted but sent for disposal). With the enactment of Legislative Decree No. 116/2020, as of 2021 inert waste is excluded from the municipal waste stream, with the only exception of inert waste from abandonment (waste lying on public land is municipal by definition). More specifically, in the reporting of the 2022 data, the aggregates collected within the municipal hygiene service were considered "neutral waste", applying the guidelines that the Emilia Romagna Region provided on the annual regulatory compliance of the Osservatorio Rifiuti Sovraregionale (Supra-regional Waste Observatory) 2021. From 2023, inert waste from households will also be considered as municipal waste.

In 2023, **sorted waste collection** volumes increased compared to the previous year, reaching **1,405 thousand tonnes** (107 thousand tonnes more than in 2022). This increase was influenced by the excellent performance of the Modena, Forlì-Cesena, and Ravenna areas, which, starting as early as 2022, have adjusted their sorted waste collection service by aligning with the provisions of the new concession and significantly improving their performance (+9%, +8%, and +8%, respectively, compared to 2022). The Group has set a goal of achieving 78 % separate waste collection by 2027, focusing on citizen and business engagement.

The increase in the volumes of sorted waste collection, in conjunction with a reduction in the unsorted component by 76 thousand tons (-16% compared to 2022), has led to a substantial and noticeable growth in the percentage of sorted collection, given by the ratio of the amount of separately collected municipal waste to the total amount of waste delivered (managed and unmanaged sorted and unsorted municipal waste), reaching 72.2% in 2023 (+4% compared to 2022) keeping well above the national average of 65.2% surveyed by ISPRA in 2022 (Source: ISPRA, Municipal Waste Report 2023).

In the **eight capital cities managed by the Hera Group**, sorted waste collection stood at 61.9% in 2022 compared to a value of 55.0% in the national capitals (weighted average, Source: processing of Legambiente data, Urban Ecosystem 2023).

In **Emilia-Romagna**, the percentage of sorted waste collection increased from 69.0% to 74.4%. In the **Triveneto region**, the percentage of sorted waste collection increased by 0.5% to 57.7%, while in the **Marche region** there was a 0.6% decrease to 72.5%.

Taking into consideration the entire area served by the Group and analysing it with a greater level of territorial detail, the percentage of sorted waste collection exceeded:

- 80% in the municipality of Ferrara under unit pricing since 2018 and in the province of Forlì-Cesena;
- 70% in the provinces of Bologna, Modena, Ravenna and Marche;
- 65% in the provinces of Rimini;
- 60% in the province of Padua.

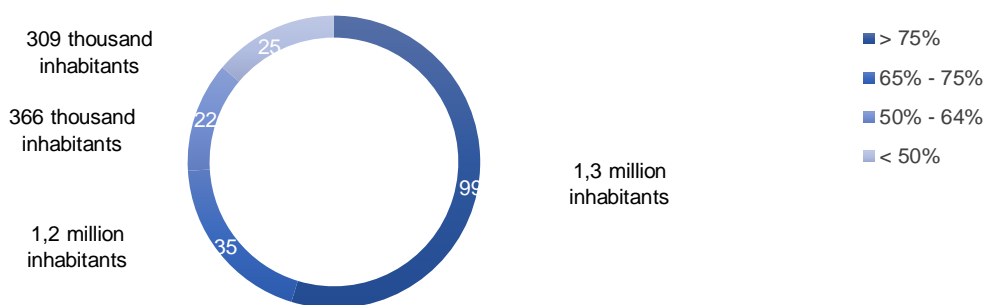
Note the significant increase in the percentage of sorted collection in the provinces of Ravenna (from 70.5% to 78.0%) and Modena (from 65.1% to 73.7%) as a result of the changes in collection systems that took place in these areas.

As regards the province of Trieste, the sorted waste collection rate increased 1 percentage point compared to 2022 but remained below the Group average (45.7%).

At the municipal level, the year 2023 closed with **99 municipalities (17 more than the previous year) out of 188 managed with a percentage of sorted waste collection above 75%**; 40% of the total served population resides in these municipalities.

There are 69 municipalities in Emilia-Romagna that exceed the 75% separate collection rate (+ 22 municipalities compared to 2022), 22 of them are under the pay-as-you-throw system. The business plan objective for 2027 is to reach 77.7% as an average of the municipalities served in the region. In Triveneto, 3 out of eight municipalities exceed 75% and the goal for 2027 is to bring the value of sorted waste collection to an average of 75%. In the Marche region, however, there were 31 municipalities above 75% sorted waste collection (1 less than in 2022); the **Group's 2027 target for separate waste collection was 77.7 percent**, as envisaged in the latest business plan approved by Hera Spa's Board of Directors in January 2024.

NUMBER OF MUNICIPALITIES PER SORTED WASTE COLLECTION PERCENTAGE RANGE (2023)



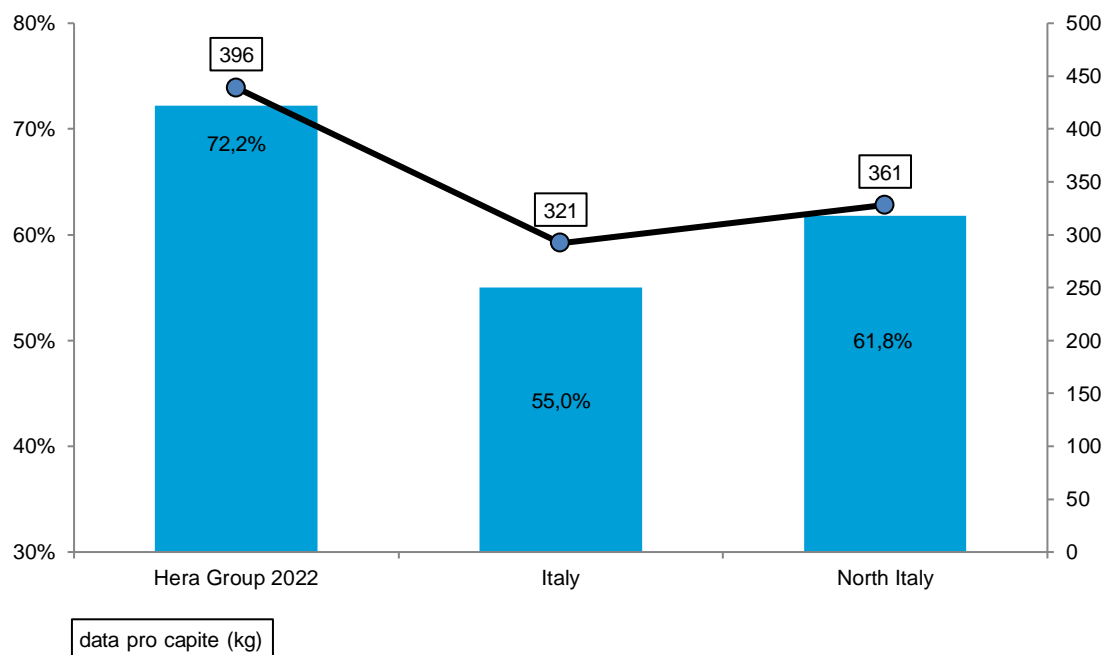
In the Group's sorted waste collection, as regards the data for Emilia-Romagna, assimilated waste delivered for recovery by the producer and sorted waste collected by voluntary associations or directly by municipalities are included, as required by the Decree of the Regional Council No. 2218/2016 and incorporated into current municipal and area regulations. The situation is very diversified in the local areas and depends on the revisions of the regulations of the individual Municipalities.

A useful indicator for evaluating the **effectiveness of sorted waste collection** is the per capita value expressed in kilograms/inhabitant/year, which allows for important analyses of the quantities of waste sent for recovery, both overall and by individual chain; per capita **sorted waste collection**, thanks to the increase in sorted waste collection volumes recorded by Hera, rose from 406 kilograms per inhabitant at Group level in 2022 to 439 kilograms per inhabitant in 2023, an increase of 8.1% compared to the previous year.

At the **per capita** level, sorted waste collection in **Emilia-Romagna** stands at 472 kg/inhabitant, recording an increase of 9.6% compared to 2022, reaching a total quantity of over 1,157 thousand tonnes. At the level of individual local areas, per capita sorted waste collection increased in **Modena** (+14%), **Ravenna** (+11%), **Forlì-Cesena** (+10%), **Bologna** (+8%), **Ferrara** (+8%) and **Rimini** (+5%). In the **Triveneto**, there was a general increase in per capita sorted waste collection in both the province of **Trieste** (+4%) and the province of **Padua** (+2%). While in the **Marches**, after a decline of 3% last year, we note absolute stability in the figure.

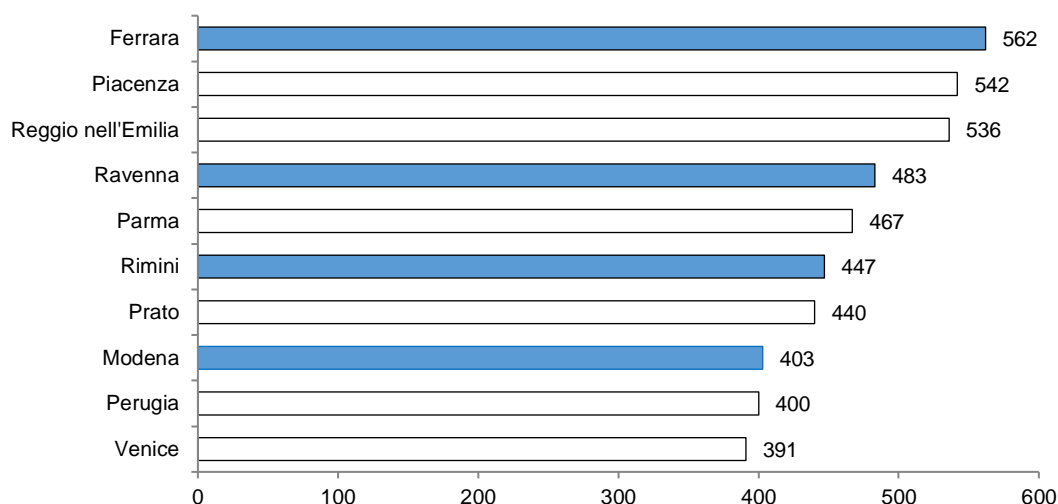
Considering the data for 2022 published by ISPRA, the Hera Group records sorted waste collection per capita 17% higher than the Italian average and 10% higher than the average for Northern Italy.

PERCENTAGE AND PER CAPITA SORTED WASTE COLLECTION (2022)



Considering the provincial capitals with a population of more than 100,000 inhabitants, in 2022 **four of the top ten cities with the best performance in Italy** in terms of per capita sorted waste collection **were managed by the Hera Group**. Of these, Ferrara, with a sorted waste collection rate of 87.6%, is in **first place in the ranking of all provincial capitals**. As shown by the data, the high levels of assimilation expected in the local areas managed by the Group generate important benefits in terms of volumes of waste to be sent for recycling and recovery.

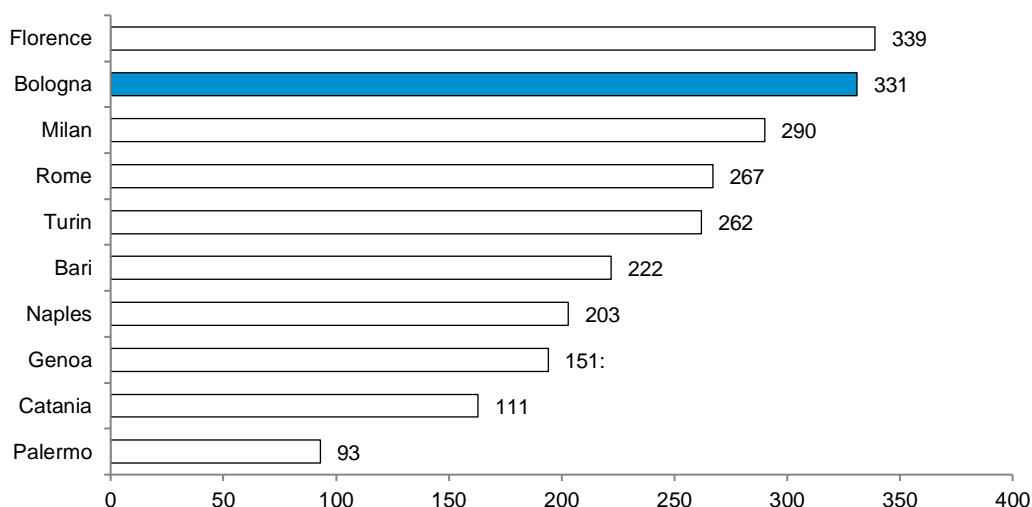
SORTED WASTE COLLECTION PER CAPITA, KILOGRAMS, MUNICIPALITIES WITH MORE THAN 100,000 INHABITANTS (2022)



Source: processing of Legambiente data, Urban Ecosystem 2023

On the other hand, considering the provincial capitals with a population of more than 300,000 inhabitants, **Bologna ranks second** in Italy for per capita sorted waste collection (Source: elaboration on Legambiente data, Urban Ecosystem 2023). In the classification for sorted waste collection, however, Bologna stands at first place. This achievement was made possible by the extension in 2022 of the computerised streetside collection system for the undifferentiated waste with the new smart bins that can be opened with Carta Smeraldo in the Navile and Borgo-Reno residential neighbourhoods to complete the Carta Smeraldo project and smart bins in the areas where the collection system is streetside, and with the delivery of tagged MSW containers to non-domestic users with dedicated services and in suburban areas where the door-to-door collection system is in force.

SORTED WASTE COLLECTION PER CAPITA, KILOGRAMS, MUNICIPALITIES WITH MORE THAN 300,000 INHABITANTS (2022)



Source: processing of Legambiente data, Urban Ecosystem 2023

With reference to sorted collection by **type of material collected** from the data below in the table, in 2023 there was a significant increase in the collection of aggregates and also a major increase in the collection, green waste, organic waste, wood and bulky waste. There are insignificant changes in the collection of glass, plastic containers, iron, WEEE and paper and cardboard, while the remaining data shows a slight decrease. In particular, a long-term collection target was set for packaging: 72 % recycling rate at 2027 and above 80 % at 2023 (much higher than the European targets at 2030).

Details with the most significant changes are shown below:

- collections of **aggregates** (more than tripled), **green waste** (+14%), **organic waste** (+8%), **wood** (+8%), paper and **cardboard** (+4%) **bulky waste** (+8%). The strong growth in aggregates is related to the implementation of the new Legislative Decree No. 213/2022 which, in contrast to last year, considers aggregates from households with allowable EER to be counted in sorted waste collection.
- multi-material** collection decreased by 3%;
- Increased collection of **plastic containers** (+5%), **paper and cardboard** (+4%), **iron** (+6%), **WEEE** (+4%) and **glass** (+0.7%);
- finally, the item **other** decreased (-4%).

SORTED COLLECTION BY TYPE OF WASTE

Thousands of tonnes	2021	2022	2023
Paper and cardboard	243.7	255.5	265.2
Green scraps	218.0	217.6	246.9
Glass	126.7	132.9	133.8
Organic waste	237.9	249.6	270.4
Plastic containers	119.2	131.6	137.5
Refuse from multi-material collection	50.3	43.7	42.3
Wood	99.9	97.9	106.0
Bulky items	58.3	57.0	61.5
Inert	11.4	6.8	37.5
Iron	12.6	10.6	11.2
WEEE	19.7	17.6	18.3
Other	68.7	67.9	65.4
Total	1,266.3	1,288.7	1,396.0

SORTED WASTE COLLECTION PER CAPITA (2022)

kg/inhabitant	Paper	Glass	Plastic	Wood	Metals	Organic and green
Hera Group	80	42	41	31	3	146
North Italy	68	46	33	27	8	131
Italy	62	40	29	17	6	123:
Best region	91*	61**	57**	67**	12***	180*
Hera Group (2023)	83	42	43	33	4	162:

*Emilia-Romagna, **Valle d'Aosta, *** Trentino-Alto Adige Source: Source: ISPRA, Municipal Waste Report 2023

Heras sorted waste collection levels are due to the widespread coverage of the services provided and to the assimilation rules which encourage the recovery of materials. Hera ranks above all national and northern Italian averages except glass in relation to the northern Italian average and metals in reference to the national and northern Italian averages.

Sorted waste collection centres

The collection centres take in, among other kinds of waste, those which, owing to their nature or size, cannot be collected with normal local services, integrating streetside and household-based collections and represent the most sustainable and low-impact environmental solution for sorted municipal waste collection.

There are 166 sorted waste collection centres, or equipped recycling stations, for direct waste disposal by residents. Of these, 136 are in Emilia-Romagna and are 2 fewer than in the previous year (in 2023 the centres in Cattolica and San Giovanni in Marignano were closed), 11 in the Triveneto, and 19 in Marche. Many centres are equipped with user weighing and recognition systems that allow the traceability of the deliveries and the application of tariff discounts.

At the Group level in 2023, waste delivered to sorted waste collection centres increased significantly from 245,659 tons in 2022 to 294,065 tons (+20%). This significant increase is due to the enactment of Legislative Decree No. 231/2022 which, in contrast to 2022, considers inert waste from households with allowed EER as waste eligible for sorted collection; it should also be noted that most of this waste is delivered to Collection Centres. In the Triveneto region, the volume of waste delivered to waste collection centres increased slightly (+5%), as did the Marche region (+0.7%).

Even considering the increase in total waste delivered, there was an overall increase in **access to the Collection Centres** of 4 percent.

Minor sorted waste collections

For some time now, the Hera Group has been launching sorted waste collections in those waste fractions which produce so-called “smaller” volumes. The main smaller sorted collections are the collections of WEEE (Waste from electrical and electronic equipment), toner, textiles and edible oils. For the latter collection, see the case study in the attachments.

WEEE collection

Currently, 15 “WEEE Point EVO” points and 20 “WEEE Shop EVO” points are installed in Hera’s area, which are distributed throughout the various provinces, mainly in shopping centres, for the collection of small WEEE.

The number of deliveries made by residents to the WEEE Points and WEEE Shops in the local area served were found to have increased in 2023 compared to the previous year, from about 50 thousand to over 52 thousand deliveries made during the last year.

In the Triveneto area, the collection of smaller sorted waste is carried out through ecological stations, the so-called “Ecological Saturdays” and, for some specific types, as well as through dedicated kerbside or unit pricing collections. For example, toner collection takes place through door-to-door collection systems at the premises of non-household users. In smaller municipalities, where there is no collection centre, on specific days of the month, the presence of mobile roll-off containers - called “Eco-Self” sorting containers is guaranteed. These are used for the collection of small WEEE and other fractions that are not able to be transferred to the main circuits.

The collection of toner cartridges

Throughout 2023, the collection and recovery service for used toner cartridges also continued in Emilia-Romagna. Using “Ecobox” containers, distributed to public users such as schools and municipal offices, approximately 155 tons of used cartridges were collected and effectively sent to the re-use market (remanufactured toner cartridges for printers). Quantities are down slightly from the previous year, on the one hand because of the increasing digitisation of documents, which reduces the need for printing, and on the other because spent cartridges are taking alternative recovery channels, such as, for example, pickup by the supplier companies themselves, under existing contracts.

The collection of textiles

Lastly, among the initiatives with solidarity contents, it should be noted that in 2023 both Hera and AcegasApsAmga gave continuity to the textile waste collection service, typically referring to used clothes and fabrics, making use of the companies that won the call for tenders announced at the provincial level.

These contracts stipulate that the contracted firms, private operators, and Social Coops that were awarded the tender, will carry out the collection service by emptying the containers owned by the Group, and make the best use of the collected material by sending it for recovery in their own facilities, giving a new life to these recoverable textile materials, with a view to the circular economy.

No profit margin is derived from the collection of used clothing for the Group and the economic result obtained, net of the coverage of service costs, is allocated by individual municipalities to the abatement of urban hygiene service costs for the resident.

In Emilia-Romagna local areas managed by Hera in 2023, 8,195 tons of textiles were collected, while 1,228 tons were collected in the AcegasApsAmga areas.

In the Marche area there is a collection service for used clothes and clothing accessories which takes place through the special yellow containers positioned in each municipality served., as well In 2023, more than 908 tons of used clothing were collected which are thus removed from landfill disposal and the best use was made of them, by allocating them for reuse and/or recovery.

Bulky waste collection

Bulky waste is waste which, owing to its type, size or weight, cannot be disposed of in urban waste collection containers. Hera currently offers various options for delivering bulky items and large household appliances, offering the possibility of reusing items in good condition by preventing the production of waste or sending them to the correct recovery or disposal flow:

- **donate the good to the non-profit organisation** of the “**Cambia il finale**” project: if the asset is reusable, in the areas of Emilia-Romagna it is possible to make a gesture of solidarity by assigning it for reuse by donating it to one of Heras non-profit partner organisations. Non-profit organisations can collect bulky items free of charge, at their headquarters and at home, to give them new life and use them for charitable purposes. In Ferrara, Ravenna, Modena, Cesena and Rimini it is also possible to allocate reusable goods to non-profit organisations by placing them in the “Reuse Area” located in the sorted waste collection centre;
- **bringing waste to recycling centres** (sorted waste collection centres): if the bulky item is not reusable, it is possible to bring it to the closest recycling centre using the vast and widespread network of recycling centres active in the area;
- **take advantage of Heras home service**: if the good is not reusable and it is not possible to take it to the recycling centre, you can call the call centre to book free home collection. From 2022 it is also possible to book the collection directly from the **Il Rifiutologo app**.

In 2023 these types of waste, including large household appliances, accounted for 4.2% of the total waste collected under management and 5.7% of sorted waste collection, values basically in line with the previous year but on a slightly increased waste stream compared to 2022 (+1 percent).

In the area served by Hera Spa, 193,869 requests for bulky waste pickup were recorded, a sharp increase over the previous year (+15%). Of these, there were specifically about 18,650 carried out by app Il Rifiutologo, a new channel launched in 2022 in addition to the traditional one of calling the toll-free number. The quantities of bulky waste collected, also counting those delivered to sorted collection centres and those abandoned without any reporting, amounted to approximately 60,000 tonnes, recording an increase compared to 2022 equal to 6%.

In the municipalities served in the Triveneto area, a free-of-charge bulky waste collection service is guaranteed upon reservation via toll-free number. In 2023, a total of over 47,000 bulky waste bookings were made across all the local areas served. Household and non-household users can also deliver bulky waste to the collection centres located in the local areas served. In addition to the service by reservation and to the collection centres, it is always possible to deliver bulky waste on the so-called ecological Saturdays that are active in the Municipalities of Padua, Albignasego (Pd), Casalsurigo (Pd), Ponte San Nicolò (Pd) and in Trieste.

In the Marche region served, in 2023, through the ‘Cambia il finale’ project, 916 pickups were made (-63% compared to 2022), managing to recover about 98.4 tons of bulky waste out of 123 tons collected, for a recovery equal to 80% of the collection. In the event that the bulky item cannot be reused, it is possible to take it to one of the 15 Sorted Waste Collection Centres active in the area served, or book an appointment for home collection. In 2023, more than 12,800 home collections were made, and a total of more than 2,300 tons of bulky items were managed overall.

Waste prevention initiatives

Waste prevention is a key element in the transition towards a circular economy, which for the Hera Group represents one of the strategic guidelines for future development. For this reason, the role of prevention is at the centre of many actions and projects that Hera has introduced in the area over the years. Heras commitment is also in line with the new European, national and regional regulations which introduce prevention and reuse objectives as an integral part of integrated waste management.

The European Directive 2008/98/EC on waste, transposed into Italian law by Legislative Decree No. 205/2010, defines the following waste prevention and management hierarchy:

- prevention;
- preparation for reuse;
- recycling;
- other types of recovery, for example energy recovery;
- disposal.

Waste prevention is confirmed as the priority action also with the European package on the circular economy, referred to in one of the case studies in the attachments. Specifically, Directive 851/2018, transposed by Legislative Decree No. 116/2020, places considerable emphasis on the concept of prevention by introducing an obligation for member states to take measures to avoid the production of waste. In fact, it is envisaged that actions will be introduced that encourage the reuse of products and the creation of systems that promote repair and reuse activities. A particular focus is dedicated to the prevention of food waste through the promotion of measures aimed at avoiding its production, also by encouraging the donation of food to prevent its waste.

At the regional level in Regional Law No. 16/2015 of Emilia-Romagna “Provisions in support of circular economy, reduction of municipal waste production, reuse of end-of-life goods, sorted waste collection and amendments to regional law 19 August 1996 no. 31”, provisions were introduced to support prevention in waste generation, including the possibility of providing, as part of the waste management service fee regulation, facilities for enterprises that implement actions aimed at preventing waste generation.

Finally, the new “Regional plan for waste management and for the reclamation of polluted areas 2022-2027”, recalled the importance of prevention as the “key concept” of waste planning, providing for new measures and specific actions aimed at preventing waste along various supply chains.

Below are some of the most significant initiatives implemented by Hera in 2023 in waste prevention. Other important initiatives such as Cambia il finale, Farmaco Amico and Cibo Amico are covered in detail in this sustainability report (see the case studies in the attachments).

Reuse area

The reuse area is a real box, housed inside a recycling centre, where residents can bring furniture (tables, chairs, beds, etc.), tableware, books, electrical and electronic appliances and various objects, provided that it is in good condition and therefore suitable for a new use by other people. Everything brought by residents is, to all intents and purposes, a donation and at the time of delivery, documentation is compiled which serves as a receipt for the contribution. The material is then delivered to one of the Third Sector Entities participating in the Cambia il Finale project (described in a case study in the appendix), which arranges for the goods deemed suitable to be reused. With this initiative, every time a resident goes to the recycling centre, he can then choose whether to give his good a second chance at life through the reuse area or whether to use it for material recovery, through the recycling chains. Through the activities of the entities involved in the project, the reuse area also serves social purposes by offering support to sensitive segments of the citizenry, making used goods available and creating employment opportunities for people who are unemployed, disabled or disadvantaged.

There are six reuse areas active as of 2018, in the municipalities of Rimini, Ravenna (2), Cesena, Ferrara and Modena.

A total of 5,768 objects were donated in 2023 (considering a single object the simultaneous contribution of a plurality of goods of small size or value, such as for example books or tableware or small objects) equivalent to a total weight of approximately 10 tons.

Trashware

The project, which saw its implementation starting from the year 2011 thanks to the S.P.R.I.Te student association in agreement with the Municipality of Cesena, Hera and the Cesena scientific and educational hub, it represents a point of reference in the area for those who have computer equipment that is dated but still functional that they want to get rid of and for all companies that need reconditioned and computers that are useful for basic computer science. The aim of the project is to recover PCs and IT components in general to stem the phenomenon of dangerous electronic waste. At the same time, it aims to reduce the digital divide of residents by donating PCs with attached peripherals to individuals, associations and schools in the municipality of Cesena. The project is promoted above all through social media and the internet (Facebook as a channel for giving information or receiving requests; Instagram, aimed at younger people, to give visibility to events or the normal laboratory session; trashwarecesena.it as an internet showcase, for those are less accustomed to social networks).

In 2023, there were 95 contacts from stakeholders interested in the equipment donation activity (surpassing the number of 3,400 since the start of the project), and the refurbished PCs and peripherals that have been delivered total 586 (more than 2,500 since the start of the project) of which as many as 346 have been delivered to schools and associations.

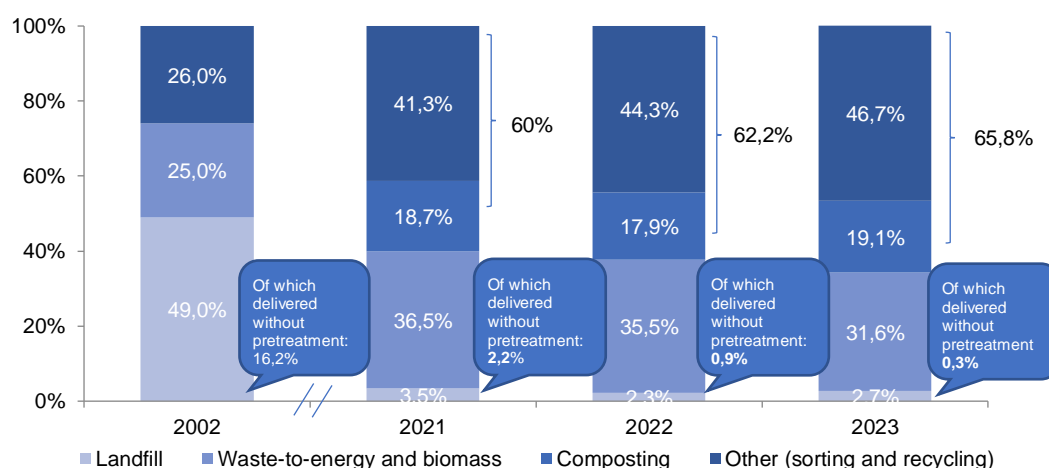
The disposal of municipal waste in Italy and Europe and the comparison with Hera

European Union and national legislation define principles and priorities in waste management which, starting from the minimisation of the waste at the origin, provide for the recovery of materials, the recovery of energy and, only as a final and residual system, disposal in landfills.

The Hera Group has worked in this direction over the years, as demonstrated by the comparison between the 2023 data and those of the last three years. In terms of reducing the use of landfills, the Group managed to maintain the already excellent performance achieved in 2022. This is in line with the Group's objectives which, in line with national and European Union regulations and the planning of the responsible bodies, envisage a reduction in the use of landfills and an increase in sorted waste collection.

In 2023, the share of municipal waste disposed of in landfills downstream of pretreatment was 2.7% compared to an Italian average reported for 2021 of 21.3% (Source: Eurostat) and thus lower than the 2035 target set by European directives of 10%. Landfill use was particularly low in the areas served in Emilia-Romagna, standing at 1.2% in 2023 (0.9% in 2022), compared to the Emilia-Romagna average of 5.2% in 2022 (Source: ISPRA, Municipal Waste Report 2023). While in the Marche areas the positive trend of landfill reduction that began last year (from 22.2% in 2022 to 21.5% in 2023) continues, mainly due to a gradual return to the situation prior to the health emergency in which it was possible to return to pre-treatment of waste, through mechanical biological treatment plants, before landfilling; in addition, there has been a general decrease in the production of sorted and unsorted waste, which has affected the volumes landfilled. In the Triveneto area, the absence of a landfill for the disposal of municipal solid waste was also confirmed in 2022.

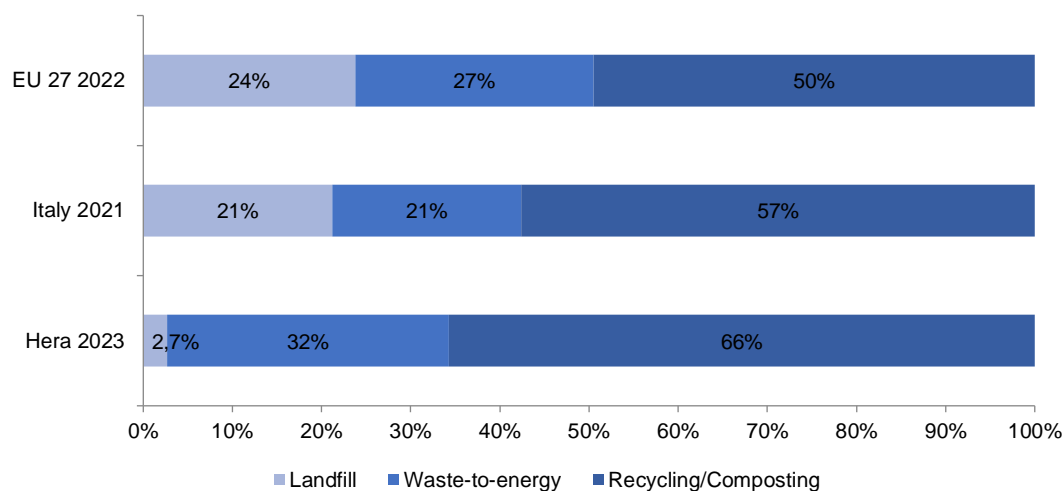
MUNICIPAL WASTE COLLECTED BY HERA BY DESTINATION



At European level, the use of landfill as a form of municipal waste disposal was stable compared to the previous year, with significant differences from country to country: in the EU-27, the figure for 2022 was 24% (source: Eurostat). In Italy, the decrease in the percentage of waste sent to landfills continues (21% in 2021 versus 23% in 2020), while the figure for deliveries to waste-to-energy plants remained stable at 21%.

Landfills continue to be the main treatment modality in 11 European countries, with peaks reaching 86% in Malta or higher than 75% in Greece, Romania and Cyprus. Conversely, in Denmark, Belgium, Germany, Finland, Sweden and the Netherlands, the use of landfills stands at between 0% and 1%; in these virtuous countries, waste-to-energy fluctuates from 30% to 61%; while the remainder is sent for recycling. Hera is in line with these countries in terms of recycling, with further improvements planned over the next few years.

URBAN WASTE MANAGEMENT IN EUROPE AND ITALY AND HERA'S RANKING (2022)



MUNICIPAL WASTE: EUROPE AT THREE SPEEDS AND THE HERA AREA AMONG THE MOST VIRTUOUS (2022)

Country	Landfill	Waste-to-energy	Recycling / Composting
Countries with deliveries to landfills lower than or equal to the European average			
Belgium	0%	47%	53%
Finland	0%	61%	39%
Sweden	1%	59%	40%
Denmark	1%	42%	57%
Germany	1%	30%	69%
Holland	1%	41%	58%
Hera Group	2%	32%	66%
Austria*	2%	36	62%
Luxembourg	4%	42%	55%
Slovenia	9%	15%	75%
Lithuania	14%	38%	48%
Estonia	15%	48%	37%
Ireland**	16%	43%	41%
Italy*	21%	21%	57%
European Union (27 countries)	24%	27%	50%
Countries with deliveries to landfills less than or equal to 55% but greater than the European average			
France	24%	33%	43%
Poland	38%	21%	41%
Slovakia	41%	8%	51%
Czech Republic*	45%	12%	43%

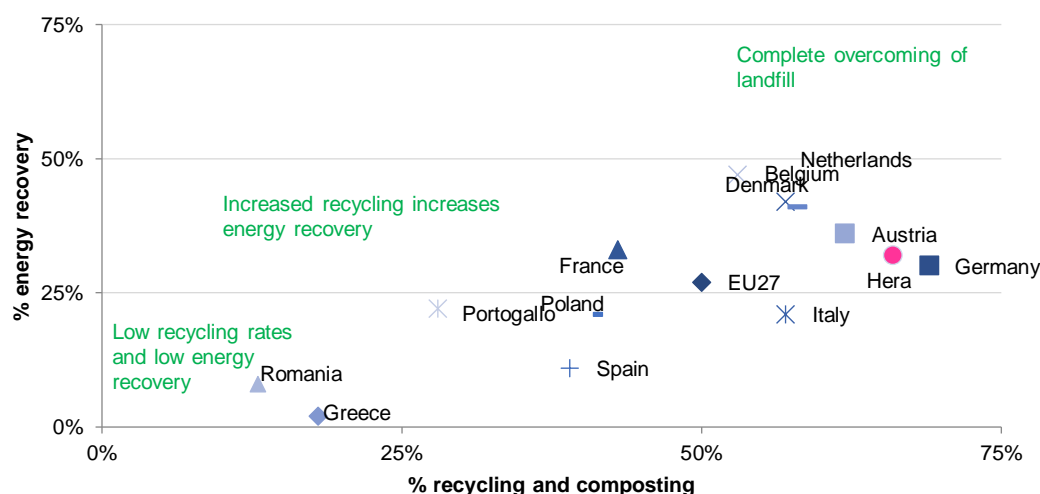
Country	Landfill	Waste-to-energy	Recycling / Composting
Bulgaria*	49%	4%	47%
Portugal*	50%	22%	28%
Spain	50%	11%	39%
Latvia*	52%	3%	44%
Hungary	55%	12%	33%

Countries with deliveries to landfills greater than 55%

Croatia	62%	0%	38%
Cyprus	77%	3%	19%
Romania	79%	8%	13%
Greece*	81%	2%	18%
Malta	86%	1%	13%

*2021 Data, ** 2020 Data Source: based on Eurostat data

MUNICIPAL WASTE DISPOSAL IN EUROPE: THE CORRELATION BETWEEN RECYCLING/COMPOSTING AND ENERGY RECOVERY. HERA AMONG EUROPEAN BEST PRACTICES (2022)



Source: Eurostat data processing

Recovery of materials and energy in Herambiente's sorting plants

The evolution of the Hera Group's strategy develops in full harmony with the criteria of the circular economy organised into various actions and choices that lead to perceiving the change in the area and in everyday life. The Herambiente Group pursues specific objectives determined by the general strategy of the Group, in particular, new solutions for the recovery of waste as well as waste for the production of biofuels or biomethane, new recycled plastic materials, derived for example from molecular recycling, new recycling options, including cutting-edge solutions such as carbon fibre recovery, and the involvement of residents to improve the quality of sorted waste.

Among **sorting plants**, 6 (out of the 15 total) treat urban and special waste coming from sorted collection and from production/craft activities mainly in the provincial area in which they are located. The objective of the process, carried out with more or less complex technologies and specific treatment lines for the type of collection to be treated, is to recover the greatest possible quantity of material from the delivered flow and reduce the use of landfills. These plants recover: paper/cardboard, plastic, wood, metals, glass, biodegradable waste (from pruning), tyres, textiles, aggregates. The treatment lines used are specific for the characteristics of each collection, five plants out of six are equipped with particularly performing optical reading lines in the selection of urban plastic and paper collections both in terms of flow rate

(hourly quantity of treated waste) and the quality of the material obtained from the selection. The treatment waste, so-called waste and not destined for material recovery, is destined for energy recovery or disposal.

In 2023, Herambiente's sorting and recovery plants produced **445,892 tonnes of waste**, an increase of 3% compared to 2022. This increase is mainly due to the increase in waste from sorted waste collection in the area. The amount sent to **material recovery** accounts for 71.9%, while the portion sent to **energy recovery** accounts for 13.0% leading to an **overall recovery of 84.9%** up from 2022. A share of the produced surplus is allocated to energy recovery, amounting to about 48.9% in 2023, an increase from the previous year of about 79%. The amount of plastic selected and sent for recycling in 2023 increased to **58,793 tons** (+25% compared to 2017). The increase in the quantities of plastic selected and sent for recycling is one of the three objectives of the Group as part of the New Plastics Economy Global Commitment, an initiative with which in 2018 the Ellen MacArthur Foundation aimed to address the problem of plastic pollution worldwide origin and make the whole plastic production chain more circular.

The shredding activity aimed at the volumetric reduction of the large size waste, deriving from the mechanised selection of the separate collection of bulky waste, already present in the Ferrara, Bologna, Coriano and Modena plants, was started up and put into operation also on the plant of Voltana, which in 2022 launched the new automatic line for the enhancement of the value of the glass from collection.

DESTINATION OF TOTAL WASTE LEAVING HERAMBIENTE SORTING PLANTS

Thousands of tonnes	2021	2022	2023
Waste sent for material recovery	323.6	317.2	320.4
Irrecoverable in the output	102.8	116.3	118.5
<i>of which energy recovery</i>	<i>20.7</i>	<i>32.3</i>	<i>57.9</i>
Other waste for disposal	0.1	0.06	7.0
Total waste treated in selection plants	426.5	433.5	445.9
<i>of which sent for material recovery (%)</i>	<i>75.9%</i>	<i>73.2%</i>	<i>71.9%</i>
<i>of which sent to energy recovery (%)</i>	<i>4.9%</i>	<i>7.4%</i>	<i>13.0%</i>
<i>of which sent for material and energy recovery (%)</i>	<i>80.8%</i>	<i>80.6%</i>	<i>84.8%</i>

The circular economy at the service of businesses

The Hera Group, through its subsidiary Herambiente, manages over 90 plants for the recovery and disposal of hazardous and non-hazardous municipal, special and industrial waste. The range of facilities includes waste-to-energy plants, composting/digestion plants, sorting and material recovery plants, chemical/physical plants and inertisation plants and soil washing; several plants are dedicated exclusively to the treatment of special waste in order to provide increasingly comprehensive and punctual services to industries and companies for managing their waste and scrap.

The acquisition of A.C.R. in 2023 further expanded the range of services offered to businesses, such as decommissioning activities, and also enhanced the remediation service offered.

In 2023, there was confirmation of the lines of development that characterise the transformation of the Herambiente Group's business, which tends to become a company capable of transforming all the waste it delivers into products, with a view to the circular economy, while ensuring the correct and timely management of waste, tailoring its activities to the nature of the latter.

In particular, note:

- the consolidation of **biomethane production** through the S. Agata Bolognese (Bo) plant, which is already in industrial operation, and the Spilamberto (Mo) plant, operated by the subsidiary Biorg, which is in the start-up phase. When fully operational, the two plants will produce a total of about 12 million cubic metres of biomethane for automotive use;
- the expansion of the range of **plastic waste recovered** through Aliplast obtaining a single authorisation (ex art. 208 of Legislative Decree No. 152/2006) for the construction and operation of the rigid plastics recovery plant to be built in Modena, where the waste-to-energy plant and the civil purification plant operated by Hera Spa already exist on the same site, financed in part by NRRP funds. The plant will be able to process 30k ton/y of plastic waste to produce about 27k ton/y of high-quality polymers (PP, HDPE, PE, PO mix) in the form of flakes or pellets;

- the implementation of the project to upgrade **PE production and regeneration** capacity, with an increase of 20k ton/y, at Aliplast's plant located in Novara; the authorisation process will start in 2024;
- the implementation of an innovative plant for **recovering carbon fibre** from waste composite materials. Construction of the first of two planned carbon fibre recovery lines at the plant located in Imola (Bo) began in 2023. Civil preparations and connections have also been made and the on-site assembly phase has also begun, which will be completed when production is scheduled to start in the first half of 2025. This plant adopts an innovative technology based on pyrolysis and gasification that was developed together with industrial partner Curti and with the contribution of the Faculty of Chemistry of the University of Bologna. This project was also partly financed by NRRP funds;
- the completion of logistics platforms that operate the storage, characterisation and pre-treatment of the waste in such a way as to make it compatible with the recovery and/or disposal systems available in Italy and abroad. From this point of view, the agreement signed in 2020 with the company **Eni Rewind** for the construction, in the "Ponticelle" area, adjacent to the petrochemical pole of Ravenna, of a technologically advanced platform for the treatment of industrial waste, assumes significant importance. It can receive and pre-treating up to 60,000 tons per year of solid, liquid and sludge like (mainly hazardous) industrial waste. The project was developed in 2020 and was authorised at the end of 2023. Work and supplies have also been awarded for the construction of the facility, with construction to begin in the first half of 2024.

In 2023, Hasi completed the construction of an osmosis and evaporation plant for the treatment of saline solutions at the Malpasso (Pi) site, which will allow the recovery of water for production activities, as well as the construction of new facilities to serve the sludge, reclaimed soil and industrial dust inerting plant at the Ragghianti (Pi) site.

Hasi also continued its corporate acquisition activities for 2023, implementing the activities of the acquired companies, such as the work carried out for the new plant of the company Vallortigara located in Marano Vicentino (Vi), which is now operational, and the completion of Recycla's plant located in Maniago (Pn), with the annexed installation of the photovoltaic system.

Of particular note is the acquisition of the company A.C.R., which was an additional and relevant piece in the service to companies for remediation and full-service interventions. A.C.R.'s operational capacity, which can count on specialised vehicles, machinery and equipment, as well as a large and competent operational workforce, allows the Herambiente Group's operational arm and scope of action in the remediation, full service and decommissioning sector to be completed and expanded in a consistent manner.

In 2023, the new Line 2 of the waste-to-energy plant in Trieste went into industrial operation, while in August the start-up of the hazardous waste incineration plant named 'F3' in Ravenna began, after a major renovation of the combustion, boiler and flue gas treatment sections. As for the work to replace lines 1 and 2 of the Padua waste-to-energy plant with a new line (Line 4), the authorisation process was completed in 2022, and the procurement phase as well as work on site activities began in 2023. The primary objective of these interventions was to give a long-term perspective to the current waste-to-energy capacity of these plants, increasing the efficiency of energy recovery, reliability and continuity of operation, and, above all, equipping the plants with better and more innovative fume purification systems in order to further reduce the environmental impact.

In addition to interventions on individual projects, the feasibility of initiatives aimed at researching **new technologies** to extract resources and value from waste and its assets is ongoing. On this point, we highlight the commissioning of the 1MW photovoltaic plant on the exhausted landfill in Baricella (Bo) managed by Herambiente. Another element in the valorisation of its assets is the assignment by tender to a joint venture of Hera, Herambiente and SNAM of the construction of a hydrogen production plant in the disused area of Via Cavazza in Modena. Post-management landfill areas will be used on the site for the production of renewable energy using photovoltaic systems (6 MWe) that will feed a water hydrolysis plant for generating green hydrogen to be used both for transport and to replace fossil fuels in hard-to-abate industries.

For more information on the progress of the interventions and the expected/obtained environmental benefits, refer to the table in the paragraph "[The development of the plant system](#)".

Industrial waste recovery with Herambiente Servizi Industriali (Hasi)

Herambiente Servizi Industriali (Hasi) is the Group company that offers environmental solutions and services dedicated to companies. Today **it represents the largest Italian company dedicated to the treatment of industrial waste** and boasts a **plant system** that is unique in Italy consisting of 26 plants of different types, located in different areas of the national area, such as Tuscany, Emilia-Romagna, Veneto, Friuli-Venezia Giulia and Molise. Below is the list of plants owned by Hasi and its subsidiaries A.C.R., Recycla and Vallortigara:

:

- 11 storage facilities;
- 6 chemical-physical-biological treatment plants;
- 3 waste treatment plants (hazardous waste, special waste, sludge);
- 3 inertisation plants;
- 3 packaging sorting and washing plants.

Key elements of Hasi's offer are **maximum traceability, compliance with all environmental regulations** and identification of the optimal recovery and recycling solution that **minimises landfill disposal**.

Hasi acquired 60% of A.C.R., one of Italy's largest companies in the remediation, industrial waste treatment, industrial plant decommissioning and civil works (construction and maintenance) sector with headquarters in Mirandola (Mo). This operation is expected to create the first national operator in reclamation and global service activities, with a widespread presence throughout the Italian peninsula.

In addition to global service and reclamation solutions, Hasi offers O&M (operations and maintenance) services provided to large manufacturing groups of private waste treatment plants, implementation of improvement/efficiency plans, solutions for maximising recovery and overall reduction of waste produced, such as managing some streams as by-products.

Some examples of recovery-oriented solutions applied to the customer portfolio are:

- leather scraps that converge for the production of soil conditioners and fertilizers;
- recoverable fractions of paper that are sent to paper mills;
- washed and reclaimed plastic that is reproduced in flakes for future processing;
- wood scraps that are used to make chipboard panels;
- ferrous materials that are selected for recovery in the foundry;
- organic waste from food manufacturing companies destined for composting for the production of energy and compost;
- some types of plastic production waste or poly laminates (which until recently were destined for energy recovery) selected and separated directly in the company and sent for material recovery at proprietary plants or third-party suppliers;
- all non-hazardous unsortable waste, or waste that is not selectable or recoverable in terms of material, directed to energy recovery.

The integration of the waste management offer with that of on-site plant management guarantees the Group effectiveness and notoriety on the market, high customer loyalty and value creation, as well as an element of differentiation compared to competitors.

Hera guarantees its customers complete traceability of all waste. Since 2015, a reserved area dedicated to customers has been active on the Herambiente website, who can remotely view the status of their contributions, the validity of the approvals and the status of the payments. For each contract, information relating to the treatment operations is provided in real time, with evidence of the individual destinations and the percentage of recovery achieved with respect to the total waste delivered. More recently, a new feature has also been introduced that allows customers to book their deliveries online.

DESTINATION OF TOTAL MANAGED WASTE - HERAMBIENTE SERVIZI INDUSTRIALI (HASI) AND SUBSIDIARIES

Thousands of tonnes	2021	2022	2023
Waste sent for material and energy recovery	488.4	592.3	700.6
Waste sent for disposal	645.8	626.8	650.0
Total waste managed	1,134.3	1,219.1	1,350.6
Waste sent for material or energy recovery (% of total waste treated)	43.1%	48.6%	51.8%

In 2023, the volume of waste managed by Hasi and its subsidiaries, through the intermediation service and in its plants, amounted to approximately **1,350.6 (+10.8% compared to 2022)** of which 51.8% (approximately 700.6 thousand tons) sent for material or energy recovery or recovered directly as secondary raw material, while the remaining part was sent for disposal.

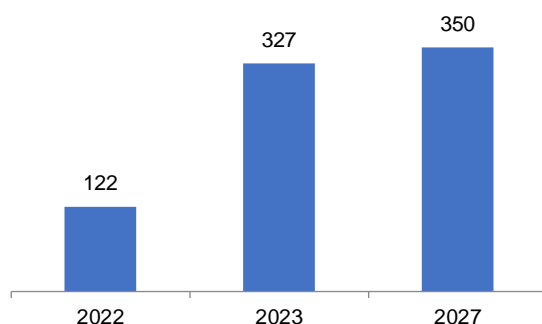
In 2023, Hasi and its subsidiaries (A.C.R., Recycla, SEA, Vallortigara) treated 646.6 thousand tons of waste in their plants, of which 63% (corresponding to about 406 thousand tons) was sent to recovery or recovered by generating secondary raw material. Analysing the performances, note the increase in waste sent for energy recovery equal to 14 thousand tonnes (+26% compared to 2022) and the increase in the **reuse of water leaving purifiers**, which came to 261 thousand tonnes (+27% compared to 2022). This latter result was possible thanks to the innovative osmotisation process in the Malpasso and Ragghianti plants, through which a high level of recovered water quality is guaranteed, higher than, for example, that emitted from artesian wells.

Through the **brokerage service**, Hasi and subsidiaries, in 2023, handled 703.9 thousand tons with its customers, of which 41.8% (294.2 thousand tons) were sent for material recovery (82.7% corresponding to 243.6 thousand tons) and energy (17.2% corresponding to 50.6 thousand tons).

DESTINATION OF TOTAL WASTE TREATED IN ITS OWN PLANTS - HERAMBIENTE SERVIZI INDUSTRIALI (HASI) AND SUBSIDIARIES

Thousands of tonnes	2022	2023
Waste sent for recovery and recovered	325.1	406.2
<i>Second raw material produced</i>	27.0	35.8
<i>Material recovery start</i>	48.4	62.6
<i>Purified water recovered</i>	205.4	261.1
<i>Start-up of energy recovery</i>	44.4	46.9
Waste sent for disposal	278.1	240.4
<i>Of which discharge into industrial sewers</i>	19.0	
Total waste treated in the operations area	603.2	646.7
Waste sent for recovery and recovered (% of total waste treated)	53.9%	62.8%

WASTE TREATED IN REMEDIATION AND GLOBAL SERVICES (THOUSAND TONNES)



Focusing on global services and remediation activities, the waste treated in the last two years has seen significant growth (+164%) thanks to the acquisition of A.C.R. in 2023.

The development of A.C.R.'s activities in the time covered by the plan will particularly concern remediation, which, however, is not reflected in the figure for treated waste, also as a result of the possible in-situ treatments that do not result in the production of waste.

The contribution of the Hera Group to the plastics of the future

The Aliplast Group, acquired in 2017 by Herambiente, owns **nine plants**. The three foreign plants located in Spain, Poland and France, the two Italian plants in Formigine (Mo) and Quinto di Treviso (TV), are dedicated to the procurement and selection of plastics, the plants in Ospedaletto di Istrana (TV) and Borgolavezzaro (No) transform plastic waste into finished products, while the Gualdo Cattaneo (Pg) plant produces finished products starting from semi-finished products in recycled plastic.

Aliplast **manages the integrated plastic cycle**, transforming waste into a finished product, mainly PE film, PET sheet and granules/flakes of the main polymers. Its main commitment is to give sustainability to the life cycle of plastic, by collecting and recycling it to produce new materials, with the minimum possible environmental impact. Through constant research and development and continuous technological innovation (of product, service, process), Aliplast oversees a traceable plastic supply chain, capable of transforming a fractional chain into a virtuous circuit and ensuring a quality, efficient and economical final production cheaper than traditional materials.

Furthermore, Aliplast continues to constantly implement synergies that are aimed at the recovery of base polymers, through the agreement signed with Nextchem for the design and construction of a plant which is capable of regenerating polymers which constitute “rigid” and three-dimensional objects. The plant will be built in the municipality of Modena near the waste-to-energy plant and the wastewater treatment plant, both operated by the Hera Group, creating a true circular economy district and will be completed by 2026.

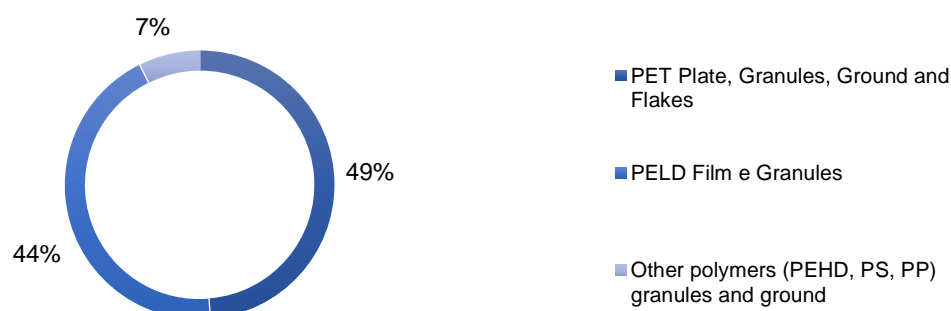
WASTE TREATED BY ALIPLAST

Thousands of tonnes	2021	2022	2023
Incoming waste (A)	97.4	99.2	108.4
Total incoming waste sent for recycling (B=C+D)	88.3	86.2	92.8
Secondary raw material obtained from incoming waste (New plastics economy Global Commitment) (C)	80.9	79.2	84.6
Incoming waste sold (started for recycling at third parties) (D)	7.4	7.1	8.2
Percentage of secondary raw material and waste sent for recycling out of total incoming waste ((B/A)	90.6%	86.9%	85.6%

The plants treat **waste from industrial waste and sorted urban waste collection**. This waste was transformed into new products or, to a residual extent, transferred to third-party companies operating in the recycling sector. The Aliplast Group directly recycles a large part of the incoming waste and only a small percentage is discarded because it is made up of non-recyclable polymers or due to weight loss due to the presence of liquids. The percentage of input waste sent for material recovery is more than 85%.

The secondary raw material obtained from the incoming waste is sold or used to produce recycled plastic products. The products sold by Aliplast in 2023 contained around 86% of secondary raw material derived from plastic waste. Also in the same year, Aliplast sold 100.1 thousand tons of recycled plastic products (it was 99.6 thousand tons in 2022), registering a growth of about 1% over 2022. This increase was driven mainly by PET polymer, which, thanks to a major reduction in the cost of plastic bottles, has enabled recycled materials to be competitive. The aforementioned increase in sales consequently led to an increase in the amount of secondary raw material obtained (+7% over 2022 from 79,172 tons to 84,619 tons) and the amount of waste input (+8%). This data is the subject of public reporting as part of the **New Plastics Economy Global Commitment** promoted by the Ellen MacArthur Foundation, described in a case study of this report. The Group has set a target of increasing recycled plastics by +122% to 2027 and +150% to 2030 from the 60 thousand tons recorded in base year 2017.

PRODUCTS SOLD BY ALIPLAST BY TYPE (100.1 THOUSAND TONS IN 2023)



The food industry requires compliance with high safety standards and demands strict compliance with applicable food regulations. The range of Aliplast products, fully certified at European level for food

contact, consists of polymer granules and flakes, and PET sheets for thermoforming and extrusion, which are ideal for the production of food trays and bottles.

Since 2018, Aliplast has been using its own IT tool to calculate the **carbon footprint** of five types of products, as described in more detail in a case study within this sustainability report.

The development of the plant system

The main interventions

In 2023, the Herambiente Group made operational investments in **material and energy recovery**, as well as in the construction of additional landfill volumes and implementation of its plant equipment, totalling **123.9 million euro**.

The following table shows the construction, upgrading or restoration of the plants completed during the year and under construction. For a description of the main interventions carried out, see the paragraph [“The circular economy at the service of businesses”](#).

MAIN CONSTRUCTION/ENLARGEMENT/IMPROVEMENT INTERVENTIONS OF WASTE TREATMENT PLANTS

Plant	Status as of December 31, 2023	Type of intervention	Expected / achieved environmental benefits
Spilamberto plant (Mo)	Started and close to industrial operation	Implementation of the biomethane production section	Biomethane production in 2023 of about 1.5 Mmc. Full industrial operation expected in 2024
S. Agata Bolognese (Bo) plant	Plant in industrial operation	Biomethane plant implementation	Biomethane production in 2023 of 7 Mmc (performed in 2023 scheduled maintenance)
Carbon Fibre Recovery Plant (Bo)	In progress	Implementation of no. 2 carbon fibre recovery lines from composite materials	Increase in the range of recoverable waste and production of recycled materials with less energy expenditure than virgin raw materials
Rigid plastics recovery plant of Aliplast (Mo)	Authorised intervention	New plant	Increased range of recoverable plastic waste; treatment of 30 kton/a of plastic waste and production of 27 kton/a of PP, PE, HOPE, PO flakes and pellets etc.
Special waste recovery plant in Marano Vicentino (Vi) of Vallortigara	Implemented and in operation	New plant	Recovery of special waste (paper/cardboard, wood, metals, etc.)
Malpasso(Pi) site of Hasi	Osmosis line finished; Evaporation line under construction	New osmosis/evaporation line for wastewater/liquid waste	Recovery of water for industrial use
Torrelbelvicino (VI) plant of Vallortigara	In progress	Plant expansion	Increase in special waste treatment capacity
Maniago (Pn) plant owned by Recycla	In progress	Construction of new department	Increase in special waste treatment capacity
Maniago (Pn) plant owned by Recycla	Terminated	Photovoltaic system on Maniago warehouses	Renewable e.e. production also for self-consumption
Castiglione delle Stiviere plant (Mn)	Plant in industrial operation	Modification and revamping of high-quality CSS production line	Reduction of waste scraps from processing that cannot be used as fuel
Castiglione delle Stiviere plant (Mn)	Terminated	Insertion of 2 abatement towers on the air treatment system	Reduction of odour emissions
Ragghianti (Pi) of Hasi Site	Implemented and in operation	Doubling of the tank park for flammable waste	Capacity increase
Ponticelle platform (Ra) of Hasi	Authorised intervention	New platform for industrial waste storage and pre-treatment	Capacity increase
Voltana selection plant (Ra)	Terminated	New glass waste treatment line from separate collection	Improved glass recovery system from separate collection

Plant	Status as of December 31, 2023	Type of intervention	Expected / achieved environmental benefits
Paper/cardboard, plastic (Pu) sorting plant	Feasibility study and obtained opinion of no need for EIA	New plant	Plant for the treatment of Sorted Waste portions of paper/cardboard and plastic
Pozzilli treatment plant (Is)	Authorised intervention	Purifier expansion	Increased handling capacity
Pozzilli Spillway (Is)	Terminated	Insertion of spillway and first rain accumulation tank on the wastewater inlet pipe via pipe	Adjustment of inflow/load to purifier and spillway management
Trieste waste-to-energy plant	In industrial operation	Line 2 revamping	Increase in treatment capacity and energy recovery (expected 20 thousand MWh/year)
Ravenna waste-to-energy plant (F3)	In startup/testing	Revamping of the F3 hazardous waste incinerator (Ravenna)	Increased treatment capacity (+10 kt/year) and energy recovery (+7,000 MWh/year) Startup to begin in August 2023, expected industrial operation in the first half of 2024
Padua waste-to-energy plant	In progress	Replacement of lines 1 and 2 with new line 4	Increase in energy recovery (expected + 70,000 MWh/year), BAT adjustment and continuity of operation.
Landfill 5th section of Ravenna	In the authorisation phase	Construction of the 5th sector landfill of inertised NP and P waste	Capacity increase
Landfill 9th sector Ravenna	Terminated	Capping and environmental restoration	Reduction of leachate production and environmental restoration
Landfill site km 3.8 Ravenna	Authorised intervention	Restoration and renaturation of the area	Renaturation and landscaping. Internal site of the Po Delta Park
Gaggio Montano (Bo) Landfill	In the authorisation phase	Implementation of 6th sector	Capacity increase
Finale Emilia (MO) landfill	In progress	Implementation of lots 5,6 and auxiliary systems	Capacity increase
Landfill of Loria (Tv)	Lot 6 implemented and in operation; Lot 5 implemented	Implementation of lots 5 and 6	Capacity increase
Discarica Cordenons (Pn)	Terminated	Implementation of lots 5,6,7,8	Capacity increase
Serravalle Pistoiese landfill (Pt)	In progress	Implementation of lots 12,13	Reduction of leachate production and environmental restoration
Landfill leachate treatment plant Cà Asprete (Pu)	In progress	New plant	Landfill leachate treatment plant using reverse osmosis technology

Environmental impact assessments [2-23]

The **EIA and Screening** requests are accompanied by a series of **environmental assessments** aimed at evaluating the effects of the works (both in the construction phase and in the project stage) on the environment and on human health and well-being, based on the characteristics of the project itself and following the analysis of the components involved in the pre-construction work situation. Interferences with the following components are analysed: atmosphere, water resources, soil and subsoil, flora, fauna and ecosystems, noise, human health and well-being, landscape and cultural heritage, settlement system and socio-economic conditions.

The approach used involves the execution, in addition to qualitative and descriptive assessments, of specific **modelling and forecasting simulations** with software and calculation algorithms, in order to obtain numerical data that can be compared with the standards and limits defined by the sector legislation and such as to be able to assess the significance of the impact. The modelling simulations are carried out in particular for the emission of pollutants and odorous substances into the atmosphere, and noise emissions. They are also used for the preparation of the risk analysis in the landfill sites, where it is necessary to request derogations from the admissibility criteria of the incoming waste and in any case

necessary during the plant closure procedure phase as envisaged by the recent regulatory updates on landfills.

All the simulations carried out envisage the punctual characterisation of the sources and the evaluation of the most disadvantageous scenario for the purpose of carrying out a **precautionary analysis**. In order to evaluate the visual effect of the new work on the surrounding environment, for example, for the construction of new landfill lots/sectors, landscape assessments are carried out through the creation of renderings and photo-insertions. In addition, where the planned works fall within or near sites of community interest (sites belonging to the Natura 2000 Network), special impact assessments (VINCA) are provided to analyze the significance or otherwise of the interference that the planned works/activities could have on these sites. Finally, in some cases, the requests are also accompanied by a specific "Health impact assessment and health monitoring plan proposal". Once the impacts have been assessed, specific **mitigation measures** are identified, where necessary, in order to reduce their significance and, where not possible, specific compensatory measures are prepared (construction of photovoltaic systems, planting, creation of electric recharging points for cars, etc.).

It should be noted that the design of the works is always carried out through the identification and use of the best available technologies as stipulated in Legislative Decree No. 152/2006 Art. 29 b paragraph 3, which, for landfills, are defined by Legislative Decree No. 36/2003.

During 2023, the following Environmental Impact Assessment Procedures were activated under Art. 27b of Legislative Decree 152/2006 "Single Regional Authorisation Provision":

- Serravalle Pistoiese (PT) Landfill - Volumetric optimisation project: updating the landfill capacity with the same morphological profile to increase the amount of waste that can be landfilled. With this project, the landfill capacity would increase from 3,010,000 m³ to 3,392,500 m³.
- Gaggio Montano (BO) landfill - Optimisation project of the existing plant site with construction of the 6th landfill sector in order to extend the landfill's operational horizon, guaranteeing a disposal service without the need to build new landfill facilities.

In addition, during 2023, the process of verification of subjectivity to EIA (so-called Screening) of the project of non-substantial modification by Vallortigara Servizi Ambientali Spa (a Herambiente Group company) of the A.I.A. of the Torrelbelvicino (VI) plant in order to undertake a synergistic operational management with its own new waste management plant located at Marano Vicentino (VI), with a view to optimising the waste flow, was initiated. These modifications concern technological, plant engineering, space organisation and management choices aimed at limiting the impact with the surrounding environment to allow an organic integration of the planned works in the local and environmental context.

The main **plants/plant sites** for which AIA review applications have been activated in 2023 are:

- Landfill for non-hazardous waste located at Via Bocche no. 20, Municipality of Baricella (BO)
- Landfill for non-hazardous waste and incinerator slag located at 150 Via Caruso, Municipality of Modena (MO)
- Sorting and recovery plant located in Via del Frullo, Municipality of Granarolo dell'Emilia (BO)

From the evaluations carried out during the presentation of the AIA Review requests, **substantial compliance with the sector BATs emerged for all of them**.

The following **Impact Assessment Procedures (VINCA)** were submitted during 2023:

- Landfill for non-hazardous waste in Gaggio Montano (BO): an application for impact screening was submitted as part of the procedure for the issuance of the Single Regional Authorisation Measure for the project to optimise the existing plant site with construction of the 6th landfill sector;
- Landfill in Serravalle Pistoiese (PT): an impact screening application has been submitted as part of the procedure for the issuance of the Single Regional Authorisation Measure for the volumetric optimisation project by updating the landfill capacity with the same morphological profile.

Hestambiente has developed a project to modernise the Padua waste-to-energy plant by replacing Lines 1 and 2 with a line (Line 4) that is similar in configuration and capacity to the current Line 3.

The impact of the emissions in the project configuration, as verified through a diffusion study, is negligible and does not affect the state of air quality (largely compliant with the quality limits set forth in Legislative Decree 155/2010).

The environmental assessments regarding the sustainability of the plant, both for the plant configuration currently in operation and for the project configuration with line 4 operational, were carried out considering the plant at its originally authorised capacity, i.e. 245,000 t/y. The authorised capacity has been reduced in the new authorisation to 219,000 t/y with a further reduction of the stack emission limits specifically for the parameters NO_x, PM₁₀ and NH₃; therefore, further improvements are to be expected

with respect to what was estimated in the diffusion study as well as with respect to the current state. These reductions refer to both Line 3 currently in operation and Line 4 with respect to what is proposed.

Sblocca Italia Decree and new waste disposal legislation

Article 35 of Decree-Law. 133/2014 converted with amendments into Law 164/2014 in the so-called "Sblocca Italia," is aimed at achieving on a national scale an adequate and integrated system of urban waste management as well as achieving separate collection and recycling targets.

This rule provided for the recovery plants that comply with the environmental limits, present in the environmental impact assessments (EIA) of the individual plants, the possibility of adapting the treatment capacity to the saturation of the thermal load of the plant and the possibility of treating urban waste coming from outside the basin subject to meeting the needs of the reference basin.

Following this legislation, an agreement was signed in 2015 between the Emilia-Romagna Region and the two managers of waste-to-energy plants for urban waste (Hera and Iren). This agreement limited the treatment of municipal waste from outside the region only in the event of a request for assistance in offering solidarity for justified and shareable needs posed for limited periods and with the assent of the local areas concerned.

Consistent with the principles and objectives defined in Art. 35, the Hera Group identifies the priority criteria for saturating the capacity of its waste-to-energy plants in the following hierarchical order:

- municipal waste from the local area;
- municipal waste from the regional area;
- any non-regional municipal waste based on decisions by the relevant authorities;
- non-hazardous special waste upon saturation of the residual thermal load (according to the provisions in the integrated authorisation of each plant).

Based on these principles, between the end of 2015 and during 2016, the Integrated Environmental Authorisations (AIA) were updated, and at the same time, program agreements were signed with the Local Authorities concerned for the waste-to-energy plants of Forlì, Rimini, Modena and Ferrara.

The Bologna, Padua and Trieste plants had already been authorised with a capacity at saturation of the thermal load. The authorisations of the two Padua and Trieste plants, in fact, do not allow the treatment of urban waste coming from outside the basin, since priority access to basin and regional waste must be guaranteed, both municipal waste as well as from treatment of municipal waste, saturating the treatment capacity.

The agreement on the Forlì waste-to-energy plant provides that only urban waste and special waste deriving from the treatment of municipal waste (e.g., waste from the treatment of sorted waste collected) coming solely from the regional basin in compliance with current planning will be destined for this plant and the new AIA released in December 2022. The agreement on the Ferrara waste-to-energy plant was passed in 2021 with the issue of the new Integrated Environmental Authorisation which sets the maximum authorised disposal capacity of 142,000 t/year of non-hazardous waste, with priority access to municipal waste produced in the region.

In 2023, in the eight Herambiente **waste-to-energy plants** destined for municipal waste (thus excluding the Ravenna plant), no municipal solid waste coming from other regions was treated on the basis of determinations by the relevant Authorities. Also as regards **landfills**, solid municipal waste coming from other regions was not treated on the basis of determinations by the relevant Authorities.

Circularity within the Hera Group

Waste produced by the Company [306-1]

Waste generated by the Group in 2023 was **2,147 thousand tons, 31% more** than in 2022. 45% of the waste produced was sent for recycling, composting or other recovery operations such as the reuse of certain types of materials, while the remaining 55% was destined for disposal or waste-to-energy (assimilated to disposal as defined by the GRI standard).

[306-3]

MAIN WASTE PRODUCED BY THE COMPANY BY DESTINATION

Thousands of tonnes	2021	2022	2023
Non-disposal	747.2	681.2	970.3
Disposal	1,005.3	959.4	1,176.9
Total	1,752.5	1,640.6	2,147.2

Water discharges not classified as waste pursuant to Legislative Decree 152/2006 were not considered. 152/2006.

MAIN WASTE PRODUCED BY THE COMPANY BY DESTINATION (2023)

Thousands of tonnes	Non-disposal	Disposal	Total
Bio-stabilised	92.7	0	92.7
Compost leachate	0	31.1	31.1
Sewage sludge	107.5	47.9	155.4
Sludge from chemical-physical-biological treatment	8.2	30.5	38.7
Purification leachate	0	19.7	19.7
Leachate from landfills and composting	48.4	440.4	488.8
Dust from waste-to-energy electrofilters	49.8	5.3	55.1
Fuel production from waste	81.2	0	81.2
Liquid waste from purification	3.8	47.6	51.4
Liquid waste from inertisation	0	42.4	42.4
Solid waste from physicochemical treatment	7.8	13.4	21.2
Solid waste from inerisation	29.8	36.8	66.6
Purification sands	0.01	0.3	0.3
Slag from waste-to-energy	221.6	45.6	267.0
Non-reusable fractions from sorting plants	148.9	70.7	219.6
Other waste from Herambiente storage and plants	170.6	345.3	515.9
Total	1,050.7	1,675.2	2,147.2

Water discharges not classified as waste pursuant to Legislative Decree 152/2006 were not considered. 152/2006

In 2023, the waste produced by the Group, sent for recovery operations, amounted to 870,687 tonnes (of which 90% non-hazardous waste and 10% hazardous). Of the total waste sent for recovery, 31% was destined for **Group plants** and the remaining 69% for **third-party plants**. The waste categories that had a significant weight within the total waste generated and destined for recovery were: **leachate from landfills and composting** for 488 thousand tons (23%), **slag from waste-to-energy** for 267 thousand tons (12%), **sewage sludge** for 155 thousand tons (7%), and **other waste from Herambiente storage and facilities** for 515 thousand tons (24%).

[306-4]

MAIN WASTE NOT DESTINED FOR DISPOSAL BY OPERATION (2023, THOUSANDS OF TONNES)

Classification	Operation	Group plants	Third-party plants	Total
Hazardous	Recycling	0.2	30.2	30.4
	Other recovery operations	22.1	36.3	58.4
<i>Total hazardous</i>		22.3	66.5	88.8
Not hazardous	Recycling	108.2	172.8	281.0
	Composting	102.3	32.5	134.8
	Other recovery operations	33.6	332.4	366.0
<i>Total non-hazardous</i>		244.1	537.7	781.8

Classification	Operation	Group plants	Third-party plants	Total
Total		266.4	604.2	870.6

“Other recovery operations” include the reuse of bio-stabilised material to cover landfilled waste, the reuse of electro-filtered powder, and the shredding of waste used for the production of secondary solid fuel.

The refuse produced by the Group, subsequently sent for disposal, amounted to 870,687 tonnes (of which 90% non-hazardous waste and 11% hazardous), of which **69% was allocated to third-party plants** and the remaining **31% to Group plants**.

[306-5]

WASTE ALLOCATED TO DISPOSAL BY OPERATION (2023, THOUSANDS OF TONNES)

Classification	Operation	Group plants	Third-party plants	Total
Hazardous	Transfer to landfill	19.4	13.5	32.9
	Waste-to-energy	4.5	21.7	26.2
	Other disposal operations	27.2	20.0	47.2
Total hazardous		51.1	55.2	106.3
Not hazardous	Transfer to landfill	128.5	67.1	195.6
	Waste-to-energy	27.7	0.002	27.7
	Other disposal operations	1,230.5	115.0	1,345.5
Total non-hazardous		1,386.7	182.1	1,568.8
Total		1,437.8	237.3	1,675.1

The item “Other disposal operations” includes the physicochemical treatment of compost leachate, leachate, liquid waste and sludge.

Recovery of waste from waste-to-energy and main types of refuse
[306-2]

The development and renewal program for waste-to-energy plants carried out by Herambiente in recent years has had a positive effect on the production of combustion refuse. The new combustion systems and, above all, the “gondola” type “cooling” and extraction systems for scoria combustion, make it possible to have scoria with a very low content of unburnt products and a reduced water content. This determines a smaller quantity of scoria produced, with, above all, a more suitable quality for subsequent recovery.

In 2023, the eight waste-to-energy plants managed by Herambiente destined for urban waste (thus excluding the Ravenna plant) produced 266,9 tonnes of waste, equal to 20.9% of the waste treated in these plants. **83% of the scoria produced was sent to recovery plants**, for example in the production of cement and cement mixes, while the remainder was disposed of in landfills (this percentage was equal to 81% in 2022 and 97% in 2021).

In the Ferrara, Bologna and Rimini plants there is a **system for separating ferrous metals** which allows them to be sent for reuse in the metallurgical industry. In 2023, 4,972 tons of metals were recovered, a figure aligned to 2022 (there were 4,535).

Dust from fume filtration in waste-to-energy plants can be mainly recovered in two ways:

- the sodium powders are collected by Solvay Italia which treats them and recovers the residual bicarbonate they still contain;
- the calcium powders and electro-filter powders are sent to Germany where they allow them to be reused to restore the cavities of disused mines.

In 2023, a total of 55,153 tons of dust were produced, of which 49,629 sent for recovery and 5,638 sent for disposal.

As regards the **sludge produced by physicochemical biological plants**, this is sent abroad where it falls within a process for the production of cement granules which can subsequently be used as raw material for the production of composite mixtures for geoenvironmental engineering, i.e. levelling, reclamation and surface shaping of areas, formation of embankments or for special applications in areas where mining waste from hard coal mining is found. Furthermore, the granulate can also be used in civil engineering for the construction of the lower layers of foundations, roads or for reclamation activities.

The **bio-stabilised** product is reused as a material for preparing the daily landfill covers and, in some cases, also for their final cover.

The **wastewater from the purifier** is all potentially reusable, as washing water for vehicles or yards.

Finally, through the shredding of waste from selection centres it is possible to produce **Refuse-derived fuel (RDF)** which is then used in boilers and cement factories.

Recovery of sewage sludge

Sewage sludge is considered special waste and must be managed according to the provisions of **Legislative Decree 152/2006**. In 2023, the plants managed by the Group produced 34.2 kilograms of sludge per equivalent inhabitant served, 0.8 kilograms less than the previous year. At Group level, a portion of the sludge produced (47,949 tons) was disposed of through **dedicated incineration** (27,652 tons, 17.8% of the total), **landfilling** (9,067 tons, 5.8 percent of the total, stable compared to the previous year), and the remainder through other treatments, especially indirect reuse in agriculture (11,230 tons or 7.2%). The remainder was recovered (107,481 tons, about 70%) through **indirect agronomic reuse after composting** (100,069 tons, 64.4%), **direct recovery in agriculture** (7,412 tons, 4.8%). The Group aims to further reduce the transfer of sludge to landfills in the areas served. In particular, in Emilia-Romagna (area served by Hera Spa), the objective for 2030 is to reduce the transfer by up to 1.5%.

As far as the Triveneto area is concerned, it should be noted that in the Padua area, after the installation of the 900-square-metre solar greenhouse that took place in 2020 and the two biodessicators installed in 2022 in the Ca' Nordio wastewater treatment plant, the project to install two more biodessicators at the same site, one biodessicator in the Abano plant, and four more biodessicators in the Codevigo plant was approved. The seven new total biodryers were funded by NRRP funds and are to be tested by March 2026. In addition to this, an agreement was signed in the Trieste area between the main operators of the Friuli Venezia-Giulia region for a centralised drying project. Finally, the design of a 20,000-ton drying plant at the San Giorgio di Nogaro sewage treatment plant (CAFC management) using low-temperature belt technology was completed. All the necessary permits for construction have been obtained, and the bidding process has also been carried out for the contracting of the work, which will begin in the first quarter of 2024. This project was also funded by accessing NRRP funds and was also awarded as the first project in northern Italy. Testing is to take place by March 2026.

Waste management in the electricity distribution business

[306-1]
[306-2]

In 2021, from the analysis carried out for the Taxonomy, an in-depth analysis was carried out on the production and management of waste deriving from ordinary and extraordinary management and maintenance activities in the field of electricity distribution, with the aim of verifying compliance with the "Do No Significant Harm" principle in relation to the environmental objective of a "transition towards a circular economy".

Within the Group, the distribution of electricity is an activity carried out by the companies Inrete and AcegasApsAmga; in carrying out internalised activities, residues can be produced from processes such as: cables, metals, plastics, batteries, oils, packaging (wooden and metal), transformers and capacitors.

These are delivered by the shipyard to the company offices and then evaluated and, if unsuitable for subsequent reuse, classified as waste for recovery or disposal.

In 2023, Inrete produced around **70 tons of waste** including mixed metals, plastics, copper cables, aluminium cables and others. 95% was sent for material or energy recovery, and 5% was sent for recovery or disposal at Group plants. In the construction of new underground infrastructures for the development and renewal of the distribution network, excavations were carried out with restorations in recycled material for over 70% of the cases.

In the year 2023, AcegasApsAmga produced approximately **140 tonnes of waste** (of which 79% was sent for material or energy recovery), entirely sent for recovery or disposal at external supplier plants.

On the other hand, in the construction sites entrusted to suppliers, the waste produced mainly refers to excavated earth and rocks; in some construction sites in the Triveneto, from the replacement of old networks it is possible to find previous asbestos cement pipes which are sent for disposal through the Herambiente company. In these construction sites, waste monitoring takes place through periodic sample checks of the fourth copy of the waste form.

In 2022, the works to allow the circularity of the materials deriving from the massive replacement of the electricity meters in the Inrete and AcegasApsAmga area were completed. The massive replacement, starting in 2022 in the areas of Modena, Imola, Gorizia and Trieste, will therefore see the reuse of materials from the meters being decommissioned while the new meters are manufactured with recycled plastics.

As of 2022, companies working on behalf of Inrete and AcegasApsAmga in the massive replacement campaign of electric meters are obliged to direct waste from the activities of this contract, with particular reference to disassembled electric meters, to facilities that can guarantee at least 85% recovery of the disposed product by weight.

With the aim of improving the circularity profile of the electricity distribution service, also in relation to the requirements of the EU Taxonomy, in view of the contractual renewals of supply contracts that will take place in the coming years, the introduction of the following aspects is being considered:

- for the purchase of incoming materials, the insertion of technical specifications or certifications regarding the packaging, the nature/derivation of the products to be supplied and the methods of transport;
- for the treatment of outgoing waste, the introduction of minimum recycling percentages and reports relating to the destination of waste sent for recovery or disposal.

Water circularity

Water leakage

The percentage of water losses compared to the water introduced into the network is due to physical or real losses (due to broken pipes or hydraulic parts, etc.) and to administrative or apparent losses (meter measurement errors, illegal consumption); the latter translate into water which is actually delivered to the final customer but which is not counted and therefore invoiced.

Until 2006, network losses were calculated as the difference between the water introduced into the aqueduct network over the year and the water accounted for as delivered to customers in the same period: the latter figure was estimated at 31 December of every year on the basis of customers' historical consumption as it is not possible to carry out a single reading of all the meters at 31 December. This estimate was then supplemented to take into account the correct accrual of sales to customers at 31 December of the previous year calculated after reading all the meters. Since 2007, network losses have been calculated by entering the adjustments deriving from the meter readings in the relevant year, thus ensuring the comparability between the water sold and the related data introduced into the network for each year. The method defined by ARERA in the technical quality regulation (Resolution 917/2017 and amendments Resolution 639/2021 Article 10) is used to calculate water losses; the volume of water lost is calculated as the difference between the volumes entering the aqueduct system and the volumes leaving the aqueduct system; this value is compared to the volumes entering the aqueduct system to calculate the percentage and to the length of the adduction and distribution pipelines to calculate the linear losses, also including the length of the connections. With this approach, however, it is only possible to calculate the final figure for the year approximately four to six months after the closing of the budget (after all meters have been read). For this reason, the following graph does not show the data for the year 2023. Based on the information available at the date of approval of these financial statements, there are no elements to affirm that the final figure for water losses referring to the year 2023 differs significantly from that relating to the year 2022.

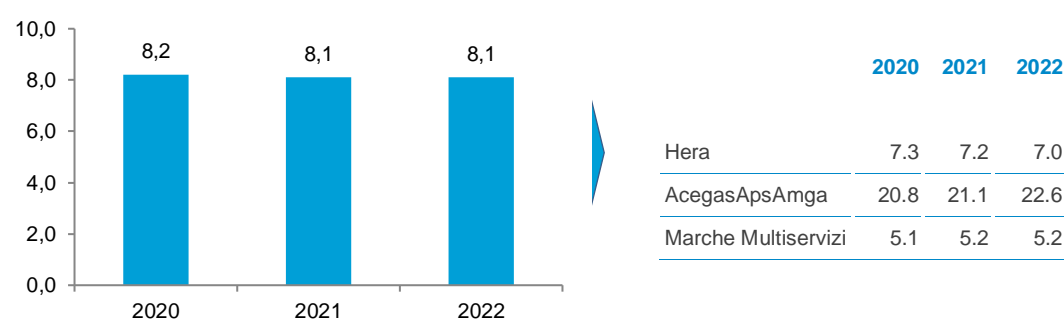
Losses are calculated according to the specifications of ARERA Resolution 917/2017. According to this resolution, **linear losses (M1a)** are defined as the amounts of unbilled water due to a water loss (physical or administrative) related to the length of the network (distribution adduction) also including the length of connections; **percentage losses (M1b)**, are the amounts of unbilled water due to a water loss (physical or administrative) related to the volumes sold pertaining to it. These changes were resolved through Resolution 639/2021/R/IDR dated 12/30/2021 regarding linear losses and Resolution 637/2023/R/IDR dated 12/28/2023 regarding percentage losses.

At Group level, the **percentage loss figure (M1b)** for 2022 was **29.6%**, a slight increase compared to 2021 (both figures calculated according to the ARERA resolution). The Group continued to be positioned at a **significantly lower level than the national average** of 41.8% in 2022, which was **also lower than the Northwest Territory average** of 32.6% in 2022, which is the best national performance (Source: ARERA, Annual Report 2023), as well as at 37.1% in 2022 **average of provincial capitals** (Source: Legambiente Ecosistema Urbano 2023).

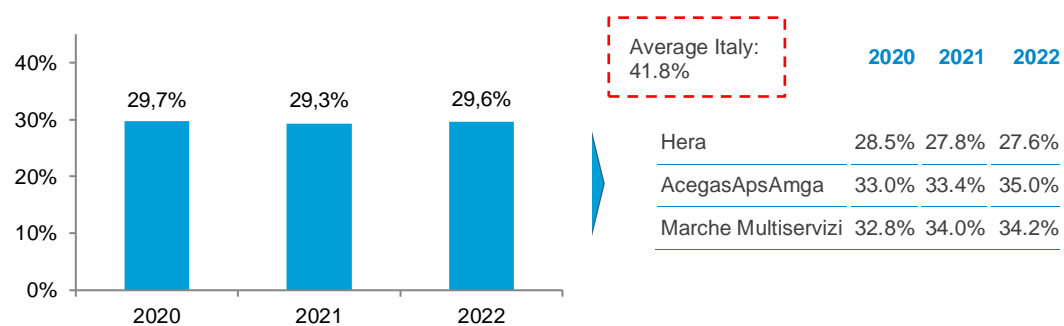
The corresponding **linear loss ratio (M1a)** (2022 data) was **8.1 cu m/km/day**, stable compared to 2021. It is believed that the figure of water losses per kilometre of network is more representative of the effectiveness and efficiency of the distribution system. This value is even more significant when compared with the 17.9 cubic metres/km/day **national average** reported by ARERA for 2022 (Source: ARERA, Annual Report 2023). The figure is also lower than the **average for the Northeast region**,

which shows the best performance nationwide, at 11.4 cu m/km/day in 2021 (Source: ARERA, Annual Report 2023). Compared to other water service operators at national level (ACEA, IREN, Acquedotto Pugliese, Metropolitana Milanese, SMAT Torino, Publiacqua, Acque Veronesi), the Group has a better performance with respect to the weighted average of percentage water losses (35.5% compared to 29.6% for the Group) as well as linear water losses (32.1 mc/km/day compared to 8.1 mc/km/day for the Group). This data was processed internally by retrieving data from the published sustainability reports of the aforementioned companies.

WATER LOSSES PER KILOMETRE OF MANAGED NETWORK (MC/KM/DAY) (PHYSICAL AND ADMINISTRATIVE LOSSES OF THE CIVIL AQUEDUCT CALCULATED WITH THE ARERA METHOD)



WATER LOSSES (PHYSICAL AND ADMINISTRATIVE LOSSES OF THE CIVIL AQUEDUCT CALCULATED WITH THE ARERA METHOD)



The 2020 and 2021 data are calculated according to the method defined by ARERA in the regulation of technical quality (resolution 917/2017 and amendments to resolution 639/2021 Article 10). The 2022 figures were calculated according to the changes made through Resolution 639/2021/R/IDR dated 12/30/2021 regarding linear losses and Resolution 637/2023/R/IDR dated 12/28/2023 regarding percentage losses.

The recovery of purification water for the benefit of local areas

Water management must be increasingly conceived in a holistic vision, in which the point of returning the purified water to the environment is no longer the closure of a system, but rather a passage to another phase of the water cycle. In this vision, a transversal commitment is required to enhance and not risk wasting the resource. For this reason, Hera Spa, since 2018, has undertaken to sign program agreements with reclamation consortia with the aim of increasing the reuse of wastewater treatment. This commitment, albeit in different ways, has also been followed over the years by AcegasApsAmga and Marche Multiservizi.

A Program Agreement for the reuse of purified wastewater from the Sassuolo (MO) and Savignano sul Panaro (MO) plants was renewed in 2023 between **Hera Spa, the Emilia-Romagna region, Atersir and the Renana Reclamation Consortium**.

In 2023, a research agreement was also signed between Hera, the University of Bologna and the Consorzio Bonifica Renana aimed at defining the water requirements of the irrigation district managed by the Consortium and quantifying the contribution to these requirements guaranteed by purified wastewater. Also as part of the research project, a risk analysis will be prepared for the Castel San Pietro (BO) water treatment plant, developed in accordance with the transposing Reg. UE 741/2020 on direct irrigation reuse, one of the first cases in Italy and first in Emilia-Romagna. Both activities will end in 2024.

During 2023, timely monitoring of the volumes of wastewater reused for industrial uses began; these volumes were already being reused both internally in Group plants and externally; however, the contribution of these uses to the reuse of refined wastewater had not yet been measured organically.

In April 2018, a **three-year program agreement was signed between Hera Spa and the Emilia-Romagna Region, Arpa, Atersir and Consorzio Bonifica Renana** aimed at **recovering the wastewater** discharged from the Bologna purification plant (the total reuse potential is 7.5 million cubic metres). The three-year agreement was renewed in 2021, in continuity with the previous one, and made official in 2022 with the Regional Council Resolution of 11 April 2022, n. 534. The agreement provides for the consortium to withdraw around 2,160 cubic metres/h, equal to around 40% of the flow treated in the summer period. In particular, a part of the water purified by the plant is conveyed through a dedicated pipeline to the "Savena Abbandonato", letting the corresponding flow, coming from the Reno river, flow towards the "Canale Navile". This occurs through a modulated management of surface water flows by the Consorzio della Bonifica Renana, in relation to the requests and the degree of drought of the water bodies. Under the agreement, Hera and the Consorzio della Bonifica Renana have invested around 120,000 euro to bring the transfer system (sluice gate and lifting/adduction system) of part of the purified flow rates of the Bologna treatment plant to the network of canals managed by the same consortium. In the course of the activity, supplementary analyses are envisaged on the wastewater discharged from the Bologna treatment plant, to monitor additional parameters to those already envisaged in the authorisation.

This initiative, in addition to the primary objective of protecting the water bodies present in the area, also pursues the principle of reusing water as an asset to be preserved. In 2023, the total flow diverted to the Bonifica Renana plant from the Bologna treatment plant was more than **660 thousand cubic metres**. In 2022 (June-November) more than 2.2 million cubic metres were diverted while in 2021 the flow rate was 891 thousand cubic metres.

In 2019, a **Protocol and Memoranda of Understanding was signed between Hera and the Consorzio della Bonifica Renana** for some of the smaller purifiers in the Bologna area aimed at identifying the operating methods necessary so that the water treated by the purifiers located in the consortiums district can be reused downstream of the discharge, and eventually channelled into a basin, in order to improve the hydrological balance of the flow rates passing through the water bodies of the consortium district (the total reuse potential is approximately **2.5 million cubic metres**).

During 2023, the **Program Agreement for the reuse of wastewater** from the **Sassuolo and Savignano sul Panaro** treatment plants was renewed for an additional three years, and the collaboration with the **Municipality of Modena** continued; this involved diverting part of the flow of water treated by the treatment plant to one of their canals to hydraulically compensate for the water course. These activities aimed at reusing water for mixed use and preserving the ecological status of surface water bodies in the Modena area resulted in a potential reuse volume of about **4.2 million cubic metres**.

In 2022, the VALUE CE-IN research project ("Valorisation of wastewater and sludge from a circular economy and industrial symbiosis perspective") continued in the **Cesena area, and in August 2022 it was signed between Hera SpA and the Consorzio di Bonifica della Romagna** an agreement with experimental purposes, aimed at evaluating the effects of the use of purified waste water from the Cesena treatment plant on the main tree crops present in the irrigation area served by the same Consortium. This agreement, which saw the participation of the Emilia-Romagna Region, Arpa and Atersir, formalised the reuse of **6 million cubic metres** of purified wastewater for the purposes just described.

Also in 2022, discussions were initiated in Romagna with the Consorzio di Bonifica della Romagna for the finalisation of a reuse agreement to regulate the reuse of purified wastewater discharged by the **Ravenna, Russi and Cervia** plants for which the discharge of purified wastewater into consortium canals is already a regulated practice in the authorisations, as mixed use and hydraulic compensation of consortium drains. The formalisation of these agreements will enable additional volumes to be made available to the local area.

The technical discussion tables with the reclamation consortia will also continue for 2024 to share quantitative and qualitative monitoring methods of purified water for irrigation and possible prospects.

In Emilia-Romagna there are also two active contracts for the **external technical reuse** of the purified wastewater of the Ecoeridania (Fc) and Tecnogym (Fc) purifiers. In addition, the measurement and monitoring activity, started in 2022, has been completed, and this has also made it possible to value the contribution to reuse made by technical reuse at the same treatment plants and on other plants operated by the Hera Group. In 2023, **nearly 7 million cubic metres** of water was reused for industrial uses, of which **more than 3.1 million cubic metres** of water was used for technical process uses on purification plants.

In the Triveneto area, in the province of Padua, initiatives are underway aimed at recovering the wastewater leaving the purification plants. In particular, although in general terms there are no formal

agreements, for three treatment plants (**Abano, Guizza and Cona**), the discharge of consortium water is expressly authorised by the Province of Padua and the Metropolitan City of Venice. Furthermore, in the Trieste area within the Servola treatment plant, process water is recovered and reused mainly for backwashing biological filters, for cooling users, and heat exchange for the office building air handling unit. The total volumes of water recovered by AcegasApsAmga in 2022 amounted to approximately **7.6 million cubic metres**.

In the Marche region there are small quantities of water reused in small-sized purification plants.

In summary, the reuse of purified wastewater is as follows:

- **indirect agricultural reuse:**
 - **Agreement with Emilia-Romagna Region. Arpae. Atersir and Consorzio Bonifica Renana** for recovery of wastewater, coming to 7.5 million m³ (IDAR purifier, Bologna);
 - **Memorandum of Understanding between Hera and the Consorzio della Bonifica Renana**, coming to 2.9 million m³;
 - **The Programme Agreement for reuse of wastewater between Emilia-Romagna Region, Arpae, Atersir and the Consorzio di Bonifica Burana**, coming to 2.5 million m³;
 - **Operational agreement with the Municipality of Modena**, coming to 1.7 million m³;
 - **Research Agreement with Consorzio di Bonifica della Romagna** (Cesena purifier), coming to 6 million m³;
 - **Single Environmental Authorisation** in the Ravenna and Lido di Classe purifiers, coming to 3.1 million m³;
 - **Indirect agricultural reuse in the Triveneto area without formalised agreements**, in 3 purifiers, coming to 7.6 million m³;
- **Technical reuse** for a few companies, including **Ecoeridania, Technogym and Herambiente**, coming to 3.8 million m³;
- **Internal reuse within the purifiers managed**, coming to 3 million m³.

REUSABLE AND REUSED PURIFIED WASTEWATER (% OF TOTAL PURIFIED WASTEWATER)

	2021	2022	2023
Reusable and reused purified wastewater (millions of cubic meters)	20.7	30.5	38.3
Total purified wastewater (millions of cubic meters)	347.1	420.7	378.1
Reusable and reused purified wastewater (% of total purified wastewater)	6.0%	7.3%	10.1%

From 2022, the figure refers to Hera Spa, AcegasApsAmga and Marche Multiservizi.

The value relating to reusable and reused purified waste water, which in 2023 corresponds to 38.3 million cubic meters (+26% compared to 2022), is obtained by considering the reusable purified waste water indirectly allocated to agriculture (understood as potentially reusable purified wastewater leaving the Emilia-Romagna plants for which agreements have been signed with the authorities for the reuse and purified water discharged into canals for irrigation purposes in the Triveneto area) and the purified wastewater reused directly in industrial plants, inside or outside the Group. In particular, 27.4 million cubic meters were recovered for indirect use in agriculture, 7.1 for industrial reuse in Group plants and 3.8 for reuse in industrial plants not belonging to the Group. The total percentage value of reusable and reused purified wastewater (from 7.3 % to 10.1 %) was influenced by the values of Hera Spa (from 8.4 % to 11.1 %), the increase of which was due to the inclusion of industrial reuse contributions (internal and external), previously unmeasured (+2.5 %) and an increase in indirect irrigation flow on the Ravenna area (+0.2 %). Hera's goal is to continue to increase this share and reach 13,6% by 2027 and 18% by 2030.

The Group's commitment to reduce internal and customer water consumption

Internal water consumption

Water is a limited resource that must be protected and used sustainably, in terms of both quality and quantity. However, its use in a wide range of industrial sectors places pressure on the availability of this resource. The Group, in line with the long-term European vision aimed at guaranteeing an adequate water supply in terms of quality and quantity, has been engaged in initiatives to reduce and improve consumption efficiency for years.

The Group's water consumption reflects the multi-business nature of Hera and is mainly concentrated in waste treatment plants (70%) and purification plants (16%). 72% of total consumption comes from aqueduct.

In 2023, the Group's total water consumption, corresponding to the total volumes invoiced, amounted to approximately 4.9 million cubic metres of water.

TOTAL WATER CONSUMPTION BROKEN DOWN BY TYPE OF SOURCE

Thousands of cubic metres	2022	2023	%
Aqueduct	2,980.6	3,550.0	72%
Surface	605.1	597.5	12%
Aquifer	960.3	784.7	16%
Total	4,546.0	4,932.2	100%

The data refer to the consumption of water from the civil and industrial aqueducts, groundwater and rainwater of the most "water-demanding" Group business units served by Hera Spa in Emilia-Romagna, Herambiente's waste treatment plants (excluding the where the water resource does not represent a process consumption), the consumption of AcegasApsAmga (with the exception of Hera Luce, Ase, AresGas, and the Gorizia and Udine offices) and the consumptions of the purification service of Marche Multiservizi.

Reducing consumption within the Group

In 2018, the planning of actions aimed at **saving, reusing and recovering water** was launched ("water management project"). The objective set in 2018 was to **reduce by 10% in four years** (compared to the 2017 final balance) the consumption of water from the civil and industrial aqueducts of the most "water-demanding" Group business units served by Hera Spa in Emilia-Romagna, i.e.:

- the sewage and purification service;
- district heating;
- the Imola cogeneration plant;
- corporate offices;
- the Herambiente waste treatment plants in Emilia-Romagna.

Starting from 2020, the original scope of the project was extended to include all the Departments that use water for process purposes, regardless of their consumption incidence; the activities involved were those relating to managing vehicles, the waste collection service in Emilia-Romagna and the aqueduct service.

Moreover, starting from 2021, the consumption of AcegasApsAmga relating to sewerage and purification services, management of vehicles and consumption of the offices has also been included in the project's scope of analysis. Considering the substantial changes in the scope of analysis, attributable to M&A operations (sale of Padua gas networks) and start-up of new plants (Trieste purification plant) which took place between 2017 and 2018, it was decided to consider consumption as a baseline 2019, and not 2017 as in the case of the original project; for this reason the consumption of AcegasApsAmga is not included in the data shown below as it is reported separately.

The target outlined in the latest business plan is to reduce water volumes used, for headquarters and facilities operations, by 25% by 2030 compared to the 2017 actual (project baseline). The Group has also outlined an interim target to 2027 to reduce domestic consumption by 24 %.

The target outlined in the latest business plan envisages a 25% reduction in the volume of water used for site and plant operations by 2030 compared to the 2017 baseline. This result is mainly due to the continuous work done on searching for areas of improvement in the use of water resources, optimisation of systems, and implementation of interventions to reuse and recover this resource.

More specifically, the main interventions that made it possible to achieve this result in 2023 were:

- for the purification service: the construction of filtration and ultrafiltration sections for the reuse of purified wastewater at the Imola Santerno, and Idar in Bologna, with the reuse of purified wastewater for the sludge thickening and dewatering sections at the Rimini plant, process adjustments to the purifier aimed at reducing the foams produced and consequent lower use of water for abatement at the Imola and Cesenatico plants, the replacement of a coarse screen with a new conveyor belt scouring system that reduces the consumption of drinking water to zero at Modena.
- for the waste collection service: the remodelling and optimisation of consumption for sweeping and dust suppression activities;
- For corporate offices: repairing leaks within facilities and installing pressure gauges on fire-fighting systems and introducing collection and recovery system for rainwater.
- on district heating networks: the reclamation, search and repair of leaks;

- for the Imola cogeneration plant: the recovery of water for the cooling towers deriving from the purging of the boilers, the modification of the irrigation frequency of the green areas of the site and the modification of the second rainwater transfer circuit for replenishment in cooling towers.
- for waste treatment plants: the management efficiency of some sectors and the reuse of process water for the irrigation of green areas or exhausted landfills and the construction of vats for recovering meteorological water and processing rainwater.

WATER MANAGEMENT PROJECT

Thousands of cubic metres	2017	Reductions related to specific interventions
Sewage and purification service and aqueduct	571.7	-192.9
Waste collection service	64.1	-20.0
District heating	208.5	-58.1
Imola cogeneration plant	272.5	-10.7
Company Locations	127.2	-2.6
Waste treatment plants	277.1	-46.7
Vehicle management	13.7	0.0
Total	1,534.8	-331.0

Equal to 21.5% of 2017 consumption

Overall consumption is calculated on the basis of invoiced consumption using the difference between invoiced volumes and meter reading volumes as a driver for the correction. The correction is applied to prevent the mechanism of estimated readings, which is applied in billing whenever the meters are not read on time, leading to an overestimation or underestimation of the actual volumes used. Data refers to water consumption from civil and industrial aqueducts of the Group's most "water-demanding" business units served by Hera Spa in Emilia-Romagna.

For the most part, the planned measures to reduce water consumption have been implemented. The measures, identified already, that will allow the target of a 25% reduction in 2030 to be reached remain to be implemented. Major initiatives that have contributed and are contributing to the reduction of consumption include:

- Construction of treatment sections for recovery and reuse of purified wastewater;
- Preparation of rainwater collection and recovery tanks for process uses;
- Optimisation of irrigation systems of depleted landfills under management;
- Strengthening research and reducing losses on district heating networks.

The reduction in the operating hours of some plants and the cessation of some activities added to the water-saving measures implemented, generating a real reduction of 24% in 2023 consumption (equivalent to about 367 thousand cubic metres) compared to that of 2017.

In addition, starting from 2021, AcegasApsAmga's consumption related to sewerage and purification services, vehicle management and office consumption were also included in the project's scope of analysis. Considering the significant changes to the scope of analysis, attributable to M&A transactions (sale of gas networks in Padua) and the start-up of new plants (purification plant in Trieste) that took place between 2017 and 2018, it was decided to consider 2019 consumption as the baseline, and not 2017 as in the case of the original project; for this reason, the data shown in the table above do not include AcegasApsAmga consumption, since it is reported separately.

In 2023, AcegasApsAmga recorded a reduction of approximately 27.4% compared to 2019 (equal to 107 thousand cubic metres), mainly due to the restructuring works in progress on several of the company's premises, which caused the transfer of personnel, such as for the Trieste office, to other premises with a water contract not held by AcegasApsAmga, as well as the partial outsourcing of some activities, such as the washing of Via Orsera in Trieste.

Consumption monitoring will be proposed for 2024 without setting targets for reducing water consumption, as the above-mentioned renovation work will not be completed until 2025 and there are currently no plans to invest in water efficiency in the company's facilities.

**Efforts to
reduce
household and
business
customer
consumption
[303-1]**

At the same time as the launch, in 2018, of the “water management” project within the Hera Group, the importance of extending this project to **external household and business customers** clearly emerged, in the awareness that habits, choices, culture in the use of water resources they evolve only if the company involves the area and the people in its sustainable development.

Consumption analysis campaigns and reduction support campaigns were therefore designed for **household and business customers**, with the aim of stimulating and increasing a virtuous and conscious behaviour in the use of water resources among our customers as well.

The tool introduced in 2019 to support the **reduction of household consumption**, similar to what has already been experimented in the energy field starting from Thalers behavioural theories, is the “**Consumption Log**”. It is an experimental project, developed in collaboration with the “Department of Management, Economics and Industrial Organization” of the Milan Polytechnic, which analyses the behavioural interactions of individuals trying to enhance positive and virtuous behaviours. In 2023, the service was extended to about 60 thousand additional customers and involves 325,046 household customers to date (about 37.5% of household customers, +2.5% over 2022). By 2027, it is believed to reach 560 thousand customers, accounting for 77 % of the total customers served by the Group.

A report is sent to them via e-mail which analyses their consumption methods in a timely manner, comparing the volumes of water used by the individual customer with respect to similar customers and the change in consumption of the customer over time. The report is also complete with tips that help to implement some good functional household practices to save water.

Over the next few years, the Consumption Log will involve all users who have communicated their e-mail address to the Hera Group.

For **business customers**, on the other hand, the “**water management portal**” was created, dedicated to water-intensive users, i.e., with water consumption greater than 50,000 cubic metres/year. The portal is an interface that allows companies to monitor, through trend analyses, the methods of using water and to be able to evaluate process optimisation strategies. Also in 2023, in continuation of the previous year, the portal involved companies and Public Administrations in the served area by analysing the consumption trend of more than 9,000 managed drinking water supply points.

3.03 Sustainable management of water resources

The quality of drinking water

The sources of water supply
[303-1]

The integrated water service makes the water available in nature usable for human consumption and returns it to the environment purified. Hera is present in **managing the water service** in 228 municipalities for a catchment area of over 3.6 million inhabitants. In this area, the Hera Group deals with the integrated management of all the phases necessary to make the water usable and available for civil and industrial use and consumption: from its drawing to its purification and to distribution to users, from management of the sewage systems to purification up to the return of water to the environment.

The management of all the water collection, purification and distribution systems up to the final customer constitutes the so-called **aqueduct service**. The Hera Group's sources of water supply consist of underground aquifers, surface water and, to a lesser extent, springs. In Romagna, the water distributed is purchased wholesale by Romagna Acque - Società delle Fonti.

The supply sources just mentioned refer to areas identified as high water stress areas according to the WWF Water Risk Filter database, with the exception of Triveneto, which is considered a medium-low risk area (average values between 2.6 and 4.2, WWF Water Risk Filter, Overall Risk Layer); the Acqueduct database, on the other hand, identifies the area served by Hera as moderate water stress with the exception of Bologna, Romagna, Pesaro and the province of Trieste, which are considered high-risk.. For more information on how the Group addresses and mitigates these potential risks related to land drought, see "Resilient management of waterworks and water sources."

Potabilization processes are more or less complex, depending on the quality of the water at source: they range from strong chemical-physical processes, usually carried out on surface water, to simpler filtration and disinfection treatments on water from deep wells and springs with good characteristics from the moment it is drawn.

The treatments carried out guarantee that the water distributed has chemical-physical and microbiological characteristics that are suitable for human consumption, in constant compliance with the limits laid down by current legislation.

[303-3]

WATER DRAWN AND FED INTO THE NETWORK BY SUPPLY SOURCE

thousands of cubic metres	2021		2022		2023	
Aquifer	207,907	50.2%	210,150	51.4%	199,999	49.2%
Surface water	172,947	41.8%	165,672	40.6%	173,129	42.6%
Springs and minor sources	33,186	8.0%	32,499	8.0%	33,706	8.3%
Total	414,041	100%	408,321	100%	406,834	100%

All sources shown in the table are freshwater ($\leq 1,000$ mg/l total dissolved solids).

The data shown shows a total volume of water fed into the network is slightly down compared to 2022 (-0.4%). In 2023, withdrawals related to surface water and springs showed an overall year-on-year decrease of 4.4%, while withdrawals from groundwater increased (+5%), as did withdrawals from springs and minor sources (+4%). From a geographical point of view, the composition of the supply sources can be very differentiated: for instance, the importance of groundwater in terms of percentage is low in the Marche Multiservizi area (15.6%), it prevails in the Triveneto region (90.3%), while it stands at 42.5% in the Emilia-Romagna region where the most widely used source is surface water (51.2%).

WATER DRAWN AND FED INTO THE NETWORK BY SUPPLY SOURCE IN ZONES CLASSIFIED AS HAVING HIGH WATER STRESS

thousands of cubic metres	2021		2022		2023	
Aquifer	85,173	33.0%	87,377	34.8%	108,684	37.8%
Surface water	153,238	59.4%	144,755	57.6%	152,830	53.1%
Springs and minor sources	19,541	7.6%	19,199	7.6%	26,090	9.1%
Total	257,953	100.0%	251,331	100.0%	287,605	100.0%

thousands of cubic metres	2021	2022	2023
Incidence % of total water fed into the network	62.3%	61.6%	70.6%
All sources shown in the table are freshwater ($\leq 1,000$ mg/l total dissolved solids). Samples refer to the provinces of Bologna, Forlì-Cesena, Ravenna, Rimini, Pesaro and Trieste, which are classified as high water stress according to the Acqueduct database.			

The Hera Group's distribution network extends for 35,454 kilometres and, where possible, is interconnected and connected in order to guarantee **supply continuity** even in the event of temporary interruptions on one or more pipelines.

COMPOSITION OF THE WATER NETWORK

%	2021	2022	2023
Plastic material	54.7%	54.9%	55.2%
Asbestos-cement	20.0%	19.9%	19.6%
Steel	15.8%	15.8%	15.8%
Cast iron	8.7%	8.8%	8.8%
Other materials	0.7%	0.7%	0.7%
Total	100%	100%	100%

The composition of the water network continues to point to a slightly decreasing trend of asbestos cement, whose share is 19.6% in 2023 at the Group level. The slight reduction is a consequence of the use of materials other than asbestos cement in the new networks or in those undergoing extraordinary maintenance. In the last three years, the Group has replaced approximately 81.7 kilometres of asbestos cement network. At the local area level, the asbestos cement network is mostly present in the areas of Ferrara, Padua and Ravenna.

Drinking water controls

[416-1]
[416-2]

In 2023, to ensure control over the quality of the water delivered, the Group's laboratories in Emilia-Romagna, Triveneto and Marche performed **438,208 analyses on drinking water**, including all analyses performed for the aqueduct process (tanks, networks, wells, power plants, etc.). Of these, 58% were carried out on samples taken from **distribution networks**. A substantial stability is confirmed in the ratio between the analyses performed on the distribution network and those performed on the plants, a ratio aimed at effective prevention of non-conformities.

On 16 December 2020, the **new Directive 2020/2184 on the quality of water intended for human consumption was published**. Within two years of entry into force, Member States must make the necessary changes to comply with the new directive. On 6 March 2023, Legislative Decree 18/2023 transposing EU Directive 2020/2184 into Italian law was published in the Official Gazette. This decree introduces several changes from the previous Legislative Decree No. 31/2001, including some changes to the nature and parameter values and the development of Water Safety Management Plans placed in the charge of water utilities for all water supply systems, expiring in January 2029. Regarding checking activities, the Decree provides for the analysis of a series of analytical parameters to which it assigns different sanitary-hygienic significance, distinguishing between those that are mandatory and those that are indicators. Cogents include microbiological and chemical parameters. Indicator parameters include those whose determination enables a chemical and physical characterisation of water. There are two types of checks, namely those carried out by the water service operator and those in charge of the USLs, and they are carried out at source sampling points, at drinking water treatment and storage plants, and along the abduction and distribution networks.

The checks are carried out by the water service manager and by the Local Health Authorities and are carried out at the **sampling points of the sources**, at the purification and accumulation plants, along the **abduction and distribution networks**.

Hera has consolidated a Group control plan which shows the **sampling points** and the **checking methods applied** (analytical parameters and frequencies). The control plan provides for the checking of chemical, physical and bacteriological parameters of water to safeguard full compliance with legal requirements and to ensure the supply of the highest quality product.

Water quality also means checking the effectiveness of **treatment processes**. By way of example, the research of chlorites and trihalomethanes are cited, substances resulting respectively from the use of chlorine dioxide and sodium hypochlorite as disinfectant agents. The **concentration of chlorite** and trihalomethanes in the distribution network is kept under constant control within the **legal limits**.

Since 2008, the average data recorded for the **parameters pH, hardness, dry residue at 180°C, chloride, fluoride, sodium, nitrate, nitrite and ammonium** are published on the Group's website for each municipality and updated every six months. Since 2012 this set of parameters has been expanded with four more: **calcium, magnesium, sulphate and total alkalinity**. These 13 parameters are considered representative of the quality of **the drinking water distributed** and allow a comparison with the quality of bottled water on the market. Starting from the second half of 2014, the set of parameters was further expanded with a further 6 parameters as ordered by ARERA: **conductivity, potassium, arsenic, bicarbonate, residual chlorine and manganese**. The parameters to be published are therefore 19, one more than that set by the Authority. It is also confirmed for 2023 that the average water data is comparable with that of commercial mineral water and that no exemptions have been granted to comply with the limits set out by Legislative Decrees 31/2001 and 18/2023. The communication concerns 162 municipalities in Emilia-Romagna in which Hera manages the water distribution service.

Also, for the municipalities served in the areas of Padua, Trieste and Pesaro Urbino, data on water quality are available, and constantly updated, on the AcegasApsAmga and Marche Multiservizi websites.

Since January 2009 all the drinking water production plants in Romagna have been managed by **Romagna Acque - Società delle Fonti**, the company set up for this purpose by the local administrations of Romagna. Therefore, the water distributed in the areas of Forlì-Cesena, Ravenna and Rimini is largely purchased wholesale by this company and Heras intervention on its quality is limited to **managing networks and supplementary disinfection stations** along the networks of distribution.

[417-1]

Since 2012, the **labelling of the tap water** has been present in Heras bills and was subsequently also included in those of AcegasApsAmga. In this way, through the bill, customers can consult the data on the quality of the water distributed in their municipality (data updated every six months).

Furthermore, the water quality parameters are also published on the Hera, AcegasApsAmga and Marche Multiservizi websites through the thematic report "In buone acque"(In good waters), so that each customer can easily find the data on the quality of the water distributed by the Hera Group.

Evaluations on the quality of the distributed drinking water, compared to the quality of the mineral water, are carried out on the basis of the values of analytical parameters commonly sought at the representative sampling points of the aqueduct networks: pH, hardness, dry residue at 180°C, sodium, fluorides, nitrates, chlorides. The parameters chosen are largely indicative of the saline components with which drinking water should be equipped.

The application of the new water features of the "Water Safety Plan"

European legislation (Directive 2020/2184) has brought about a substantial change in approach for the purpose of human health protection on the issue of drinking water, marking a shift from a monitoring regime based on retrospective monitoring of a set of analytical parameters to a **preventive risk assessment**. The risk-based approach involves the control of emerging contaminants, currently not subject to systematic monitoring, and the verification of the degree of vulnerability of drinking water systems with respect to the direct and indirect impacts induced by climate change.

Hera has always provided for structured prevention and control plans that guarantee its customers good water to drink, in compliance with regulatory requirements, with a constant surveillance carried out through the planning of well-targeted controls on the entire drinking water production chain from supply sources to distribution. In this regard, the analytical control plan of the integrated water service is drafted annually, substantially in accordance with the risk assessment criteria contained in Directive 2015/1787.

COVERAGE OF WATER SAFETY MANAGEMENT PLANS

Number	2021	2022	2023
End users served (including indirect users) with a water safety management plan (technically closed)	504,898	1,383,360	1,429,880
Final users served by the manager for the aqueduct service	2,238,343	2,235,110	2,172.962
Users served in areas with a water safety management plan (% of total users served by the aqueduct)	22.6%	61.9%	65.8%

Indirect users: final recipients of the service provided to condominium users and coincide with the property units underlying the supply contract for one or more services of the integrated water system. Technically closed water safety management plans: plans for which site inspections, checklists, risk analyses have been carried out, improvement actions defined and the risk matrix elaborated and for which ongoing meetings and in-depth analyses have been held with governmental Authorities, in particular Local Healthcare Units and Regional Environmental Protection Agencies a plan can be defined as formally closed when it is sent to the Ministry of Health and the National Institute of Health.

At the end of 2023, there are 115 supply zones that are served for which a water safety management plan for an aqueduct present in the municipal area has been technically closed. The users in these areas are equal to 65.8% of the total users served in areas in which the Hera Group manages the aqueduct service.

In Emilia-Romagna in 2023, Water Security Management Plans covering a supply zone of the Emilia area (Plain former SAT) and a supply zone of the Romagna area (Cesena, Rubicon Valley, Poggio Torriana) have been developed, finalised and shared with the relevant entities.

In the Triveneto region, activities related to assessments on water plants and the distribution network of the entire drinking water supply chain aimed at compiling risk matrices for the definition of Water Safety Management Plans continued. The Padua, Saccisica and Trieste Supply Zone Plans have been technically closed.

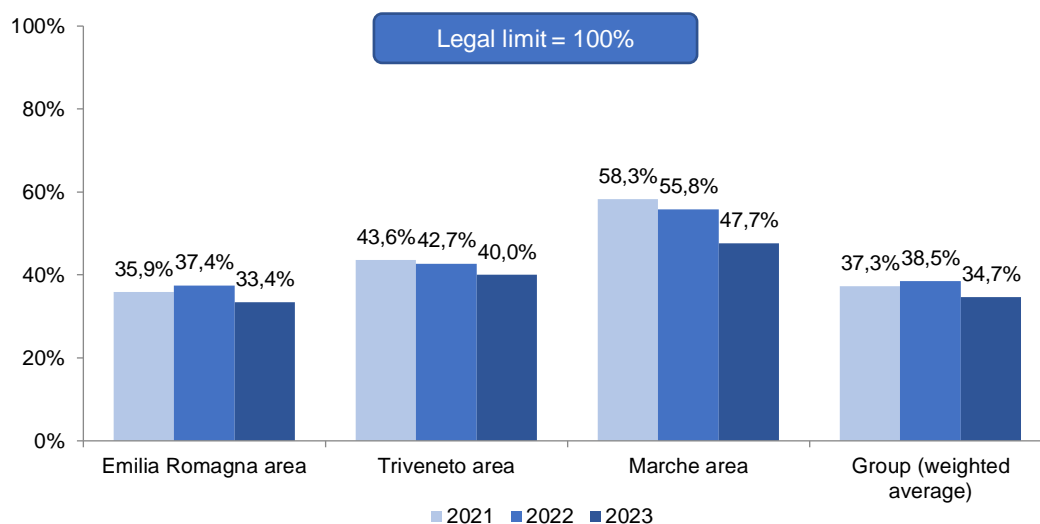
In the Marche region, during 2023, the first pilot Water Safety Management Plan for the supply area relating to the Mercatello sul Metauro aqueduct was brought into a state of "technical closure".

The quality of purification

In 2023, the Hera Group managed the sewerage and purification service in 228 municipalities, of which 47 through Marche Multiservizi and 16 through AcegasApsAmga.

In 2023, Hera Group treated a total of **378.1 million cubic metres of wastewater**, up from 2022 figures (about 337 million cubic metres). It should be noted that this figure is influenced by the amount of rainfall, which was higher in 2023 than in the previous year, as the sewerage network (amounting to 19,286 km) is mainly mixed (56% of the total).

PURIFIED WATER QUALITY COMPARED TO THE LEGAL LIMITS (OPTIMAL VALUES: <100%)



The indicator relates to plants with more than ten thousand population equivalent (the volumes treated in these plants are 93% of the total effluent treated) and is calculated on the basis of the ratio between the measured concentration of Bod5, Cod, Sst, ammoniacal nitrogen, phosphorus and total nitrogen and the relevant maximum concentrations permitted by Legislative Decree. 152/2006 or by the authorisations in force for the individual plants.

The pollutant removal efficiency with respect to legal limits, summarised by the indicator shown in the graph, is related to the purification capacity of the plant and the technologies adopted. Low values of the indicator indicate a better quality of purified water. At Group level, this indicator averaged 34.7% (38.5% in 2022) of the legal limits if Bod5, Cod, Sst, ammonia nitrogen, phosphorus, and total nitrogen are considered, and 24.0% (26.4% in 2022) if phosphorus and total nitrogen are excluded. Therefore, there was a significant improvement in the indicator for purified water quality compared to 2022.

For the area related to Emilia-Romagna, there was evidence of improved purification performance across all provinces managed by the Hera Group. Values were well below the 100% limit value, outgoing water quality continued to fully comply with regulatory limits, and values were in accordance with historical data.

As far as the Triveneto territory is concerned, the indicator showed an improvement in line with the improvement path started three years ago with the commissioning of the new biological section in Servola (Ts), the optimisation of the methanol dosing system in the same plant, and the refinement of the Oscar system at the Zaule (Ts) purification plant.

In the Marche area, the 2023 result improved over 2022 in relevant terms: indeed, a value of the indicator of 47.7% was noted, compared with 55.8% in the previous year.

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The water leaving the sewage treatment plants must comply with the current regulations, Legislative Decree No. 152/2006 and authorisation requirements. For discharges of municipal wastewater in agglomerations of more than 2,000 population equivalents, required to comply with the tables in attachment 5 of Legislative Decree 152/2006, a Protocol for the correct performance of control activities is stipulated between the operator and Arpa/Arpat, aimed at planning the number of annual controls on the discharge, useful for assessing the conformity of the discharge, while for discharges in smaller agglomerations (less than 2,000 population equivalents) limits of acceptability and appropriate treatments are set by the Regions. The controls, anomalies and non-conformities deriving from the legislation and regulations about the integrated water service are managed and planned through Group procedures, at community, national, regional level, of the individual provinces and municipalities of the area under the jurisdiction of the Hera Group.

The following table shows the main interventions to upgrade and modernise the treatment plants completed during the year, and which are in progress.

THE MAIN INTERVENTIONS FOR THE ENLARGEMENT AND IMPROVEMENT OF THE PURIFICATION PLANTS

Plant	Population Equivalent (no.)	Progress (end of 2023)	Type of intervention	Post-intervention situation
Ca' Nordio (Pd)	197,000	In progress (expected completion 2024)	Ca' Nordio treatment plant expansion.	Upgrading of the purification sewage system in the Padua area also in critical weather conditions and optimisation of the purification capacity. When completed, the purification capacity will increase from 197,000 p.e. to 230,400 p.e.
Savignano sul Rubicone (Fc)	139,000	Terminated	Savignano treatment plant - Total Nitrogen and discharges upgrading	Bringing the plant into compliance with the limit for nitrogen
Ferrara (Fe)	120,000	In progress	Revamping of the Gramicia purifier anaerobic digester	Better management of sewage sludge through the reclamation of anaerobic digesters
Massa Lombarda (Ra)	80,000	Terminated	Bringing the Massa Lombarda purifier into compliance with the nitrogen limits	Bringing the plant into compliance with the limit for nitrogen
Lido di Classe facility in the municipality of Ravenna (Ra)	30,000	Terminated	Upgrading of class Lido purification plant - 1st phase	The intervention includes a major revamping of the plant and is part of the regulatory adjustments of Decree of the Regional Government 201/2016. Work on meeting the nitrogen limit concluded
San Giovanni in Persiceto (BO)	16,000	Terminated	Recovery of ex-sugar refinery purifier 3rd round of interventions	Bringing the plant into compliance with the nitrogen limit, also in view of future expansions
Calcinelli (Pu)	9,000	In progress	Upgrading of the Calcinelli purifier	The intervention involves the adoption of the biological membrane process

Plant	Population Equivalent (no.)	Progress (end of 2023)	Type of intervention	Post-intervention situation
Tavullia (Pu)	3,000	In progress	Upgrading of the Tavullia purification plant	The intervention will include the review of the entire purification process with the construction of entire compartments. This intervention will thus make it possible to satisfy the new discharge limits, which are more restrictive than the current ones. Planning phase completed.
Vergato (Bo)	2,000	In progress	Expansion of the Tolè purification plant	Greater plant efficiency
Pioppe plant in the municipality of Marzabotto (Bo)	1,300	In progress	Upgrading of the Pioppe agglomeration	The intervention is part of the regulatory adjustments of Decree of the Regional Government 201/2016 and will allow the rehabilitation of the Pioppe agglomeration
Grizzana (Bo)	1,100	In progress	Construction of a new purification plant and collection systems of inadequately purified wastewater	Renovation of the agglomeration of Grizzana
Guiglia (Mo)	1,100	In progress	Modernisation and upgrading of the Guiglia Lama purification plant	The intervention is part of the regulatory modernisations pursuant to Deliberation of the Regional Government 201/2016 and within it we will proceed with the modernisation and upgrading of the Guiglia Lama purifier
Bruscoli (Bo)	1,100	In progress	Work on the treatment system in Bruscoli Locality and Moghidoro chief town	The intervention is part of the regulatory adjustments of DGR 201/2016 and within it, the Bruscoli and Moghidoro agglomeration will be adjusted
Pavullo nel Frignano (Mo)	650	In progress	Construction of collectors and appropriate treatment system	The intervention is part of the regulatory adjustments of Decree of the Regional Government 201/2016 and within it, the Verica agglomeration will be adjusted
Palagano (Mo)	500	In progress	Monchio Ca' Grande agglomeration adjustment	The intervention is part of the regulatory adjustments of the Deliberation of the Regional Government 201/2016 and within it, an appropriate treatment system will be implemented in the agglomerations of Monchio, Grande and Savoniero
Poggio Suvizzano (Bo)	350	In progress	Monteacuto Vallesse treatment plant construction	The intervention is part of the regulatory adjustments of Decree of the Regional Government 201/2016, and within it the Monteacuto Vallesse agglomeration will be adjusted

PERCENTAGE OF ANALYSES ON THE WATER LEAVING THE PURIFICATION PLANTS IN COMPLIANCE WITH THE LAW

%	2021	2022	2023
Plants with more than 10,000 population equivalent	99.3%	99.6%	99.7%
Plants with less than 10,000 population equivalent	99.3%	99.6%	99.8%
Weighted average	99.3%	99.6%	99.8%

Considering the 10,061 analyses carried out in 2023 in the 225 managed treatment plants, in 99.8% of the cases the results were found to comply with the legal limits. The final values in 2023 for this indicator represent a very satisfactory situation, with excellent percentages of conformity controls compared to the total monitoring. The only data relating to checks that have confirmed that the authorisation limits have been exceeded refer to entirely sporadic situations and substantially compatible with the variability of incoming loads, operating conditions and the structural state of the plants.

The quality of purification can also be represented by monitoring the trend of adaptation of urban agglomerations, understood as local areas in which populations and productive activities are concentrated to such an extent as to make the creation of an autonomous purification sewage system technically and economically permissible. As established by Directive 91/271/EEC, Legislative Decree No. 152/2006 and Water Protection Plan of the Emilia-Romagna Region to declare an urban agglomeration in compliance, the following two conditions must be met:

- the collection of wastewater at least equal to 95%;
- the capacity of the purification plants must be greater than the population equivalent of the agglomeration itself with secondary or tertiary treatment (whenever necessary).

MODERNISATION OF THE SEWAGE-PURIFICATION SYSTEM, URBAN AGGLOMERATIONS

	2021	2022	2023	2027
Agglomerations upgraded in order to bring them into compliance with regulations >2,000 p.e. (no.)	132:	133	135	135
Agglomerations upgraded in order to bring them into compliance with regulations for purification >2,000 p.e. (% population equivalent)	99.6%	99.6%	99.8%	100%
Agglomerations upgraded in order to bring them into compliance with regulations for purification <2,000 p.e. (n.)	180	194:	186:	229
Agglomerations upgraded in order to bring them into compliance with regulations for purification <2,000 p.e. (% population equivalent)	81.1%	85.0%	85.0%	100%
Total agglomerations upgraded in order to bring them into compliance with regulations for purification (no.)	312	327	321	364
Total agglomerations upgraded in order to bring them into compliance with regulations for purification (% population equivalent)	99.0%	99.1%	99.3%	100%

The numbers shown in the table refer to agglomerations within the size range of 200 to 2,000 p.e. and >2,000 p.e. in the areas where the Group provides sewerage and purification service, i.e., Emilia-Romagna, Triveneto and Marche. It should be noted that there are no agglomerations <2,000 p.e. in the areas served in the province of Padua; while agglomerations <2,000 p.e. related to the Marche region are not counted because the Marche region has not yet issued provisions in this regard.

At the Group level, at 2023, **agglomerations with more than 2,000 population equivalent (p.e.)** adjusted to Legislative Decree No. 152/2006 were 135 out of 137 and corresponded to **99.8% of the total population equivalent**.

As regards the **Triveneto** and **Emilia-Romagna Regions**, 100% of agglomerations > 2,000 p.e. served in the area are compliant with the regulations on purification.

In the Marche Region, in 2020, the perimeters, the loads generated, and the compliance of the agglomerations with at least 2000 p.e. were updated through a regional decree (Decree 173, 30 December 2020); this regulatory update led to a slight change in the number of population equivalent in the agglomerations managed by Marche Multiservizi, while the overall number of agglomerations remained unchanged. Interventions to achieve compliance of the Montecchio agglomeration >2,000 p.e. and the 1st batch of the San Costanzo agglomeration >2,000 p.e. were completed in 2022, resolving the 2014/2059 infraction. Regarding to the Gallo-Cappone agglomeration and the second lot of the San Costanzo agglomeration, works are in the authorisation and works-awarding phase to make all the agglomerations compliant with the dictates of EU and national regulations by 2025, as established by the Marche Region Territorial Ambit Authority planning approved in December 2020. By 2025, therefore, all urban agglomerations with a population greater than 2,000 population equivalent in the areas served by the Hera Group will be in compliance with the legislation.

The **Emilia-Romagna Region**, through Resolutions 2153/2021, 2388/2022 and 2201/2023 on the upgrading of municipal wastewater discharges, has provided for the implementation of some additional interventions in agglomerations with **more than 10,000 p.e.** These are structural modernisations related, for example, to the upgrading of network spillways or more stringent treatment for nitrogen removal, which, while not affecting agglomeration compliance under Legislative Decree 152/2006 may, however, locally undermine the achievement of quality objectives for water bodies. In 2023, all interventions related to more stringent treatment for nitrogen removal in the managed treatment plants (Massa Lombarda, Savignano sul Rubicone, and San Giovanni in Persiceto) were completed. In particular, it should be noted that with the latest resolution 2201/2023, the total number of agglomerations and priorities and timing of interventions were redefined. There were 101 agglomerations > 2,000 p.e. managed by the Group in Emilia-Romagna, to which are added 3 more in Tuscany, for a total of 104. Indeed, during 2023, agglomerations pertaining to the municipality of Montese entered the perimeter managed by Hera Spa.

A total of 12 interventions have already been carried out (Riccione treatment plant in 2017, Cattolica treatment plant in 2018, Castel San Pietro and Lugo treatment plants in 2019, Budrio, Medicina, and Alfonsine treatment plants in 2020, Lido di Classe and Misano treatment plants in 2021, and San Giovanni in Persiceto, Savignano sul Rubicone, and Massa Lombarda treatment plants in 2023) for a total of 12 nitrogen upgrades in 11 agglomerations. In addition to these, one intervention is planned in 2025, 4 in 2026, 3 in 2027, and 16 in 2030.

As regards **agglomerations of less than 2,000 p.e.** (between 200 and 2,000 for the Emilia-Romagna Region), on which there remain critical elements for subjecting final discharges to the appropriate treatments, the Emilia-Romagna Region by resolution 2153/2021 and subsequent resolution 2338/2022 identified and defined new timelines for compliance. As of 2023, 150 agglomerations out of 192 have been upgraded, totalling 112,000 population equivalent. The modernisation by 2027 of 42 agglomerations in Emilia-Romagna totalling approximately 22,000 population equivalent is expected, effectively completing the modernisation of all agglomerations of less than 2,000 p.e. It should be noted that the 4 interventions completed in 2023 (2 ATO5 Bologna, 1 ATO6 Ferrara, and 1 ATO8 Forlì) resulted in the elimination of 2 agglomerations as a result of collection in another agglomeration (ABO014 - Boschi di Baricella collected to ABO0064 - Malalbergo and AFE0054 - Focomorto collected to AFE0050 Ferrara). In the Triveneto area served, there are 37 agglomerations with a size of less than 2,000 p.e., of which 35 have already been upgraded in order to be brought into compliance with the legislation in 2019, one upgraded in 2021 (Trieste Duino Aurisina with a size of 1,689 p.e.) and one that will be upgraded by 2026.

In summary, considering Emilia-Romagna and the Triveneto there are 229 agglomerations of less than 2,000 p.e. and of which 186 were upgraded in order to be brought into compliance with the legislation at the end of 2023 equal to 81.2% of the population equivalent. By 2026, agglomerations of less than 2,000 p.e. will all be brought into line with the regulations. As regards the agglomerations of less than 2,000 p.e. in the Marche region, the Region has not yet issued provisions on the matter.

At Group level, the total of agglomerations >2,000 and <2,000 which have brought their plants into compliance with the legislation governing purification stand at 321 out of 366 and corresponds to 99.3% of the total population equivalent.

Phytodepuration

Phytodepuration is a natural process for treating polluted water based on taking advantage of the soil-vegetation system as a natural filter for water purification and is made up of biological ponds and macrophyte vegetation. The purification process, which already occurs spontaneously in nature (e.g. lagoons, ponds and vegetated streams), is entirely ecological and does not involve the use of chemicals. The incoming wastewater flows into a bed of gravel and aquatic plants: here microorganisms come into play that eliminate the polluting substances that are present. The action of plants is fundamental because microorganisms necessary for the entire system are developed in their roots; they absorb the oxygen produced by the plant species and trigger the processes necessary to purify wastewater.

There are various types of phytodepuration using either different plant essences, e.g., algae or floating plants such as water lilies, or rooted plants such as cattails, or swamp reed, and depending on the hydraulic flow they are distinguished into FWS (Free Water Surface) or SFS (Sub-Surface Flow System) systems.

This type of treatment also contributes to the recovery of marginal areas, creating aesthetically pleasing natural environments and landscapes, often chosen as a refuge for various species of birds, amphibians and reptiles.

At the state of the art, phytodepuration is a mature treatment, but in Italy it is not widely used owing to the surface areas required (2-4 square meters/p.e.), although it does find a place as a treatment in small agglomerations (<200 p.e.).

Hera Spa manages seventeen phytodepuration plants of small to medium capacity located in the provinces of Bologna, Florence, Forlì-Cesena, Rimini and Ravenna. These mainly carry out secondary biological treatments, and are placed downstream of a primary sedimentation, or tertiary treatments used as final refinement of the wastewater before final discharge. Marche Multiservizi operates five phytodepurators with a capacity of between 80 and 180 population equivalents.

3.04 Protection of air, soil, and biodiversity

Atmospheric emissions from waste-to-energy plants

Every waste-to-energy plant of the Hera Group is equipped with **fume purification** and **process and emission control systems**, designed, and built with the aim of obtaining:

- high flue gas purification performance in all process conditions;
- high managerial versatility;
- high reliability of emission control systems.

In order to pursue these objectives, the **plant engineering standards** adopted in the Group's plants are characterised by:

- **double reaction and filtration system** for reducing concentrations of dust, hydrochloric acid, hydrofluoric acid, sulphur dioxide, heavy metals, dioxins and furans, and polycyclic aromatic hydrocarbons (with the exception of the Pozzilli plant, which is equipped with a single reaction and filtration system);
- **double reaction system** (non-catalytic and catalytic) for the reduction of nitrogen oxide concentrations (with the exception of the Pozzilli plant, which is equipped with a single non-catalytic reaction system);
- **dual fume monitoring system** for process control (with the sole exception of the Padua, Trieste and Pozzilli plants equipped with a single system) to measure the concentrations of the main pollutants leaving the furnace and downstream of the first reaction and filtration stage. Based on these concentrations, the amount of reagents required to achieve purification performance that ensures not only compliance with regulatory emission limits, but values that are on average 80-90% lower than them, is adjusted;
- **double continuous monitoring system** of chimney emissions: one in reserve to the other in order to guarantee the continuity of analysis of the concentrations in the emissions into the atmosphere.

The possibility of having dual purification and monitoring systems in series (or in parallel, as regards chimney monitoring) makes it possible to effectively pursue the objectives described above.

Furthermore, in terms of **emissions and environmental impact control**, the following are performed annually:

- **spot checks on stacks** for parameters that cannot be detected continuously, with frequencies defined in the Integrated Environmental Authorisation and using certified laboratories;
- **controls on the impact of pollutants on the ground**: through external monitoring programs prescribed in the individual authorisations, analyses are carried out on the deposits on the ground (on soil, plants, etc.) in collaboration with universities and research bodies in order to ascertain that the emissions, although within the restrictive limits of the law, they do not have any significant impact on the surrounding environment.

Plant renewal has led to significant improvements in pollutant emission abatement rates: since the beginning of 2008, the two new lines of the Ferrara waste-to-energy plant have been in full operation, since the beginning of 2009 the new plant in Forlì has been in full operation, in April 2010 the new Line 4 of the Modena waste-to-energy plant came into operation, and since October 2010 the new Line 4 of the Rimini waste-to-energy plant has been in full operation, and in 2022 the revamping of Line 2 of the Trieste waste-to-energy plant was completed. During 2023, the revamping of Furnace F3 of the Ravenna industrial waste incinerator was completed. At the end of 2023, the construction site was opened for Line 4 in the Padua waste-to-energy plant, which will replace the existing Lines 1 and 2 and will be equipped with a dual flue gas monitoring system.

This paragraph reports data on the nine waste-to-energy plants managed (Bologna, Ferrara, Forlì, Modena, Padua, Pozzilli, Ravenna, Rimini, Trieste) as well as data on the biomass plant in Faenza (managed by the company Enomondo, 50% owned by Herambiente and not consolidated on a line-by-line basis), equipped with a dual reaction system (non-catalytic and catalytic) for the reduction of nitrogen oxide concentrations.

The, Legislative Decree No. 152/2006 requires **continuous monitoring of stack emissions** for seven parameters: dust, hydrochloric acid, nitrogen oxides, sulphur oxides, carbon monoxide, hydrofluoric acid, and total organic carbon. Mercury is also continuously monitored in the Ferrara, Forlì, Modena, and Rimini plants.

[305-7] ATMOSPHERIC EMISSIONS FROM WASTE-TO-ENERGY PLANTS, PARAMETERS MONITORED CONTINUOUSLY

tonnes	2021	2022	2023
Dust	5.3	5.9	5.7
Hydrochloric acid	20.7	20.7	22.6
Nitrogen oxides	663.8	667.3	752.0
Sulphur oxides	19.1	19.5	22.1
Carbon monoxide	75.1	82.2	87.3
Hydrofluoric acid	0.6	0.7	0.8
Total organic carbon	7.8	9.5	10.4
Waste treated in plants (thousands of tonnes)	1,304	1,263	1,359
Gross electricity produced (MWh)	852,379	880,884	941,723
Thermal energy produced (MWh)	244,182	226,872	184,077

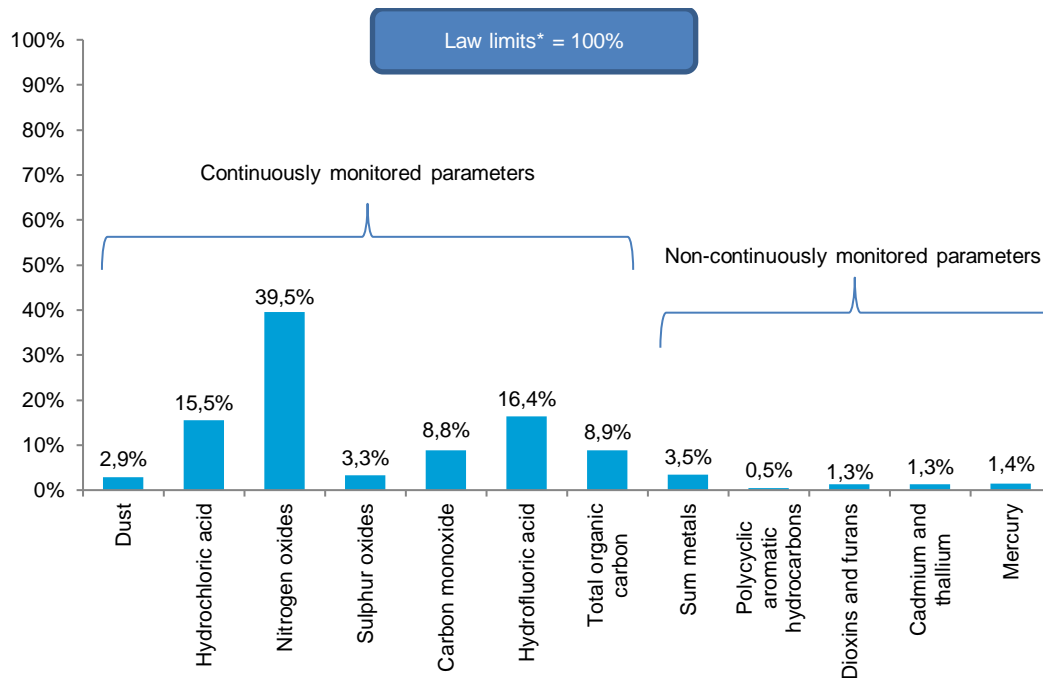
The data are calculated using the continuous measurement systems approved by the control bodies at the time of authorisation for plant operation. The systems of the individual plants use collection and calculation procedures for the partially non-uniform emitted substances.

The analysis of mass flows over the last two years shows a worsening in reference to almost all emissions from waste-to-energy plants (with the exception of dust and hydrofluoric acid, which remains substantially stable), consistent with the greater volumes of waste treated (+8%) and the restart of the Ravenna special waste treatment plant. However, these are limited deviations which depend on the composition of the waste treated.

As regards the **pollutants that are not continuously monitored** (sum metals, polycyclic aromatic hydrocarbons, dioxins and furans) from the results of the analysis conducted in the year, total emissions can be estimated: 147 kg of metals were emitted in 2023 (183 kg in 2022), 0.5 kg of polycyclic aromatic hydrocarbons (same as in 2022) and 10.8 mg of dioxins (10.9 in 2022).

The results of the measurements carried out on the emissions of the Hera Group's waste-to-energy plants confirm also in 2023 that, being equipped with the best technologies available and operated at their best, they record emissions **that are much lower than the limit values permitted by law**.

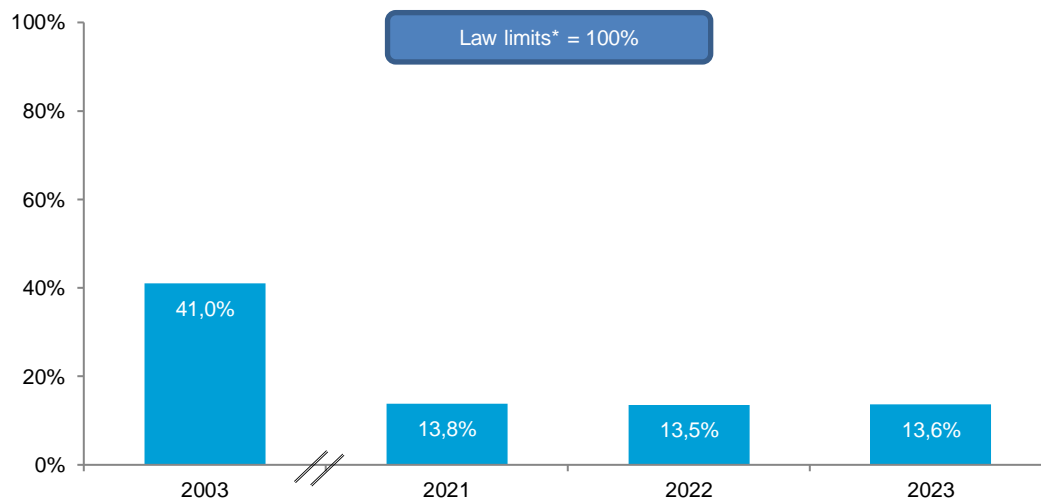
ATMOSPHERIC EMISSIONS FROM WASTE-TO-ENERGY PLANTS COMPARED WITH LEGAL LIMITS (OPTIMAL VALUES: < 100%) (2023)



Including the Enomondo waste-to-energy plant. *Law limits refer to Legislative Decree 152/2006.

For all pollutants that are **monitored continuously**, average stack concentrations were **below limits by at least 60.5%** (nitrogen oxides data) **up to 97.1%** (dust). Even for the **non-continuously monitored parameters**, all values are well below the legal limits **by at least 99.5%** (polycyclic aromatic hydrocarbons), **up to 96.5%** (sum metals).

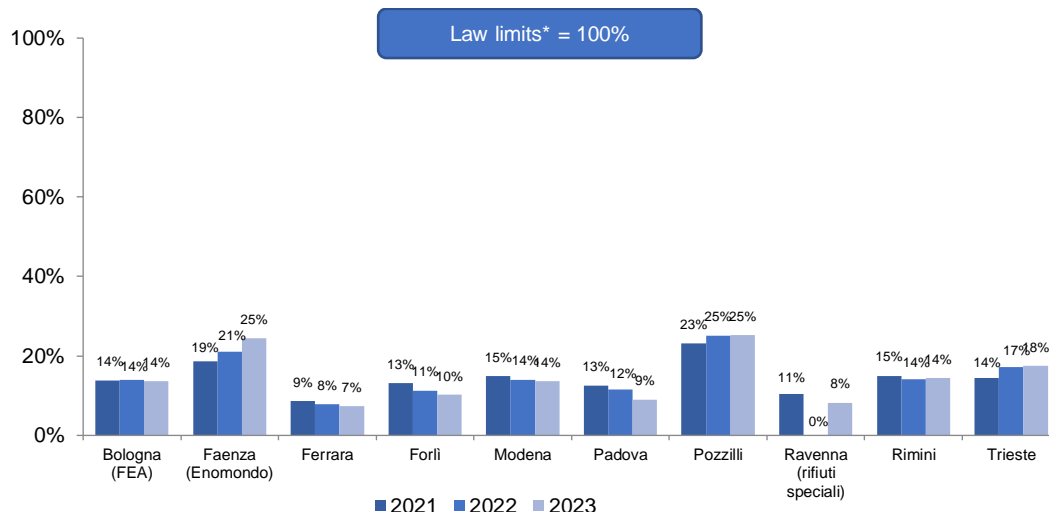
ATMOSPHERIC EMISSIONS FROM WASTE-TO-ENERGY PLANTS WITH RESPECT TO THE LEGAL LIMITS - CONTINUOUSLY MONITORED PARAMETERS (OPTIMUM VALUES: < 100%), WEIGHTED AVERAGE ON THE VOLUMES OF WASTE TREATED BY THE PLANTS MANAGED



Including the Enomondo waste-to-energy plant. *Law limits refer to Legislative Decree 152/2006.

Considering all the pollutants that were monitored continuously, in 2023 the concentrations of emissions into the atmosphere from the waste-to-energy plants were on average **86.4% lower than the permitted limit** (13.6% of the legal limits), when in 2003 this percentage was 59%.

EMISSIONS INTO THE ATMOSPHERE FROM WASTE-TO-ENERGY PLANTS COMPARED TO LEGAL LIMITS - CONTINUOUSLY MONITORED PARAMETERS (OPTIMUM VALUES: < 100%), DETAILS BY PLANT



*Law limits refer to Legislative Decree No. 152/2006.

The same indicator was calculated for the six plants with more stringent authorisation limits than those set by Italian law for the year 2023 (for the seven parameters monitored continuously, the limits set in the authorisations correspond on average to 70% of the limits in Legislative Decree 152/2006); the data is shown in the table below.

EMISSIONS INTO THE ATMOSPHERE FROM WASTE-TO-ENERGY PLANTS COMPARED TO THE AUTHORISATION LIMITS - CONTINUOUSLY MONITORED PARAMETERS (OPTIMUM VALUES: < 100%)

%	2021	2022	2023
Bologna waste-to-energy plant	21.9%	21.1%	23.1%
Ferrara waste-to-energy plant	8.9%	11.4%	10.5%
Forlì waste-to-energy plant	49.5%	43.6%	39.0%
Modena waste-to-energy plant	17.5%	17.7%	17.5%
Padua waste-to-energy plant	19.3%	17.2%	13.7%
Ravenna waste-to-energy plant (special waste)	10.8%	-	14.3%
Rimini waste-to-energy plant	-	-	15.0%
Faenza waste-to-energy plant (Enomondo)	21.4%	24.2%	26.4%
Average compared to authorisation limits	21.2%	19.3%	19.9%

The integrated environmental authorisations relating to the Ferrara, Forlì, Modena, Padua and Faenza (Enomondo) plants also provide for the continuous monitoring of mercury.

In this case as well, the results were **excellent**: the concentrations were on average **80.1% lower than the most restrictive limits**. Note that the limits set by the individual authorisations differ from plant to plant, which does not allow for comparability. It should also be noted that new Authorisations were approved in 2023 for the Bologna (mercury limits lowered by 60%), Ravenna special waste (all limits lowered, on average by 45%) and Rimini (limits lowered, on average by 25% for all parameters except carbon monoxide, hydrofluoric acid and total organic carbon) plants.

Transparency on emissions from waste-to-energy plants

Since 2008, the average values of the previous day and the “semi-hourly averages” of emissions from the Group’s waste-to-energy plants **can be consulted** on the Group’s website (the online data is updated every half hour with the average values recorded over the last 30 minutes). The data is transmitted automatically by the detection systems, operating 24 hours a day on all the plants, located in the provinces of Bologna, Ferrara, Forlì-Cesena, Modena, Ravenna, Rimini, and Isernia.

Furthermore, as a further **guarantee of transparency**, Hera ensures:

- the daily or weekly transmission to the control body (ARPA) of reports containing the semi-hourly and daily averages;
- the annual transmission to the competent Authority of the report on the operation of the plant, by 30 April of each year;
- in the case of EMAS registered plants, the publication of the results of the checks in the "Environmental Declaration";
- the publication of the annual data in the Group's sustainability report, compared with the legal limits and the limits established by the authorisations.

Since 2015, data from the Padua and Trieste plants have also been available on the Group's website, according to the methods provided (semi-hourly average updated in real time).

Finally, since 2018, the average annual data of the periodic self-monitoring relating to metals and organic micro-pollutants have also been available for all plants.

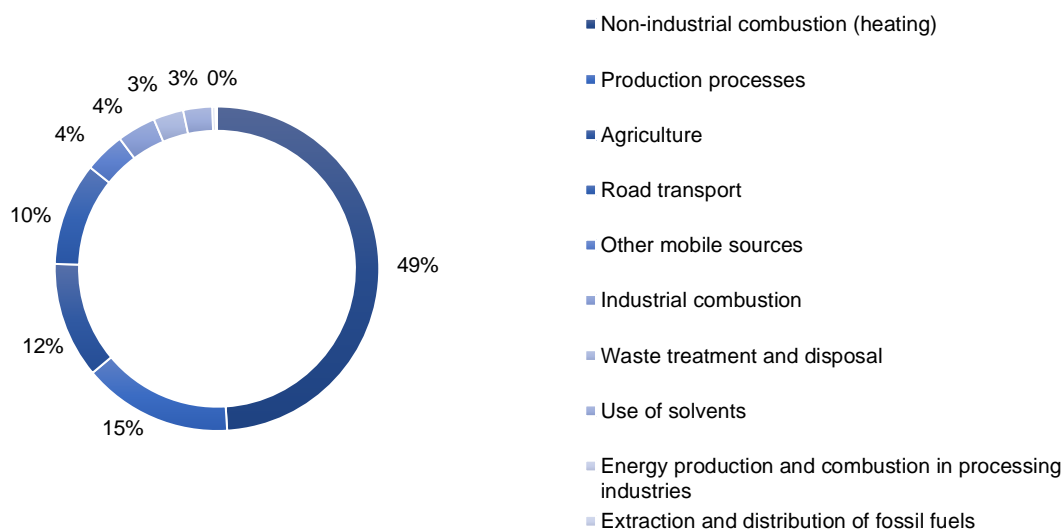
Studies on the environmental impacts of waste-to-energy plants

The activity linked to waste-to-energy has, for many years, been the subject of numerous **studies and monitoring** as well as important **technological improvements** also linked to the definition of **increasingly stringent** plant engineering and management criteria by Community and national legislation. The technology has achieved very high performance in terms of **containing emissions and impacts on the environment**.

If we consider the **total annual emissions of dioxins** into the atmosphere as the sum of all the waste incineration plants present on the national area from 1990 to 2021, it can be seen that following the regulatory and technological evolution there has been a **99% reduction of emissions** (Source: ISPRA - Historical series of national emissions). By contextualising the analysis to the various production sectors, it can be seen that since 2001 waste incineration has been the least representative source in terms of dioxin and furan emissions, contrary to the iron and steel industry and the entire residential sector (such as home heating).

With regard to **PM10** emissions from waste incineration plants throughout the national area these stand at values of approximately **three orders of magnitude lower** than those from non-industrial combustion (heating). The main sources of PM10 at a national level are in fact represented by the residential sector, contact combustion processes (for example foundries), agriculture and vehicular traffic, as shown in the graph below.

PM10 EMISSIONS BY SECTOR



Source: ISPRA, Italian emission inventory 1990 - 2021, Report 2023, PM10 emission trend from 1990 to 2021

Air quality surveillance and monitoring projects

The authorisations of the **waste-to-energy plants of Ferrara, Modena, Forlì, Rimini, Bologna, Padua, and Isernia** require the Hera Group to carry out studies on the potential impact that these plants have on the surrounding environment. A description of the studies underway in 2023 is provided below and

reference is made to the previous sustainability reports for those already completed relating to the Bologna, Ferrara, Modena, Padua, Pozzilli and Rimini plants.

In the industrial area where the **Forlì** plant is located, Hera has installed an air quality monitoring station, which has been active since 2009 and managed by Arpae Forlì. The station provides continuous data validated by Arpae and published on the institution's website. In addition to this, periodic campaigns are carried out at the control unit for the **search for micro-pollutants and metals in the particulate matter**. The findings show no substantial difference between an urban site and the area surrounding the plant, indicating the presence of a homogeneous background significantly influenced by urban realities rather than the presence of the plant. With the reconsideration of the Integrated Environmental Permit, the monitoring protocol has been updated and includes, in addition to the presence of the control unit, the **study of atmospheric depositions** at two points (one of maximum fallout from the waste-to-energy plant emissions and one of control in the area of the city's biological treatment plant). The results of the 2023 analysis will be available in 2024.

For over a decade, environmental monitoring has been conducted on the **Modena** plant relating to **various matrices**: air quality, soils, biomonitoring, and total deposition. Since 2013, the monitoring network has been managed by the territorial Arpae which has therefore been entrusted with all the investigations envisaged by the requirements of The Hague for the waste-to-energy plant.

Environmental and health surveillance protocols are also conducted on the **Ferrara** waste-to-energy plant, defined by Arpae, Ausl and the Province and coordinated by CNR and the university. Studies have confirmed on several occasions that the contribution of the plant, in terms of air quality and accumulation in the soil, cannot be differentiated from the environmental background. A collaboration with CNR-IIA and La Sapienza University is still active, to ensure the continuity of the **air quality** study, which is carried out by scheduling four monitoring campaigns each year (winter, spring, summer and autumn). All available data confirms the absence of impacts attributable to the operation of the plant. In addition, the **three-year soil monitoring**, the last of which will be in 2022, is also continuing: as in the previous ones, no correlations between the presence of the plant and the characteristics of the monitored soils were found.

Consistent with the provisions of the "Agreement for monitoring the fallout of the San Lazzaro waste-to-energy plant" signed by Arpav, the Province of Padua, the Municipality of Padua and the Municipality of Noventa Padovana, and financed by Hestambiente, **air quality monitoring** is carried out in the area of the **Padua** waste-to-energy plant through two fixed stations (APS). The results are then compared with the values measured by several stations belonging to Arpav's regional air quality monitoring network. Furthermore, in 2022, the Veneto Region published Decree no. 11 03/03/2022 of the Director of the Land Protection and Safety Area, by which it issues the Single Regional Authorisation Measure (Paur), which includes, among other acts, the Integrated Environmental Authorisation and a series of environmental conditions to be complied with, which are currently being implemented. In particular, before the construction work, work in-progress and after the construction work **environmental monitoring** plans are envisaged for Line 4, as well as the execution of an **epidemiological survey** to be carried out in agreement with ULSS 6 Euganea with the support of the University of Padua and taking into account the indications of the Municipality of Padua. During 2023, the planned ante-operam monitoring campaigns were carried out at four locations represented by the two APS stations and, by mobile means, at a maximum fallout point and a blank point. The results obtained will serve as a comparison scenario for subsequent monitoring related to the course-operam and post-operam phases. With regard to the epidemiological survey, a specific agreement was signed in 2023, which envisages the implementation of a study in two phases: a retrospective one (which will cover two years prior to the start-up of the new Line 4) and a prospective one which will analyse, over the long term, the health outcomes in the period following the activation of the new Line 4.

The area surrounding the waste-to-energy plant site in **Granarolo dell'Emilia** (Bo) is subject to **air quality monitoring** by means of two fixed monitoring stations that measure particulate matter (PM10 and PM2.5), polycyclic aromatic hydrocarbons (PAH) and metals. In 2023, the plant's Integrated Environmental Permit underwent a review procedure to **verify compliance with the European BAT Conclusions** establishing Best Available Techniques conclusions regarding waste-to-energy plants. The analysis conducted by the competent Authority revealed substantial alignment of the plant with the new technical standards. In the new permit act, issued in October 2023, some additional monitoring is required for the fixed monitoring station, which is considered significant because it is located at the point of maximum fallout. Specifically, one nitrogen oxides analyser, one mercury analyser, and one analyser for hourly measurement of PM1, PM2.5, and PM10 are required to be installed. The installation will be shared with Arpae.

District heating: a response to protect air quality

Hera manages **district heating systems** in the areas of Bologna, Cesena, Ferrara, Forlì, Imola and Modena.

District heating is a service which consists in the sale to the customer of heat for heating and household hot water. It is an **alternative system to the traditional autonomous or condominium boilers**, which allows the generation of heat to be **concentrated in more efficient and better controlled** production centres compared to household boilers. From these plants, the heat, in the form of hot water, is brought to the customers homes through a distribution network made with insulated pipes. The heat then feeds the heating system of the houses through heat exchangers, without emissions of pollutants.

The advantage for the customer is having **greater safety** and **lower** operating and maintenance **costs**, while maintaining the possibility of independently regulating the temperature in the home. From an environmental perspective, district heating is a **response to the problems of air pollution** in the city in as much as it makes it possible to replace the more numerous household boilers distributed throughout the city (sometimes even oil-fired ones) and to use high-efficiency centralised forms of production for heat generation,

renewable energy or recovered energy from other processes. New initiatives took shape in 2023, the main ones being:

- Ferrara: replacement of the pumps serving the geothermal well **with better performing ones**;
- Ferrara: the campaign to **connect to the main grid** along the via Bologna axis continues with the first connection of the shopping centre;
- Modena: **Complete replacement** of the second cogeneration engine of the Giardino power plant, and extraordinary maintenance performed on the third cogeneration engine;
- Casalecchio di Reno: **revamping of both** Ecocity power plant **cogeneration engines** that power the system;
- Implementation of **214 substations from a smart point of view**; confirming the results obtained thanks to the experimentation on the lowering of climate curves throughout the Bologna area, for the Barca and Pilastro cogeneration systems it was possible to free thermal power for 8.1 MW that can now be committed to other potential customers, as well as important financial savings.

A number of techno-financial efficiency and technological innovation initiatives have been identified in the 2024-2027 plan arc that will **reduce atmospheric emissions** in terms of greenhouse gases and pollutants, while achieving growth in shared value and maximising the economic viability of existing assets. Among the main initiatives are:

- **Further development of systems** that already meet the “efficient district heating system” condition and **evolution** of those that currently still do not;
- **Doubling the capacity of the Ferrara geothermal plant** with simultaneous extension of the city’s district heating network. This project will benefit from NRRP funds and must be implemented by 2026;
- **Interconnection of the city systems of Bologna** CAAB-Pilastro, Sede Berti, Fiera and Navile. This project will benefit from national funds and must be implemented by 2026.
- **Interconnection of the city systems of Forlì** waste-to-energy plant and Centre-Campus; This project will benefit from NRRP funds and must be implemented by 2026.
- **Smart district heating**: the multi-year technology evolution project aimed at achieving operational efficiencies and intercepting customers’ digitalisation needs will continue. For example, it will be possible to free up committed power quotas to connect new users, and to set up more advanced reporting. In this context, **smart grids** will be developed to manage and monitor the distribution of heat from all production sources and to meet the needs of connected users more efficiently and rationally. **Smart sub-stations**, remote reading systems capable of monitoring and regulating temperature, instantaneous power and pressure, will also be developed to improve the commercial offer and optimise consumption profiles.
- Various **commercial development** initiatives in Bologna (new connections University district and in the Lazzaretto area), Ferrara (extension of the via Bologna axis network and connection of several utilities including the shopping centre), Forlì (connection and start of supply to the Bonfiglioli plant) and Cesena (interconnection of the Bufalini and Ippodromo systems in order to increase the resilience of the entire system, also in light of the flooding in Romagna in May 2023).

ENERGY SOLD AND VOLUME SERVED WITH DISTRICT HEATING

	2021	2022	2023
Thermal energy sold (MWh)	510,040	442,137	406,634
Volume served (thousands of cubic meters)	21,938	23,238	23,312
Equivalent residential units served (no.)	91,410	96,825	97,135

The equivalent residential units were calculated considering an apartment with an average volume of 240 m³.

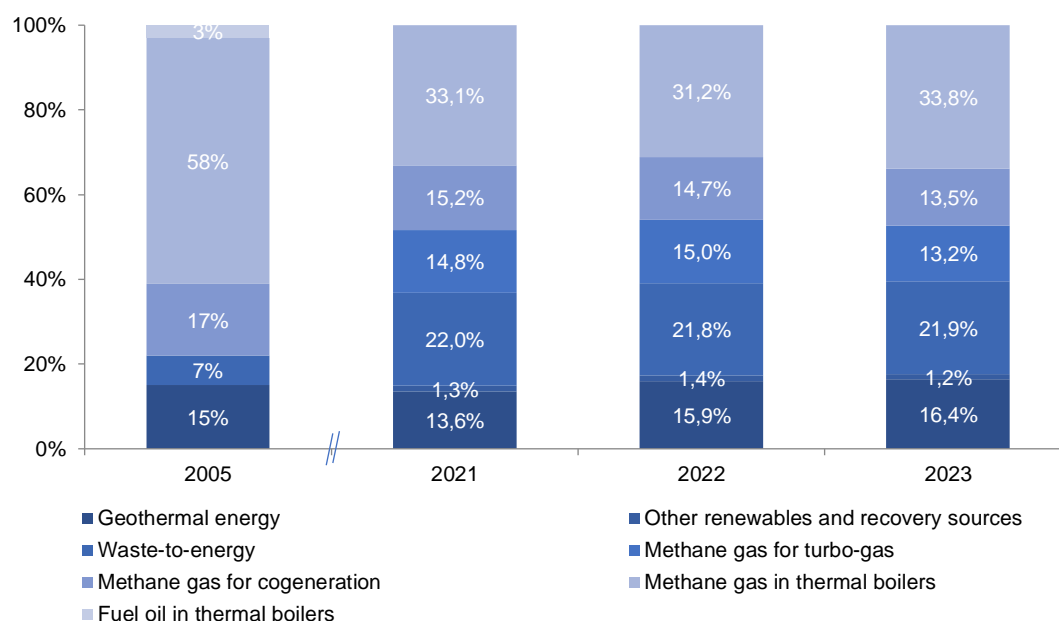
Thermal energy sold in 2023 was **406,634 MWh**, down 8% from 2022 due to less heat during the year, building efficiency upgrades in recent years, and extraordinary breakdowns and maintenance. The volume and equivalent dwelling units served, on the other hand, remained stable.

Systems that in 2023 met the definition of **efficient district heating** (systems that employed, alternatively, at least: 50% renewable energy, 50% waste heat, 75% cogenerated heat, or 50% of a combination of the above) were Bologna Frullo-CAAB-Pilastro, Castelmaggiore, Ferrara, and Forlì waste-to-energy plants. Compared to 2022, the Imola Casalegno and Casalecchio San Biagio systems did not appear to be more efficient due to less reliance on cogenerators. Overall, these systems sold 167,814 MWh (**41.3% of the total**) and served 36,817 equivalent units (**37.9% of the total**).

The **areas most covered by the district heating service** are the areas of Bologna (34.6% of the volumes served), Ferrara (29.6%) and Imola-Faenza (19.2%).

By 2027, the goal is to increase the volumes served by 2% compared to 2022.

SOURCES USED FOR DISTRICT HEATING



In terms of the **sources used for district heating**, the percentage of thermal energy produced from **renewable, recovery or high-efficiency sources** is declining slightly: **66.2% in 2023** compared with 68.8% in 2022 and 66.9% in 2021.

By 2027, the goal is to produce 79% of energy from renewable sources, cogeneration or recovery.

[302-5]

ENVIRONMENTAL BENEFITS OF DISTRICT HEATING

	2021	2022	2023
Primary energy saved (toe)	31,663	29,888	25,608
Greenhouse gases avoided (t)	46,509	41,352	36,284
Nitrogen oxides avoided (t)	102	108	99

Calculated as the difference between the energy production (thermal and electric) of Hera's district heating systems and the equivalent energy requirements of a traditional system (electric fleet with national average emissions and domestic boiler fleet consisting of 90% natural gas boilers, 6% LPG boilers, and 4% oil boilers with efficiencies of 90%, 85%, and 85%, respectively).

Thanks to district heating systems, compared to a traditional system in 2023 **over 25,000 tonnes of oil equivalent, 36,000 tonnes of greenhouse gases, and 99 tonnes of nitrogen oxides were saved.**

Furthermore, in 2023 the Ferrara district heating plant again obtained **ISO 14067:2018 certification on carbon footprint** (the first was in 2020), which expresses in CO₂ equivalent the total greenhouse gas emissions associated directly or indirectly with the service. According to this certification, based on 2022 data, the Ferrara system had a carbon footprint of **0.099 kg CO₂ per thermal kWh sold** to the end user. Making an estimate using the same methodology, this value is 64% lower than the calculation referring to a conventional domestic boiler. The figure is of absolute importance and has led to the estimation of **an annual saving of over 26 thousand tons of CO₂ equivalent** by the district heating of Ferrara.

Cogeneration serving district heating

Cogeneration consists in the **combined production of electricity and heat** in a single integrated system, using a single fossil or renewable source. It is made in particular thermoelectric plants which recover heat from the fumes produced by an engine, obtaining **significant energy savings** (about 40%) compared to the separate production of electricity and heat.

Hera Group's cogeneration plants also contribute to the **improvement of air quality** in the urban centres where they are located, thanks to their connection with **district heating networks**: in fact, they replace numerous boilers with **modern and efficient systems** for heating and supplying hot water to buildings. With district heating, control is continuous, both in the combustion processes and in relation to emissions into the atmosphere.

Hera Spa manages 12 cogeneration plants, four of which are trigeneration, for a total nominal electrical power of around 114 MW which in 2023 produced **approximately 142 thousand MWh of thermal energy** for district heating in all the areas served, half of which (69,858 MWh) from the Imola cogeneration plant.

Emissions into the atmosphere from district heating

In 2023, the district heating systems produced a total of 793,6 MWh of electricity and thermal energy, an increase of 12% compared to 2022. In relation to this production, a total of 100.1 tons of nitrogen oxides were generated, an improvement over the previous year as a result of lower production. These emissions, in relation to the energy produced, result in 2023 in approximately **126.1 grams per megawatt hour**, a ratio that is decreasing by 15%.

[305-7]

EMISSIONS INTO THE ATMOSPHERE FROM DISTRICT HEATING

	2021	2022	2023
Nitrogen oxides (t)	145.6	133.3	100.1
Electricity and thermal energy produced (GWh)	952.2	899.1	793.6
Specific emissions (g NOx / MWh)	152.9	148.3	126.1

The nitrogen oxide data were calculated with the following sources: data from manufacturers for the cogenerators, Eu-Ets calculation method for the Imola gas turbine, Emep/Eea inventory for the boilers.

Emissions from the Imola cogeneration plant

The **Imola** cogeneration plant, serving the **city's district heating**, is characterised not only by high-yield performance from the point of view of energy production but also from an environmental point of view as it combines significant energy savings with low levels of emissions into the atmosphere.

In 2023, the power plant generated **194,110 MWh of electricity** (188,335 MWh that fed into the grid) and **97,178 MWh of thermal energy** from an installed capacity of 82 MW electric and 65 MW thermal. Compared with the previous year, electricity production was down 15.5% due to a long period of summer plant downtime, while thermal production was 13% higher, in line with historical production.

170,000 cubic metres of industrial water was consumed, including 96,000 cubic metres for replenishment to the cooling tower, in compliance with the 210,000 cubic metres authorised by the AIA.

[305-7]

EMISSIONS INTO THE ATMOSPHERE FROM THE IMOLA COGENERATION PLANT

mg/Nmc	National limit value	Authorised limit value	2021	2022	2023
Nitrogen oxides (NO _x)	60	14.5	8.6	8.4	8.7
Carbon monoxide (CO)	50	9.5	0.6	0.7	0.9
Ammonia slip (NH ₃)	not foreseen	2.0	0.0	0.1	0.2
Total suspended particulates (TSP)	not foreseen	4.0	0.01	0.01	0.01
PM10	not foreseen	1.0	0.01	0.01	0.02

The authorised emissions limits of the Imola cogeneration plant refer to the Integrated Environmental Authorisation and subsequent amendments and additions (with more stringent limits than set out in the Legislative Decree 152/06). The CO, NO_x, NH₃ and PTS values correspond to the annual average values recorded continuously by the continuous monitoring system. The PM10 values are derived from the average of the values detected during the self-monitoring checks (quarterly). All authorised limit values correspond to the daily average.

In 2023 as well, the **absolute specific emissions** of the Imola cogeneration plant will remain at **extremely low levels**. The environmental authorisation of the Imola plant foresees limits for the most common pollutants in the flue gas (NO_x and CO) that are 75-80% lower than the national standard. Since 2019, the AIA has changed the limits on emissions channelled into the atmosphere by introducing compliance with the daily limit instead of the hourly limit for continuously monitored pollutants.

The corporate vehicle fleet and sustainable mobility

Company vehicles

The strategy of rationalising and optimising the use of vehicles was also confirmed in 2023, including, when possible, through the purchase of technologically advanced vehicles **with lower environmental impact** to replace obsolete vehicles.

NUMBER OF VEHICLES

Number	2021	2022	2023
Euro 6 electric	16	22	23
Euro 6 non-electric	1,710	1,974	2,053
Euro 5	1,296	1,268	1,207
Euro 4	674	576	485
Euro 3	241	181	140
Euro 2	74	69	57
Euro 1 or earlier	41	29	25
Total	4,052	4,119	3,990

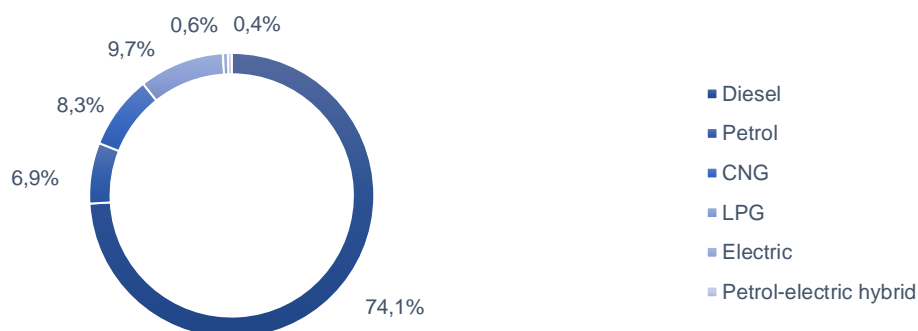
As of 2022, the data refers to all vehicles owned by Uniflotte, Marche Multiservizi and Marche Multiservizi Falconara and vehicles owned by other companies whose maintenance or management is under Uniflotte. Non-circulating vehicles expected to be disposed of are excluded from the calculation.

As of 2023, there were 3,990 vehicles in the Group (129 less than the previous year). **Newer anti-pollution vehicles** (Euro 5, Euro 6 and electric vehicles) accounted for **82.3% of the total**, up 3 percentage points from the previous year.

There were 688 vehicles used in **waste collection and transportation** activities, and **83.4% of them were Euro 5, 6 or electric type**.

Of the total number of vehicles, 3,146 were light, and 83.4% were Euro 5, 6 or electric.

VEHICLES BY FUEL TYPE (2023)



759 of the Group's vehicles were powered by **fuels with lower environmental impact** (CNG, LPG, electric or petrol-electric hybrid power), 19.0% of the total (it was 787 in 2022, 19.1%).

The goal by 2027 is to reach 547 electric vehicles in the company car fleet (14.1% of the total).

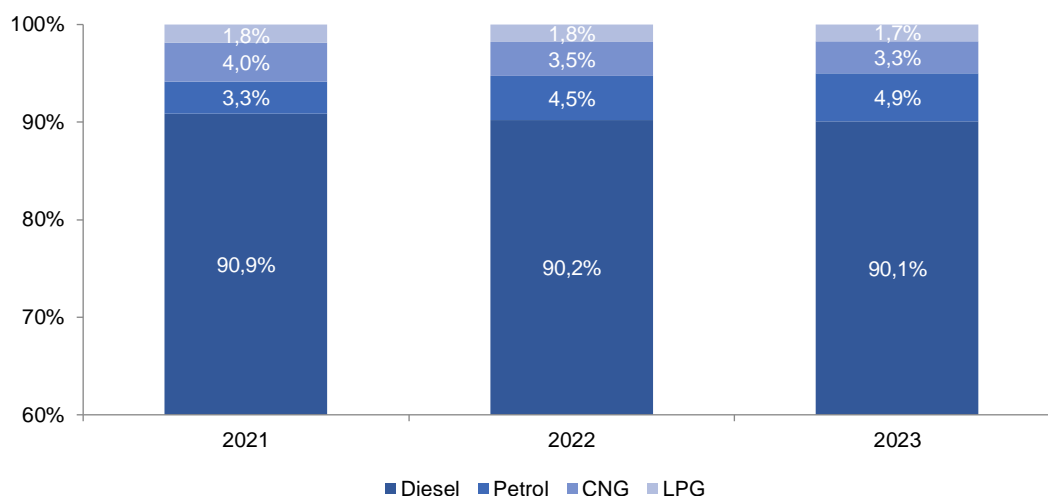
Light vehicles fuelled with these fuels accounted for 22.0% (stable compared to 2022), while waste service vehicles accounted for 6.5% (6.2% in 2022).

FUEL CONSUMED BY VEHICLES

tep	2021	2022	2023
Diesel	9,405	9,354	8,995
Petrol	337	467	491
CNG	416	360	332
LPG	190	186	170
Total	10,348	10,368	9,989

As of 2022, the data refers to all vehicles owned by Uniflotte, Marche Multiservizi and Marche Multiservizi Falconara and vehicles owned by other companies whose maintenance or management is under Uniflotte.

FUEL CONSUMED BY VEHICLES (%)



The comparison between the various types of fuels was carried out considering the primary energy present in the individual fuels.

At the Group level, fuel consumption in 2023 amounted to 9,989 toe and decreased by 4% compared to 2022. Petrol consumption increased (+5%), while consumption of LPG (-9%), CNG (-8%) and diesel (-4%) decreased.

The **average age of the Group's vehicle fleet** in 2023 was **8.4 years**, up from 8.0 years in 2022.

Added to the fleet of company vehicles were **leased cars** assigned to salespeople and executives of Group companies. In 2023, this car fleet consisted of 338 cars, of which 161 assigned to executives and 115 used by salespeople.

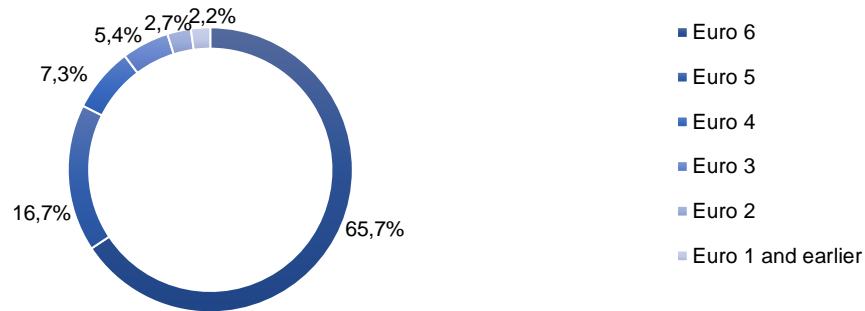
The number of cars assigned to the executives were: 78 diesel, 8 gasoline, and 75 hybrid-powered (42 in 2022), all registered after 2011 and of **Euro 6** type. The other leased cars, however, numbered 2 diesel-powered and 113 hybrid-powered, registered after 2011, and **Euro 6** type. In total, **hybrid-powered** leased vehicles account for **68.1%** (66.7% in 2022).

Supplier vehicles

Hera's commitment to sustainability and energy efficiency also has repercussions on the **supply chain** and in particular on the **criteria for choosing suppliers**. In view of the high environmental impact of urban hygiene services, especially in terms of atmospheric emissions, the Group has decided to **reward the most virtuous suppliers** in this respect by giving preference to those who use **vehicles with a reduced environmental impact**, and also giving a preference to such vehicles in the environmental services tenders it announces. For example, under the Atersir concessions, it is planned that vehicles will be gradually replaced with smaller capacity and lower environmental impact vehicles.

In 2023, the fleet of Hera Spa, AcegasApsAmga and Marche Multiservizi contractors consisted of 2,752 vehicles; **light vehicles** accounted for **60.4% of the total** (58.9% in 2022).

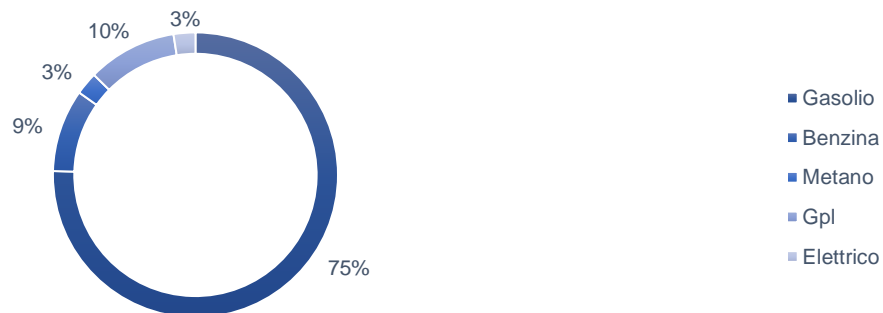
SUPPLIERS' VEHICLES BY ANTI-POLLUTION DIRECTIVE (%)



The data include the vehicles of the temporary groupings of companies for managing environmental services in which Hera Spa is the agent.

The most recently registered vehicles (**Euro 5 and 6, including electric vehicles**) make up **82.4% of the total**, thus continuing the process of modernisation of the contractors' fleet in 2023 (the figure was 75.1% in 2022).

SUPPLIERS' VEHICLES BY FUEL TYPE (%)



The data include the vehicles of the temporary groupings of companies for managing environmental services in which Hera Spa is the agent.

From the point of view of fuel sources, in 2023 natural gas, LPG or electric vehicles accounted for **15.2% of the total** (16.2% in 2022).

Mobility management

In 2023, actions aimed at raising employees' awareness of reducing the environmental impact of **home-to-work travel**, to help them experiment with commuting by less polluting means, and to engage them in challenges to reduce private car use, continued.

Among these, continuity was given to the **shuttle service** in the Bologna area, which connects the railway station with the Viale Berti Pichat and via del Frullo / via Cristina Campo offices, and in the Imola area, which connects the station with the via Molino Rosso and via Casalegno. In view of the transformation of the Municipality of Bologna into 'City 30' in January 2024, monitoring was undertaken to investigate the impact on transport and define possible changes to the timetable.

Awareness campaigns have been activated for the replacement of individual means of transport for home-work trips towards more sustainable choices of **public transport**. For example, the **additional portion for sustainable mobility** available in the welfare plan of all employees to cover part of the cost of public transport season tickets was also used and appreciated in 2023: 229 employees have in fact taken advantage of it (up from 2022).

Sustainable Mobility Week was also organised in September 2023 to involve all employees in using non-polluting vehicles. This year, in order to be more widespread across all territories, an inter-office challenge was organised: each team nominated one person in charge, taking a group photo and coordinating moves to get the most points given by sustainable moves.

Finally, in December, **Home-Work Travel Plans** for the main municipalities where the Hera Group operates were drafted and sent out, containing information on locations, employee travel habits, major initiatives and future challenges.

Hera for electric mobility

The Hera Group, through the company Hera Comm, is active in the development of the **electric charging infrastructure network**.

More than 60 new public charging points were installed by 2023, including 24 with a capacity of 50 kW or more for DC fast charging. As a result, **560 public charging points** (about 280 columns) are **currently installed**, of which 36 are at least 50 kW in power (18 columns); in total they delivered about 1.3 GWh in 2023. The energy delivered by Hera Comm's public charging stations comes **entirely from renewable sources certified** through a Guarantee of Origin, not only for Hera Comm customers but also for customers of other operators enabled to charge at other infrastructures.

Through the awarding of new tenders and the signing of additional Protocols and Memoranda of Understanding, investments will be supported which will contribute to achieving **the goal of 750 public electric charging points installed by 2027**. In particular, in 2024 there are plans to install more than 35 high power points (50-100 kW).

In the installation of public infrastructure, Hera Comm is **supported by Hera Luce** in activities such as executive design, drafting of technical documentation, technical assistance for connections and authorisations, commissioning and maintenance of infrastructure.

Hera's activities in the field of electric mobility are not limited to public charging, but also involve **private charging**: these solutions are particularly appreciated by customers, as evidenced by the more than 260 private charging points sold during the year, for a total of more than **1,600 by 2023** (of which about 900 at business and top business customers; energy from certified renewable sources is also guaranteed for these).

The consumer experience related to public charging has always played a major role for the Hera Group: in addition to the installation of charging points, new **interoperability agreements** have been signed **with other market operators**, which have made it possible to increase the charging network available to Hera customers to **more than 30 thousand charging points** throughout Italy.

CHARGING POINTS INSTALLED AT THE END OF THE YEAR

Number	2021	2022	2023
Public charging points	388	500	560
Private charging points	864	1,386	1,610
Total	1,252	1,886	2,170

Taking installations as a whole, **more than 2,100** public and private **charging points** were **active** in 2023. The goal for 2027 is **to exceed 5,100**.

Hera for soil protection and biodiversity

Reuse of soil in the construction of infrastructures and reuse of excavated earth

Starting right from the preliminary analyses to the design of works, the Hera Group identifies technical solutions aimed at the **reutilisation of formerly urbanised areas** and/or the preservation of the natural context of the areas to be worked on, in line with the objectives set out in the UN Agenda 2030. Among the main design criteria, we can mention:

- in the area of networks: extensions realised by taking advantage of existing roadways and/or urban fabric, improvement of the network layout by upgrading or reclaiming existing pipelines, laying new pipelines adjacent to already existing services;
- in the area of plant systems: the re-use of already existing/occupied infrastructures and areas; decommissioning of the infrastructure and rehabilitation/restoration of the area at the end of its lifecycle; use of technological solutions to reduce the footprint of the infrastructure.

SOIL REUSE IN DESIGNS

Square metres	2021	2022	2023
Area of designs on already-occupied soils	29,766	19,520	58,124
Total design area	48,672	26,785	99,313
Soil reuse in designs (%)	61.1%	72.9%	58.5%
Area of designs on already-occupied soils (cumulated from 2018)	584,699	604,219	662,343
Total design area (cumulated from 2018)	749,342	776,127	875,440
Land reuse in designs (cumulated from 2018) (%)	78.0%	77.9%	75.7%

Continuing the path of sustainability begun in previous years, the infrastructure (networks and facilities) implementations completed in 2023 involved **land use** of about 99 thousand square metres, of which **58.5% involved land already occupied** by existing infrastructure (about 58 thousand square metres). Considering the period from **2018 to 2023**, **75.7%** (equal to approximately 662,000 m²) **of the total surface area involved** in the construction of infrastructure, concerned land that was already occupied. This concerns the construction of infrastructures whose design was provided by HeraTech.

Among the achievements completed in 2023, the **best results in terms of soil reuse** were obtained in the following interventions: upgrading of the San Giovanni in Persiceto wastewater treatment plant in Bologna (100% of soil reused, 10 thousand sq. m.), revamping of the special and hazardous waste-to-energy plant in Ravenna (100%, 9.7 thousand sq. m.), revamping of the anaerobic sludge digestion section of the Gramicia wastewater treatment plant in Ferrara (100%, 6.5 thousand sq. m.), upgrading of the Villa Vezzano sewerage system in Ravenna (100%, 3.5 thousand sq. m.). The reason for the indicator's decline in 2023 was a consequence of the completion and expansion of the Ca' Nordio treatment plant in Padua, where out of 30.5 thousand square metres of soil involved, only 4.0% could be reused.

In the 2024-2027 period, it is foreseen that most of the infrastructure projects will be constructed on land that is already occupied, while continuing to limit the use of virgin soil: in fact, it is estimated that a further 166,000 square metres of land will be reused, bringing to 72% (or about 828,000 square metres) the amount of land reused in projects completed from 2018 to 2027 with plans drawn up by HeraTech.

In particular, in the Padua area, work will be carried out to make the Roncagette site of AcegasApsAmga in Ponte San Nicolò safer, for a total of 250 thousand square metres reused (100%). In Modena, 69.4 thousand sq m of land (92%) is planned to be reused in the works for the construction of the new Hydrogen valley. In Ravenna, Castel Maggiore (Bo), and Ferrara, the construction and installation of photovoltaic systems at depleted landfills will allow 100% of the land involved in the works to be reused (104,000, 52,000, and 28.4,000 sq m, respectively).

Biodiversity

With respect to the protection and **conservation of wild habitats and species**, the European Union has enacted two pieces of legislation: Directive 2009/147/EC (known as the **Birds Directive**), which came into force in February 2010 and relates to the conservation of wild birds, and Council Directive 43/92 (known as the **Habitats Directive**), adopted in May 1992 and relating to the conservation of natural habitats and of wild fauna and flora. These directives have created a coherent ecological network of protected spaces located throughout the area of the European Union, called **Natura 2000**.

The two largest catchment plants in the province of Ferrara (Pontelagoscuro and Stellata) are located on the Po River within the special protection zone called the **Po River from Stellata to Mesola and Cavo Napoleonico**. The purification plant situated in the area of Ravenna (Marina di Ravenna) is located within the site of community interest called "**Piallassa Piombone**" and discharges the purified effluent within the "**Piallassa Baiona**" special protection area.

The Hera Group carries out **acute toxicity tests** on purification plants in order to safeguard biodiversity.

An agreement was renewed in 2023 between Hera Spa, the Burana Land Reclamation Consortium and the Emilia-Romagna Region for the **recovery of wastewater purified** by the Sassuolo-Fiorano and Savignano sul Panaro treatment plants in the Modena area. In particular, a detour of discharges to the Modena Canal and the Torbido Canal was provided for in the agreement, which would allow for better management of the available water resource as well as the achievement of the **quality objectives of**

the Secchia and Panaro rivers, consistent with the guidelines given by EU policies on the protection of water resources.

In addition, the permits for the Ravenna and Lido di Classe plants provided for release into specific consortium canals to allow hydraulic compensation during the driest summer period, as indirect agricultural reuse and to protect aquatic environments further downstream.

In relation to actions to protect biodiversity in the context of activated **authorisation procedures**, Herambiente proposes (particularly for projects of greater significance) the initiation of **mitigation and/or compensation actions** oriented towards the enhancement of the local area, landscape and natural environment. Each proposed intervention is specifically tailored to the local situation, so as to be in tune with the peculiarities of local habitats.

By way of example, the following 2023 activities are noted:

- Alplast, in the single authorisation issued for the new rigid plastics recovery plant in Modena, required the company to carry out interventions such as:
 - **Construction, planting and maintenance of green areas** for carbon dioxide absorption and enhancement of park areas usable by residents;
 - preventive or reductive interventions on greenhouse gas emissions and pollutants;
 - **mitigation of nutrient input into the discharge** into the Naviglio Canal in order to reduce algal growth and contribute to the improvement of the hydraulic function. This mitigation must be quantified in terms of maintenance charges, which the company will have to bear through a binding commitment;
 - road surface maintenance for roads subject to greater and faster wear and tear due to the considerable traffic of vehicles heading to the plant;
 - interventions on vehicular traffic aimed at optimising the flow in access to the plant and minimising its impact in terms of noise, traffic, and emissions.

The planned interventions will be the subject of a special agreement with the Municipality of Modena, which will define their priorities and modalities, giving priority to compensatory interventions referred to the area affected by the plant.
- **Environmental redevelopment project** of a waste treatment plant compartment in the Municipality of Ravenna, with Landscape Permit, Po Delta Regional Park Clearance and Impact Assessment.
- The company HEA (a joint venture between Herambiente and Eni Rewind), as part of the procedure for the issuance of authorisations for the project "Ponticelle development compartment: HEA multipurpose platform and Eni Rewind bio-recovery platform" located in the Ponticelle (Ra) area between the chemical hub and the Bassette artisanal complex, has planned the implementation of an environmental enhancement and naturalistic restoration project in the Classe Pinewood in the municipality of Ravenna, defined together with the municipality. The project, located within the Po Delta Regional Park "Classe Pinewood Station and Cervia Salt Pan" and in the Special Area of Conservation (SAC)/Special Protection Zone (SPA) "Classe Pinewood" of the Natura 2000 Network, envisages the **planting of more than two thousand** trees and shrubs and an environmental requalification of the entire area involved, which is now in a state of degradation.

Since 2020, Herambiente has also embarked on an **innovative biomonitoring** project to further pursue activities to study the environment around some of its facilities and any impacts exerted on it. The project aims to **use bees as bioindicators** to assess the quality status of the environment surrounding some plants and landfills of the type operated by the Group. See the case study ["Bee understand: environmental biomonitoring with bees"](#) for details.

Land reclamation activities to protect soil and biodiversity

Since 2009 the Hera Group has been involved in **environmental reclamation**. As of July 2023, following the acquisition of 60% of A.C.R., the "environmental remediation operations" business unit was transferred to A.C.R., which thus saw its business offerings extended to include remediation **and reclamation services** aimed at securing and recovering municipal areas and contaminated industrial sites, decommissioning.

The service is offered to a varied type of public and private clientele including oil companies, chemical and pharmaceutical industries, steel mills, real estate and insurance consultancy firms, reclamation consortia, and port authorities.

An all-inclusive service is offered that encompasses all environmental activities related to the technical-administrative management accompanying the reclamation of an abandoned urban and/or industrial

area: from the design of the fact-finding survey to the economic feasibility study related to environmental liabilities, to environmental consultancy with regard to the purchase and sale, to the execution of environmental remediation and reclamation of degraded areas for regeneration.

The first and most important step in the reclamation process of an area is the **characterisation**, i.e., the in-depth study that allows the history of the contamination of the place to be reconstructed, provides all the elements to construct the planning phase of the intervention with full awareness, and estimates the costs of the intervention. The technicians use state-of-the-art investigative technologies and equipment to carry out direct and indirect investigations and assist their customers in all phases of the authorisation process required by current legislation. The reclamation and safety measures are the most delicate in terms of treatment of the processed materials and the impact that the activity can have on the productive life of a company or public organization. Over the years, particular attention has been paid to **increasingly more sustainable and low environmental impact approaches**, such as those that exploit the natural attenuation potential of the contaminated site to destroy polluting substances and/or reduce their relative hazardousness. Among the main sustainability requirements there is low energy consumption, minimisation of the use of chemical amendments and finally the applicability directly in situ, i.e., without the prior removal of the contaminated environmental matrix (soil or groundwater). Such processes are effectively applied to the treatment of contaminated groundwater, soils and sediments. In parallel to the in-situ treatment, on-site and off-site technologies have also been developed which respectively provide for:

- the excavation of the contaminated soil and its subsequent treatment on site (soil washing, biological treatment of soil through biopile, treatment of soil through Soil Vapor Extraction (SVE), groundwater treatment through pump & treat) for the recovery of the matrix and its reuse;
- the excavation of the contaminated soil and its subsequent treatment outside the construction site in order to send the contaminated matrix to authorised treatment plants or to landfills.

Previous or ongoing industrial activities are in fact often the cause of important alterations of the qualitative characteristics of the soil, subsoil and groundwater environmental matrices, such as to represent a potential risk for human health and natural ecosystems and therefore require remediation and/or depollution. In Italy, the remediation of contaminated sites is a problem of extraordinary importance not only on a health level but also on a social and economic level: suffice it to say that contaminated sites of national interest alone cover an area that reaches 0.6% of the entire national area. In principle, reclaiming contaminated sites makes it possible to preserve the natural capital and reduce the impact on biodiversity, representing in fact an important resource for the country's economic development.

The remediation activity is carried out by A.C.R. on a national level with certificates of qualification. Furthermore, the activities on the construction sites are carried out **in compliance with the international standards** ISO 9001, ISO14001 and ISO 14001, as also proven by the certifications held issued by the accredited bodies.

ENVIRONMENTAL RECLAMATIONS CONCLUDED AND ONGOING

n. sites	2023	%
In situ treatment	114	77%
On-site treatment	0	0%
Off-site treatment	34	23%
Total	148	100%

At the end of 2023, the number of active (i.e. not including 'dormant' ones, where the activity carried out is merely surveillance) remediation works completed or in progress amounted to 148, three of which are Sites of National Interest (SIN), i.e. Bussi sul Tirino (Pe), the Mantua petrochemical plant and the Val del Rio landfill in Chioggia (Ve).

Respect for environmental materials is clear both from the high percentage of reclaimed land and the high percentage of remediation with in-situ treatment.







TOTAL WASTE TREATED RECLAMATION PROCEDURES



tonnes	2023	%
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Lands from reclamation treatments for material disposal	76,249	66.3%
Lands from reclamation treatments for material recovery	38,801	33.7%
Total lands treated	115,050	100%
Other waste for disposal (water, carbon, construction and demolition materials (MCD), other minor waste)	31,695	
Total	146,745	


4. LOCAL AREAS (AND BUSINESSES) - ENABLING RESILIENCE AND INNOVATION




4.01 Objectives, performance and targets

What we said we would do	What we did	SDGs	Progress*
Innovation and digitalisation			
IT security: increase the group's cyber security through the evolution of company processes, instruments, and policies, and through increased monitoring activities and improvements in technological instruments and procedures.	Increased monitoring activities both in terms of extending the coverage of the Security operation centre service and in terms of new areas subjected. The three main cyber security procedures related to systems, networks and users were also updated. (see page151)	-	
43% of customers using online billing and 41% of customers using online services by 2026, Group-wide (34.5% and 29.4% in 2022, respectively).	40.2% of customers using online billing and 36.2% of customers using online services by 2023 on a Group level. (see page.148)	11, 12, 17	
Continue developing initiatives within the two main areas of innovation: environmental transition and digital transformation, thanks to new internal figures (innovation promoters). Define, develop, and report initiatives using the Corporate Digital Responsibility framework, thanks to the continuation of dedicated formation.	Revised the Group's innovation management model, launching specific discussion and training courses on strategic innovation for "innovation promoters" in the various business units. Continued the development of initiatives in the areas of environmental transition and digital transformation in 2023, as well as the reporting of the same according to the corporate digital responsibility framework.(see page.141)	8, 9, 11, 12	
Economic growth and social inclusion			
Supplier selection: continue to promote the employment of disadvantaged people in waste management services.	The value of the assignments and partnerships between Hera and social cooperatives is approximately 91 million euro (+12% compared to 2022). (see page159)	8	
Continue to provide instalment payment for bills and other voluntary facilities to support customers facing financial hardship. Invite other municipalities to sign a protocol to prevent the suspension of supply.	Almost 736 thousand instalment payments granted in 2023(more than double compared to 2022), for a value of 339.6 million euro. 138 municipalities with active memoranda of understanding (there were 135 in 2022). (see page159)	17	
Job creation and development of new skills			
Continue to apply the social clause to protect employment in contracts for emergency services on networks and services relating to customer management (except for insourcing situations).	22 tenders, among the most notable, included a social clause to protect employment. (see page165)	8	

What we said we would do	What we did	SDGs	Progress*
<p>Direct training interventions towards the development of emerging roles and skills that concern the digital transformation (Corporate digital responsibility, business intelligence, and increased use of Digital Workplace instruments) and the environmental and energy transition.</p> <p>65% of the population that will achieve digital proficiency (meaning full control of "digital soft skills") by 2026, 90% by 2030 (54.1% al 2022).</p> <p>>50% of the population achieve circular economy and energy transition proficiency (environmental and energy transition skills) (21% per green transition e 28% per energy transition al 2022).</p>	<p>Continued the ecoHERA programme with the provision of content on skills related to the and energy and environmental transitions. In 2023, 36.3% and 31.5% of the reference company population have reached the appropriate skills for the energy transition and the environmental transition respectively.</p> <p>The third edition of the Her@futura assessment aimed at further increasing corporate e-skills was launched. In 2023, 56.2% of the target company population has achieved the appropriate competencies for the digital transition. (see page 174)</p>	4,8	
<p>Continue to raise awareness on the enhancement of diversity and inclusion through events and initiatives (focus on inclusive language and issues related to the integration of private life and working life). Consolidate the Hera Group's ranking in leading diversity stock indexes.</p>	<p>Continued the activities to enhance diversity and inclusion through obtaining gender equality certification for the main 11 companies of the Group and continuing the pilot project on inclusive language. Consolidated the Hera Group positioning in the main diversity stock indices. (see page 170)</p>	5	

Resilience and adaptation

<p>Resilience and adaptation to climate change:</p> <ul style="list-style-type: none"> Electricity service resilience: 54.8 km of network made compliant in 2023, equal to 81% of the overall electricity resilience plan (57% al 2022). Water service resilience: about 30 million euro for numerous interventions set out in the 2026 business plan in the Triveneto and Emilia-Romagna areas to mitigate the risk of drought (aqueduct interconnections, upgrading of catchments and supply lines, new wells and tanks). <p>70% of district-based network by 2026 and predictive algorithms to reduce dispersions.</p>	<p>Interventions in the area of resilience and adaptation to climate change, including:</p> <ul style="list-style-type: none"> Electricity service resilience: 55 km of network made compliant, equal to 82% of the overall electricity resilience plan. (see page 184) 7.4 million euro invested in 2023 to mitigate drought risk. 55% of district-based water network in Emilia-Romagna and Triveneto (was 51% in 2022) and 100% water network with predictive algorithms in Emilia-Romagna (was 51% in 2022). 	9, 13	
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*  Result achieved or in line with planning;  Result with slight variance compared to planning;  Result with significant variance compared to planning.

What we will do	SDGs
<p>Innovation and digitalisation</p> <p>IT security: continue the process of increasing the Group's cyber security level by increasing the coverage of the Security operation centre monitoring service, introducing advanced technological instruments and evolving company processes and policies.</p> <p>45% of customers using online billing by 2027 group wide.</p> <p>Create a new single App by 2024 by unifying existing ones, implementing new features and services.</p> <p>Artificial Intelligence: development of solutions capable of generating ever greater value for businesses in achieving their strategic objectives: improving service levels and promoting increasingly innovative services to customers, optimising asset management and making processes increasingly efficient and effective.</p> <p>Strengthen the collaboration model and promote ways of interacting with external partners with a view to open innovation in the creation of innovative solutions.</p>	<p>-</p> <p>11,12,17</p> <p>8</p> <p>8</p>
<p>Economic growth and social inclusion</p> <p>Supplier selection: continue to promote the employment of disadvantaged people in waste management services.</p>	8

What we will do	SDGs
Continue to provide instalment payment for bills and other voluntary facilities to support customers facing financial hardship. Propose to other municipalities to sign a protocol to prevent the suspension of supply (138 municipalities in 2023).	17
Job creation and development of new skills	
Continue to apply the social clause to protect employment in contracts for emergency services on networks and services relating to customer management (except for insourcing situations).	8
The 'Learning Plan 2024' includes projects and training sessions aimed at boosting: managerial skills linked to the new leadership model and the evolution of ways of working; technical-professional skills linked to priority issues in the field of energy and environmental transition and to the evolution of business roles (with a focus on network operator and front office roles); digital/technological skills linked to the Her@futura programme, with a focus on skills linked to the application of generative artificial intelligence on business processes and ways of working.	4.8
75% population will attain digital transition skills by 2027, 90% by 2030.	
53% population will attain skills for environmental and energy transition by 2027, 60% by 2030.	
Continue to raise awareness of the use of inclusive language, with dissemination events and moments fo divulging through internal communication, creating work-life balance by disseminating good practices.	5
Resilience and adaptation	
Resilience and adaptation to climate change:	
<ul style="list-style-type: none"> Electricity service resilience: 67.5 km of network made compliant in 2024, 100% of the overall electricity resilience plan. Water service resilience: 100% of the network subjected to predictive maintenance and 73% of the district-based network by 2027 (focus on limiting network losses) in Emilia-Romagna and Triveneto. 	9.13

4.01 Innovation and digitalisation

Innovation for the Hera Group

The term innovation is traditionally used to identify a process that turns an idea into a good or service that has a value. In addition, innovation must be repeatable at an affordable cost and must meet specific needs. Innovating does not mean inventing, nor planning, but rather seeking, perceiving, discovering, making progress, improving and knowing how to gain value in the present and future contexts.

The two main **innovation areas** within the Hera Group, in line with its business plan and the renewed relationship between environmental transition and digital transformation, can be summarised as follows:

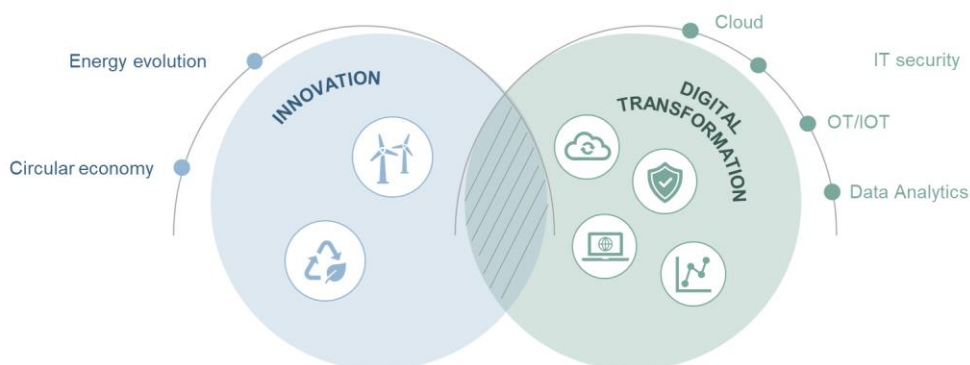


environmental transition aimed at shifting towards the use of more efficient and renewable energy sources and to the optimisation of materials, and maximising the recovery of waste and scrap;



digital transformation aimed at the implementation of new technologies for the digitalisation, automation, and flexibility of processes, and the enhancement and efficient use of data.

At Hera, **environmental transition** and **digital transformation** are two areas with elements that intersect without fully overlapping.



The last few years have seen strategic changes in the European and global landscape, linked to a multitude of factors: environmental, health, economic and geopolitical, with important **impact in the energy sector**. All of these events highlighted the need for the Group to **forcefully undertake new lines of growth in the environmental transition sector**, trying to implement projects that can intercept both new market trends and new financing opportunities deriving from the National Recovery and Resilience Plan.

For this reason, the Hera Group decided to reorganize innovation by linking it more closely to **sustainability**, redefining the objectives of the Development function of the **Central Innovation Department**, which consequently acquired the name of **Environmental Transition**, determining an orientation towards projects more aimed at combining innovation and sustainability and a change in the approach to innovation.

The **culture of innovation is sufficiently widespread within the Group** to aim for a more evolved model of innovation, in which incremental innovation projects (those that see an evolution of the existing business) are **developed directly at the business unit level**, aligning them with the company's innovation strategy, while the revamped Environmental Transition function focuses on the development of radical projects, currently outside the current lines of business. This requires a different management of innovation, aligned with corporate strategies through the development of an innovation strategy which in turn will integrate with the innovation strategies of the individual business units.

New figures have been identified within the business units ("innovation promoters") with the task of establishing a point of reference for incremental innovation activities and projects, for the development of the culture of innovation and for supporting the definition of the innovation strategies of the business units themselves. A special annual meeting is scheduled between the innovation promoters and the

Environmental Transition function for the sharing and presentation of objectives and projects, so as to align with the Group's innovation strategy and to aim at achieving the macro-objectives of sustainability.

During 2023, important steps were taken to **redefine the Group's innovation management model**. After identifying 'innovation promoters' within the various business units, a **process of discussion and specific training** dedicated to them was launched, aimed at providing the instruments and methods to plan and manage innovation projects with a strategic outlook.

The definition of a general innovation strategy, followed by the creation of **guidance documents for each business unit** (in which the framework for **creating shared value was emphasised and aligned to the Purpose** as per the company's Articles of Association), contributed to outline a clear picture of the strategic objectives and the importance of their contribution to addressing certain challenges of the Group. In particular, the importance of innovative projects to address the challenges related to the energy transition and decarbonisation was highlighted.

These advances represent a solid foundation for the company's future development and success in pursuing its innovation and sustainability agenda.

An open innovation model

The Hera Group has decided to consolidate the experiences in innovation projects with start-ups of past years into a structured open **innovation practice**. This approach to innovation fosters **new models of collaboration** and enhances the involvement of the external ecosystem in the creation of innovative solutions. It provides access to resources, skills and ideas outside traditional boundaries, **accelerating the transition** towards sustainable innovation and contributing to the realisation of a positive global impact.

In a closed innovation model, ideas originate predominantly internally as the development process takes place entirely within the company. However, **in an open innovation model**, the idea benefits from outside influences, the development is carried out together with various external parties, and the result can also be enhanced through new business.

Therefore, the long-term goal for the entire organisation is to establish new ways of interacting with the outside world in order **to promote a continuous propensity for process improvement** and search for efficiency by exploiting the full potential of technology.

During 2023, activities focused on defining a venture client programme, which included:

- the identification of priority areas within the company in which to advance new ideas for process innovation, the introduction of new services and the resolution of critical issues;
- the definition of an ecosystem of innovation partners not only on a national and continental level but also worldwide;
- the formulation of strategic guidelines on which to base not only the practice of open innovation but also its dissemination within the company and the maintenance of the external innovation network, which is increasingly crucial in generating new opportunities and creating value.

With the aim of fostering and boosting innovation in the businesses managed, the Group has also been activating social innovation initiatives for many years, involving both internal and external stakeholders, for example through HeraLAB (see paragraph Communications with our stakeholders" (in the chapter "[Governance and creating value](#)").

Generative artificial intelligence in the Hera Group

The Hera Group promptly analysed the technology, innovation opportunities and impacts that generative artificial intelligence is able to bring to the context in which it operates.

During 2023:

- a first prototype was implemented to support the **search for information** for some front-end processes, with very promising results. The solution identified was also a source of inspiration for identifying numerous other applications of similar processes based on information search;
- the areas with greatest potential for the **application of the technology** within the entire organization were identified, finalized in a roadmap of almost 150 use cases;
- a table was set up to **define behavioural guidelines** in the use of instruments freely available online, to give proper orientation to employees and make them aware of potential risks.

In 2024, activities will focus on defining the three most relevant project areas among those emerging from the roadmap in order to design digital solutions across all the Group's organisational units and various businesses. The artificial intelligence service platforms that are intended to be created will offer **advanced intelligent automation capabilities** to support both existing systems and processes that have not yet been digitalised, significantly impacting individual productivity in repetitive and low-value tasks.

This commitment to the integration of generative artificial intelligence reflects the constant search for new approaches to tackle complex challenges and stimulate progress. This enables a cutting-edge approach to optimising business processes, product innovation and meeting customer needs.

Investments in innovation
[203-1]

In 2023, the Hera Group invested over **148.2 million euro** in innovation and digitalisation (+18% compared the 125.3 million euro invested in 2022), a figure that is part of the total investments **aimed at the creation of shared value** (see the section on [Shared Value](#)).





Corporate Digital Responsibility

In 2020, the Hera Group launched an internal reflection on the concept of **Corporate digital responsibility**, questioning what declination it could have with respect to the Group's activities and what approach to adopt accordingly.

As defined by Michael Wade in his 2020 article "Corporate responsibility in the digital era" on the MIT Sloan review, the term Corporate digital responsibility refers to a set of **practices and behaviours** that help an organization **use digital data and technologies in an ethical and responsible manner** in the **social, environmental, economic and technological** dimensions. These turn out to be important keys to understanding a **unified analysis framework** to address sustainability and digitalisation in a coherent and complementary way, with the possibility to anticipate and reduce future risks and **seize the multiple synergistic opportunities of the two trends**, laying the foundations for a new integrated reporting and responsible project development system.

The dimensions of Corporate digital responsibility find a declination consistent with the activities carried out by the Group in detail topics, each of which is able to identify risks to mitigate and opportunities to seize.

THE FOUR FACTORS IN CORPORATE DIGITAL RESPONSIBILITY FOR THE HERA GROUP

Factor	Social  The company's relationship with people and society	Environmental  The connection between digital technologies and the physical environment	Economic  Responsible management of the economic impacts of digital technologies	Technological  Responsible creation of technologies
What it consists of	Ensuring data privacy for customers, workers, and providers Promoting digital inclusion and moving past the digital divide for employees, residents, and customers Ensuring health and safety for workers, residents and customers thanks to digital technology Ensuring the quality of service and relationship with residents and customers	Ensuring recycling and responsible management of products at the end of their working life. Developing digital innovation solutions to support the environmental transition of the Company as well as of residents and customers Using carbon neutral energy (from renewable sources and/or high-efficiency gas systems with compensatory actions) for services and digital technologies	Responsibly managing impacts on employment related to new digital technologies Sharing with stakeholders the benefits obtained thanks to the efficiency processes given by digital innovation.	Ensuring IT security and responsible use of technologies Identifying digital solutions with a sufficiently long technology life cycle

In order to ensure a greater understanding of the framework and to thoroughly evaluate the detailed issues described above, Hera Group has developed **guiding questions** to support the analysis and grasp the different facets of the four dimensions.

Hera Group innovation initiatives

The main initiatives and the innovation areas to which they belong are listed below. Each project can relate to several innovation areas: the table shows the symbols of the different innovation areas in which the project is classified. There is also an initial analysis of the initiatives with the Corporate Digital Responsibility framework.

Main initiatives	Innovation areas	CDR dimensions
Biomethane from steam explosion		
Energy park and agrivoltaic development (see dedicated case study)		
The development of the hydrogen supply chain (see the dedicated paragraph " The development of hydrogen " and the case study " The hydrogen valley ")		
New generation meters in electricity distribution	     	
Digital simulations to improve gas network maintenance	     	
Smart city projects	    	
Public lighting 4.0 with artificial intelligence	   	
Resilient dashboard: water distribution networks more resilient to climate change (see the dedicated paragraph " Resilient aqueduct and water source management ")	  	
The Group's data strategy		
Digital café	    	
Data community: development of engagement initiatives (see dedicated paragraph " Development of new skills within the Hera Group ")	 	
Connectivity and infrastructure enhancement (see the dedicated paragraph " The role of Acantho ")	    	
IT security (see dedicated paragraph " cyber security ")	 	

Biomethane from steam explosion

The **Life Steam** project aims to develop an innovative prototype for the **pre-treatment of grass clippings and pruning** in order to transform them into a product suitable for the **production of biomethane**.

This innovative technology uses the **steam explosion process**: it consists of the heat treatment of pruning, using steam to break the links between lignin, cellulose, and hemicellulose, making the material **suitable for anaerobic digestion**. This way, biogas can also be produced from pruning, a waste material that is collected and managed by the Group.

During 2023, a prototype plant on a semi-industrial scale capable of processing up to 1.7 tonnes of lignocellulosic material per hour was built at Herambiente's composting plant in Ozzano dell'Emilia (Bo). The plant consists of a mechanical pre-treatment section in which the material is cleaned of any inert matter, reduced in size by shredding and mechanically screened. The material then enters the steam explosion reactor where, thanks to saturated steam injected at high pressure, the bonds between lignin and cellulose are broken, thus making it easily 'digestible' by bacteria. The treated material will then be transported to Herambiente's anaerobic digestion plant in Voltana di Lugo (Ra) to assess its capacity to **produce biogas**.

The Life Steam project will end in June 2024 after about six months of experimentation to provide all the technical and economic elements to evaluate a possible scale-up of the system.





The innovative process of valorisation of waste lignocellulose for the production of biomethane proposed by the project will contribute to the achievement of the objectives of the most important national and European strategies in the field of energy transition and circular economy, helping to reduce the dependence on natural gas of fossil origin coming from abroad.

New generation meters in electricity distribution

During 2023, the project for the technological renewal of the Energy Distributor platform was completed to enable all energy vendors operating in the territories where the Hera Group manages the electricity distribution service to have complete and timely data on the consumption of customers equipped with new-generation (2G) meters, enabling more efficient, reliable and economic network management also by the distributor, with a series of cascading benefits for the entire energy chain.

The availability of **granular and timely** metering data enables energy vendors to make proposals and services **that are increasingly tailored to the needs and specificities of customers**, contain the costs of acquiring measurements (now of better quality), and enable users to achieve a virtuous **awareness of consumption**, hence energy savings.

Corporate digital responsibility

Social		Energy customers can effectively understand the environmental and economic effects of their consumption habits and act towards reducing waste.
Environmental		Consumption monitoring with an hourly level of granularity supports customers in reducing their energy consumption.
Economic		The renewal of the platform and the development of new-generation measuring instruments allows vendors, distributors and customers to contain costs and improve distribution and sales service.
Technological		The new platform supports the processing of large amounts of data, including hourly consumption data that can be made available to customers for timely monitoring of their consumption habits





Digital simulations to improve gas network maintenance

Knowledge of the network and its behaviour in different situations is the basis for the simulation processes that reduce risks and increase the effectiveness of the distributor's activities.

To do this, Hera has developed **Siris gas**, a system that allows **simulations** of the current and future state of the network, as well as scenarios for management interventions. Siris unifies the different data sources involved in a centralised data platform, allowing the definition of data quality rules and **machine learning algorithms** to support simulations.

The **speed of processing and the possibility of use from mobile devices** has made it possible to bring the intelligence of Siris into the field to support operators who intervene in maintenance situations, as well as in offices where the most efficient development of the gas network is designed and planned.

Corporate digital responsibility

Social		Reduction of risks for operators on duty and of inefficiencies for users affected by works on the network.
Environmental		Possibility of modelling the best use of the network according to the behaviour of the gas injected, also favouring a reduction in waste.
Economic		Through modelling and simulations, it is possible to find the best set-up to make investments in network more efficient and convenient.
Technological		The platform allows easy use of the available data, significantly reducing the effort required by operators to assess the consequences of interventions, while at the same time increasing accuracy and decreasing the associated safety risks.

Smart city projects

During 2023, the smart city initiatives launched in previous years were completed.

The experimentation with the University of Bolognan at the Cesena Campus, which was able to use the PUNTONet Board digital dashboard to **monitor sustainability indicators** and to collect and display **data on indoor and outdoor air quality** produced by the Internet of Things stations developed by the University, was completed

For the Municipality of Cesena, the PUNTONet Board dashboard was maintained by integrating it with the Next Generation Valle del Savio initiative: a dashboard for **monitoring the initiatives** in the area of the Unione Valle del Savio Union and of the related economic resources (own or deriving from NRRP and public tenders). The report is available to all residents online on the web portals of the Unione Savio Valley and the Municipality of Cesena. As from 2024, the activities concerning its updating and possible developments will be carried out directly by the municipal administration.

Also in Cesena, at the beginning of 2023, the installation of **five PUNTONet H₂O totems** was completed. They allow: the **dispensing of public water** (free of charge) and ultrafiltered natural and sparkling water (for a fee); the **recharging of electronic devices** and electric wheelchairs; **environmental monitoring** through Internet of things control units; the sharing of information content by the Administration through LED screens. Altogether, during 2023 the five totems delivered 230,000 litres of ultrafiltered water. Until summer 2024 the maintenance of the totems will be borne by Hera, while thereafter it will be borne by the Municipality.




As part of the European Urban innovative actions call, with the **AirBreak** project coordinated by the Municipality of Ferrara, Hera conducted the following activities

- released the dashboard called AirBreakBoard designed for the municipal administration in order to provide it with innovative instruments for environmental monitoring such as, for example, **forecast models of the main pollutant parameters** for up to 72 hours and **satellite mapping** to assess the distribution of PM10 in the area
- designed, built and installed four shelters called Smart Hubs designed to encourage **sustainable mobility** and capable of providing a number of services to residents:
 - Boxes and charging points for e-bikes, scooters, wheelchairs and electric devices;
 - Public Wi-Fi;
 - Automatic external defibrillator and SOS Emergency Button;
 - Video surveillance of the area;
 - Tools for repairing and maintaining bikes;
 - Air monitoring units.
- installed a spraying system in eight municipal waste collection vehicles to spread an **enzymatic product** on the road surface designed to **prevent fine particulate matter (PM10) from rising into the atmosphere**, thus reducing air pollution. From the data collected and the analyses carried out in various campaigns, it can be stated that this treatment contributes to the abatement of up to 20% of atmospheric particulate matter.

The call for tenders ended in 2023 and it will be up to the Municipality of Ferrara to evaluate the implemented solutions in order to define their possible maintenance in 2024.

Thanks to these developments, Hera was able to experiment with new solutions in the environmental and technological fields, as well as lay the foundations for new skills to be implemented in services for municipalities and residents.

Corporate digital responsibility

Environmental		Real-time monitoring of environmental indicators and implementation of new solutions for fine dust abatement.
Economic		Implementation of projects aimed at improving land management and quality of life.
Technological		Implementation of smart technology solutions for administrations and residents with data collection and processing via forecasting models and Internet of Things sensors.

Public lighting 4.0 with artificial intelligence

Hera Luce carries out various projects for the digital transformation of the public lighting service.

In 2023 it consolidated the **predictive maintenance** project of the state of degradation and corrosion of public lighting pylons, and completed the pilot project for assessing the state of low voltage switchboards.

Intelligent devices have thus been installed that are capable of providing increasing amounts of information about the position, condition, and availability of assets, such as appliances and ignition and control panels. The use of this data (**big data analytics**) will be a lever in the migration process towards a **circular business model** as it allows to **anticipate failures** and put the company in a position to plan maintenance operations in advance while containing unexpected costs. The increase in direct costs deriving from a greater number of minor interventions is in this way compensated by the **minimization of the risks of high danger** and by a higher qualitative state of the plants, returning more valuable **infrastructures to the area served**. Furthermore, in this way it will be possible to **maximise the use** of components and networks, **guaranteeing their correct functioning** even in the event of external stresses that cannot be foreseen in the design phase.

At the beginning of 2024, 156 municipalities were included in the system for the predictive maintenance of the state of degradation and corrosion of supports.



As of September 2023, all executive projects for public lighting also include a new annex, which collects useful information on the state of switchboards and already implements a maintenance assessment. Maintenance will then be compared with the results of the system assessments: more than 100 municipalities are included, awaiting the activation of the system for predictive maintenance of switchboard status.

Another activity concerns so-called **adaptive lighting**: this is a pilot project for the implementation of intelligent sensors distributed locally, capable of constantly monitoring the flow of traffic and therefore modulating the **intensity of the lighting** on the basis of real conditions, with obvious **benefits on energy consumption** and at the same time keeping the degree of safety unchanged.

A first test was carried out in the Cesena area, with the installation of 178 remote controlled point-to-point light points on four sample systems. The light points are regulated using **algorithms and traffic and luminance sensors** (with radar technologies or cameras with integrated AI). Passage sensors have also been installed on cycle/pedestrian paths: the lighting level rises as pedestrians or bicycles pass, remaining at lower levels during periods in which no movements are detected.

After two years of experimentation, the installed technology has proven to be mature, guaranteeing a **good level of reliability despite the greater complexity** compared to traditional systems. The energy analysis has found that, with standard reduction profiles, savings between 15 and 30% can be achieved, while **with adaptive lighting savings are between 37 and 54%**, at the same time guaranteeing a safe and sustainable environment for the community.

Corporate digital responsibility

Environmental		Ensuring recycling and responsible management of products at the end of their working life. Optimization of energy consumption, which can be modulated on the basis of the actual surrounding conditions, with benefits also in terms of light pollution.
Economic		Sharing with stakeholders the benefits obtained thanks to the efficiency processes given by digital innovation.


The Group's data strategy

The continuous digitization work and the relative growth of information push the Hera Group to adopt a strategy for enhancing them. The goal of the **data strategy** is to create value from all this information, supporting the Group's transition towards a true **data-driven company**.

Following the principles of data mesh, a paradigm that takes into account both the organisational and the more technological aspects, the strategic operational model was defined, identifying the profiles of the participants in the hub & spoke organisational paradigm applied across all the Group's business units. The cloud platform hosting the first data products developed and the related protected environments to guarantee information security were implemented.

Through this approach, the Hera Group is able to **accelerate the development of analytics and artificial intelligence projects**, exploiting the full potential of available data. This translates into greater decision-making capacity, a better understanding of customers and business operations, as well as the creation of increasingly innovative services.

Corporate digital responsibility

Technological		Definition of guidelines regarding secure access to data and to their methods of consumption, avoiding costly and dangerous redundancies.
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Digital café

As part of the Digital workplace and in order to **guide users in the pervasive use of new digital solutions** based on Microsoft Power platform technology, the **Digital café** was established in May 2021. The objective of the Digital café is declined through the following activities:





- "on demand" support for users who need guidance during the autonomous creation of digital solutions;
- implementation of projects through agile methodologies aimed at digitising business processes through the solutions available within the Power platform;
- guidance through the standard processes of the Information Systems Department of digitization opportunities that cannot be achieved exclusively through the engagement of the Digital café.

The Digital café therefore aims to be an **engine of innovation** in the digital transformation process undertaken by the Group, adopting a model that satisfies the need for agility.

Following the promotion activities of the Digital café, carried out in collaboration with the Personnel and Organization Head Office Department, also thanks to the proven ability of the new Competence Centre Process Automation structure to create digital solutions quickly and with certain costs, the path of adoption within the Hera Group has undergone a significant increase. During 2023, 104 potential initiatives were in fact implemented, evaluated and addressed, which gave rise to the launch or completion of 64 **projects**.

The goal for 2024 is to **further increase the number of projects** that will be managed through Digital Solutions and the Digital café, continuing to evolve the Group's digital skills and introducing additional tools capable of making company processes more efficient. During the year, the operating model of the Digital café itself is expected to be completed by introducing application monitoring and management tools through the Microsoft Toolkit.

Corporate digital responsibility

Social		Promotion of digital inclusion and overcoming the digital divide for employees through awareness-raising and training initiatives on tools capable of guiding the digitisation of company processes through the support of a dedicated centre of expertise.
Environmental		Reduction of the use of paper supports through the digitization of processes.
Economic		More efficient and effective use of personnel thanks to the introduction of digital tools: saving resources in terms of process efficiency translates into benefits of economic savings.
Technological		<p>Increase in the quality and security of the data managed thanks to the solutions implemented within the Power platform (going from unstructured and unsecured sources and databases to more solid, robust and secure architectures).</p> <p>Guarantee of responsible use of the new technologies introduced thanks to a competence centre dedicated to overseeing the solutions created.</p>

Digitalisation for our customers and for the local area

The role of Acantho

Acantho, telecommunications operator and cloud service provider, is the **digital company** of the Hera Group. It provides companies and individuals with connectivity, telephony and data centre services with high performance, high reliability, maximum security of systems, data and continuity of the service.

For over 20 years it has been developing a **proprietary ultra-broadband fibre optic network of more than 326 thousand km**, also thanks to integration with the main national and international operators, ensures complete coverage of the area.

Acantho's mission is to help companies achieve excellent results in their business. To do so, it offers itself as a competent, reliable and professional technology partner, providing its customers with state-of-the-art ICT services.

The ownership of the network, together with the **three data centres** in Imola, Sizzano and Santa Lucia di Piave (the latter acquired at the end of 2023), represents the strength of a partner capable of ensuring high levels of performance and security for all the services offered.

Alongside the constant **technological upgrade**, Acantho combines five historical and essential values, central to medium-long term strategies and daily operations: **territoriality, flexibility, transparency, sustainability and innovation**. This makes it possible to offer cutting-edge services and tools for the competitiveness of small and large companies.

Acantho provides information and communication services (ICT) for **individuals** and **companies**, developing its offer in four main areas:

- Data & voice communication: advanced voice services and solutions for data traffic, with high standards of security and performance;
- Hybrid multi-cloud: reliable, secure, easy to manage, and flexible cloud services thanks to the three data centres in Imola, Sizzano and Santa Lucia di Piave;
- Cyber & physical security: protection services against cyber-attacks and physical security aimed at preserving business continuity;
- Smart solutions: technological and innovative solutions using artificial intelligence, the Internet of things, data analysis and other advanced technologies to improve efficiency, automation, security and quality of service.

Acantho also coordinates the needs of Hera Group companies and business units. In particular, in 2023 activities continued for the **technological renewal, extension and enhancement of the Hera Group network**, which during the year exceeded 260 active locations on the management network alone.

During 2023, the centralised infrastructure for the deployment of Wi-Fi 6 access points for the Group's main offices was implemented. The field activities will be implemented according to a schedule planned for 2024, significantly improving the performance of the wireless networks in terms of speed and latency.

Activities also continued in 2023 to support the **migration to the Group's cloud services** on the Azure Microsoft and Amazon Web Services platforms, both of which are interconnected to on-premise environments in Acantho's data centres through dedicated connectivity infrastructure.

2023 also saw the creation of a new service called **Privileged access management** for logical security, to monitor and protect privileged access to Group systems. The first activation concerned the systems of the Central Innovation Department; in subsequent years, it will be progressively extended to other departments.





During 2023, the activation of the new **"OT Security Platform"** service was completed, contracted with six Group companies and deployed through nine probes using Nozomi technology that monitor the Group's main remote control networks. In addition, a first batch of **XDR** (eXtended Detection and Response) **agents** was activated for server security monitoring. The deployment of agents will continue throughout 2024, thus effectively complementing the other cybersecurity services in place for the Group.

The foundations have also been laid for the massive deployment of the new **Voice4Teams service**, i.e. the integration of the Acantho voice service with the Microsoft Teams collaboration environment managed by the Central Innovation Department, completing a path that began in 2022 with the introduction of the Microsoft Teams Room service in the meeting rooms located in 37 Group offices. The Voice4Teams service will allow the Group's employees to use their landline directly from the Teams client on a PC or mobile device, without the need for a physical telephone and a consequent reduction in the environmental impact of the devices.

Other internal projects supported by Acantho are:

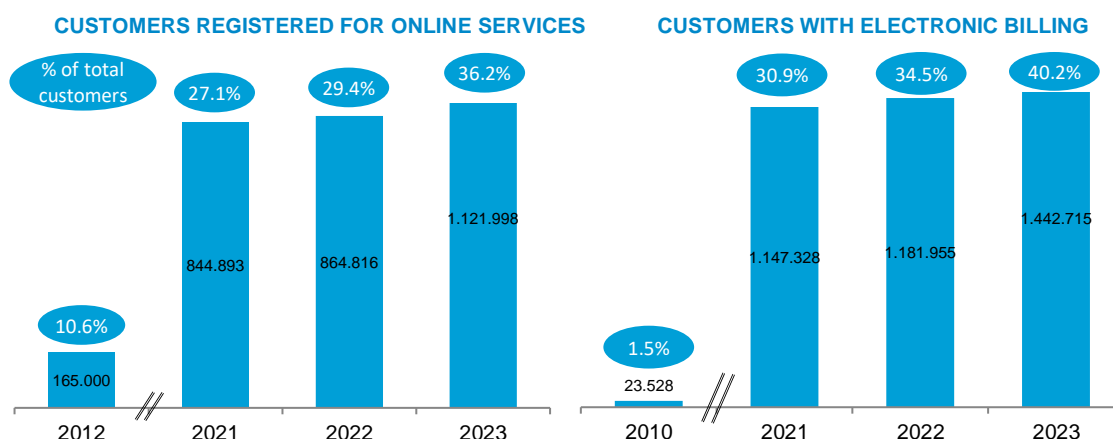
- market: the **technological evolution of customer branches** continued, in line with the restyling and implementation programme for new customer branches. Of particular importance was the activation of the "Virtual Guard" service for five EstEnergy branches in the provinces of Treviso and Vicenza.
- corporate services: strengthening the **physical security of offices and production facilities**. During the year, 23 new physical security countermeasures were implemented for the Group's plants;
- digital newsstand: a service that allows **newspapers and magazines to be used in digital format**, with additional search and content sharing functions; in 2023 this service was used by 16 business units of the Group.

How does the initiative contribute to responsible digital transformation? The benefits we obtained in the Corporate digital responsibility dimensions

Social		Guaranteed quality of cloud services for customers and responsible and secure data management. Support to initiatives for the physical safety of offices and plants, as well as for the logical safety of networks relating to essential services for the area served. Improvement of connectivity, in order to reduce the digital divide for workers and companies.
Environmental		Energy savings thanks to the implementation of efficiency solutions and the purchase of green energy for the part that exceeds self-production. Lack of paper consumption thanks to the digital newsstands and electronic billing services.
Economic		Offer of latest technology services and tools for greater competitiveness of client companies.
Technological		Creation of works and services in favour of greater connectivity of the area served (companies and residents), capable of promoting smart city services within an inclusive digitalisation process. Business activities to guarantee and enhance the safety of IT networks.

Digital channels for our customers

The Hera Group continues to help its customers become more digital, both by developing and updating its online services and by providing applications for tablets and smartphones (Rifiutologo, Acquologo, MyHera, Hera 2G).



The data up to 2022 does not include Eco Gas and Con Energia. The data does not include the company AresGas.

In 2023, **customers registered for online services at Group level were 36.2%**, recording an increase of almost seven percentage points compared to the previous year (29.4%). In detail, users registered for online services at Hera Comm increased to 41.6% and those at Estenergy to 36.8%. The growth trend towards digitalisation also continued for AcegasApsAmga customers with 14.6% subscribing to online services (+20% compared to the previous year) and for Etra Energia with 35.8% (+7%). However, Marche Multiservizi with 11.2% and Hera Comm Marche remained stable.

As of 2023, **40.2% of the Group's customers have chosen to receive their bills electronically** by email, an increase of almost six percentage points compared to 2022 (34.5%). In detail, as of 2023 customers who have chosen the electronic format for their bills are 45.6% of Hera Comm customers, 35.4% of EstEnergy, 29.3% of Hera Comm Marche, 31.6% of Etra Energia, 28.7% of AcegasApsAmga and finally 16.3% of Marche Multiservizi.

The goal for 2027 is to reach 45% of customers with electronic billing.

For the customers of Hera Comm, Hera Comm Marche, EstEnergy and Marche Multiservizi who have not chosen the electronic format but delivery by ordinary mail, the bill is still **printed on recycled paper**. AcegasApsAmga instead opts for Fsc (Forest stewardship council) certified paper, i.e. from **responsible supply chains**.

Actions to **promote the digital behaviour of the Group's customers** also continued in 2023.

The **Digi e Lode project**, now in its seventh edition, has been extended to various areas, achieving **total area coverage of Emilia-Romagna, Marche and Abruzzo** (see the case study "[Digi e Lode, for more digital services and schools](#)" in the attachment for more details). The project aims to **promote digital services**, such as electronic billing, online services, applications for mobile devices, and the use of digital self-care areas.

Hera has signed several cooperation agreements with major banking players (Unicredit, CBILL, MyBank, Bancomat Pay, Amazon Pay, Paga con Postepay, and Satispay) to develop services that will significantly **simplify payments** and the related accounting management.

Under the agreement with **Unicredit**, **15 million dedicated virtual IBANs** have been generated that Hera, the **first company in Italy to do so on a large scale**, has made available to all customers through a notification on the bill, or on the invoice. Customers can thus pay conveniently from their own internet banking service, without queues, and with automatic and unique identification of the payment.

In addition to the virtual IBAN system, Hera is developing **additional smart and mobile payment methods** for its customers, such as digital wallets, to make transactions increasingly simple, quick and user-friendly. Specifically, **MyBank** supports making irrevocable online transfers simply and securely using the Internet banking service of the customer's bank. The service provides real-time confirmation of payment and 100% automatically speeds up reconciliation processes, and further reduces the risk of fraud. The **CBILL service**, on the other hand, using an innovative and advanced, multi-bank and multi-channel approach, enables customers to pay using their own **internet banking service**, and also using mobile devices, at ATMs and branch offices, providing security for the payer, real-time reporting, and complete and integrated coverage of the entire bill collection process, from the issue of the notice to reconciliation.




Using the **MyHera app** or the Group's **online services**, customers are also able to pay bills by simply entering their mobile phone number in **Bancomat Pay**, without having to enter their credit card or bank account details.

In 2022, the Group's online services and the MyHera app introduced bill payments using the **pagoPA** method for electricity, gas, water, district heating, and waste services provided by the Group. This change allows the Hera Group to comply with current Italian legislation.

Lastly, the **digital wallets** Amazon Pay (bill payment through an Amazon account), Pay with Postepay, Apple Pay and Satispay simplify payments via mobile devices or desktop computers, providing a simple and fast user experience.

The initiative is part of the broader **infrastructure and services digitalisation process** that the Hera Group started some time ago, with the aim, among other things, of addressing the needs of an increasingly "connected" and demanding public. This roadmap is fully consistent with the European Union's strategy for creating a digital single market based on three pillars: improving online access to goods and services for consumers and businesses, creating an environment conducive to the development of digital networks and services, and maximising the growth potential of the digital economy.

How does the initiative contribute to responsible digital transformation? The benefits we obtained in the Corporate digital responsibility dimensions

Social		The multi-channel approach offered for digital payments allows the customer to manage payment transactions in a flexible and autonomous way, involving a wider user audience and thus reducing the potential risk of digital divide.
Environmental		Less use of paper for printing bills and less need for transport thanks to the digitisation of the payment process.
Economic		Development of collaborations with the main banking players and consequent simplification of payment transactions. Efficiency of operating processes with reduction of costs related to the dematerialisation of bills and less travel required.

Cyber security

The year 2023 was characterised by a continuous increase in cyber attacks globally, which in Italy were higher than the world average (Source: Clusit Observatory - Annual Report on ICT Security in Italy). In addition to the effects of international geopolitical instability, which has increased cyberwar actions, with a particular focus on the **energy sector** and **national critical infrastructures**, malicious actions have continued, generating a increase in cybersecurity incidents in all sectors.

In view of this external context, also characterised by the numerous bulletins issued by the National Cybersecurity Agency, and in consideration of the Hera Group's businesses, in 2023 the **alert levels of cyber security monitoring** were maintained high, with a consequent increase in the management activities of anomalous events by the Group Security operation centre.

Initiatives to improve the Group's cybersecurity continued in 2023, maintaining a balance between the **macro-environments** relating to **technologies, processes and people**, and increasing coordination between the initiatives of individual IT and OT managers and initiatives of the Group.

Cyber security infrastructures and systems (technologies)

As far as **technology** is concerned, a constant improvement and refinement of technical capabilities by solution providers is observed, together with the proliferation of innovative start-ups that focus on the protection of specific areas, both IT management and industrial OT. A relevant aspect concerns the integration of **artificial intelligence-related functionalities** even solutions that have already been established, in order to enhance protection capabilities (although this entails an increase in operating costs).

In 2023, a platform dedicated to **monitoring the Group's cloud environments** through the execution of operational tests (proof of concept) was also identified, and a solution capable of covering the company's cloud services, centralising the reporting of anomalies to the Group's Security operation centre, was selected and activated.

It is also worth mentioning the start of the project to **analyse the cybersecurity of Shadow-IT systems**: in previous years, numerous IT systems defined as 'Shadow' (i.e. not formally managed by an IT or OT manager) were identified, and the project aims to analyse them in order to implement appropriate security measures to protect the Group's central systems. The project was launched and, after an initial overall analysis, a first batch of the identified systems (15% of the total systems identified) was covered. During

2024, the analysis of the Shadow-IT systems identified in previous years will continue to identify and implement the relevant measures to protect the Group's central systems.

As part of the extension of the monitoring capabilities of the Group's Security operation centre, **new probes were introduced** in 2023 in both the OT and IT environments, and the coverage of some probes already installed in previous years was extended. The convergence path of centralised monitoring of IT and OT environments continues and is accompanied by the subjugation of new sources, such as agents on smartphones and tablets introduced the previous year. In the course of 2024, the path of extension and convergence of the Security operation centre to cover the IT and OT environments will continue, in particular by improving monitoring in the OT environment and subjecting ever-increasing number of the Group's systems to it.

Security by design and cyber security monitoring (processes)

During the year, the three **main procedures for managing the Group's cybersecurity** concerning systems, networks and users were **reviewed** and shared with all IT and OT managers, and the formalisation process was started. The revision mainly concerned the **cloud** computing, in addition to other more technical aspects linked to increasingly rapid technological developments (e.g. the possibility of adopting solutions that do not require explicit password entry, or the **introduction of artificial intelligence** in the Group's IT applications).

As part of monitoring, vulnerability assessments were performed on the **outside of the Group** during the year, i.e., scans of all public and exposed IP addresses on the Internet with the aim of identifying vulnerabilities on systems and devices in production. Two targeted cybersecurity assessments were also carried out on **industrial plants and physical sites** in order to highlight possible security holes that could affect the operations of the plant or the propagation of potential cyber attacks to the rest of the Group. These assessments will also continue in 2024.

As far as the service for monitoring cyber security events carried out by the Group's Security Operation Centre is concerned, regarding the activation of new sources, and also of the external context that records a continuous increase in cyber attacks, it recorded an annual increase in the number of anomalies managed of about 30%. The service, with particular reference to the second level of analysis, was also extended to have **fulltime coverage (24 hours a day)**, thus increasing the overall ability to prevent cybersecurity incidents.



Cyber security culture (people)

Also in 2023, the activity to **increase awareness and culture of IT security** continued, the main defense against the compromise of systems due to the human factor. In fact, campaigns were disseminated **for the entire company population** and specific interventions for technical profiles in the IT and OT fields.

With regard to the first type of initiatives, the promotion of monthly online courses offered to all employees continued, including a small final self-assessment test also useful for the **gamification of training** through a classification by company business groups. The periodic **Ethical phishing campaigns** also continued, with the involvement of about 7,000 employees for each campaign, for a total of over 70,000 e-mails during the year. These activities will continue in 2024.

As regards the activities dedicated to technical profiles, two **incident simulation exercises** were carried out using specific platforms capable of simulating the corporate IT environment and carrying out the actual activities that should be implemented in the event of a real incident in a protected environment. With reference to training in the OT field, two workshops were held for the dissemination of the **technical document on cybersecurity controls in the OT field** created in 2022. The specific training path for the context of cyber security will continue in 2024 in both the IT and OT through incident management simulations and exercises.

How does the initiative contribute to responsible digital transformation? The benefits we obtained in the Corporate digital responsibility dimensions

Social		The training platform dedicated to Cyber Security themes aims to increase user awareness and reduce the risks associated with cyber-attacks, both on a work-related and a personal context.
Technological		All the IT security initiatives are developed to strengthen the processes and skills necessary for the correct use of technologies. In addition, the security by design process, by identifying appropriate security measures, helps to avoid economic impacts due to computer-related downtimes.

[418-1]

CYBER-ATTACKS

	2021	2022	2023
Cyber-attacks and breaches to information systems	1	0	4
<i>of which: breaches involving customer data and information</i>	0	0	1
Customers affected by data breaches	0	0	247
Fines and penalties paid for the attacks and breaches (euro)	0	0	0

Four (**non-serious**) incidents were recorded in 2023, one of which involved personal data of customers of electric charging services: the web portal of an electric charging access service provider was attacked, exfiltrating some personal data. Obviously, all the procedures related to notifying the Guarantor and the data subjects were implemented, as well as the technical procedures for handling the incident.

4.02 Economic growth and social inclusion

Hera's contribution to the economic development of the area

Economic value distributed to stakeholders

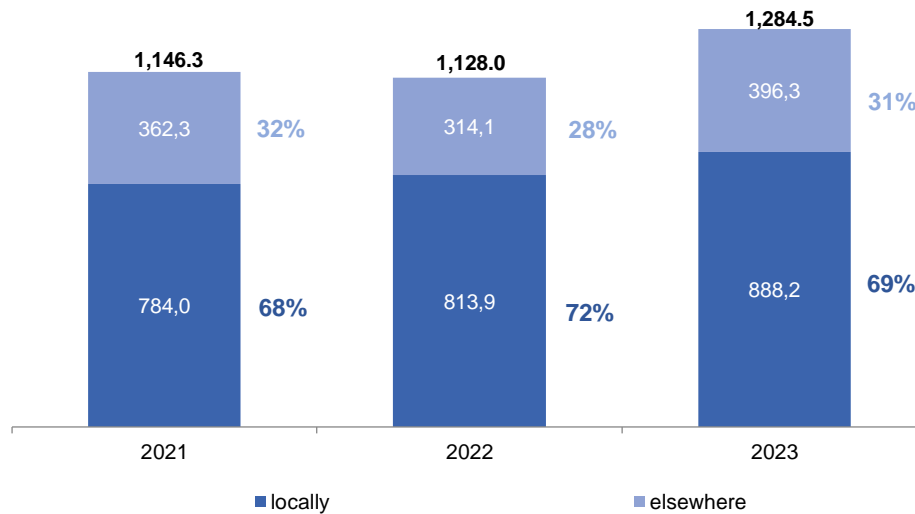
Based on the calculation of distributed added value (see paragraph “[The production and distribution of added value](#)”) it is possible to calculate the share distributed to local stakeholders only (workers, local government, local public administrations and the local community)

In 2023, the **added value distributed to local stakeholders** amounted to 888.2 million euro (+9% from 2022).

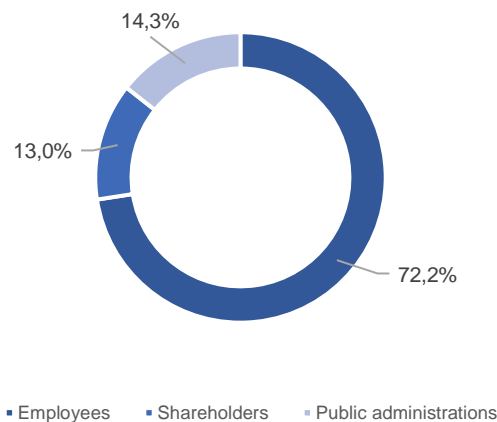
This can be broken down as follows:

- salaries to workers (72.1% of total added value);
- taxes, fees and royalties to local bodies (14.4% of total added value);
- dividends to local Hera Spa shareholders (13.0% of total added value);
- donations and sponsorships (0.5% of total added value).

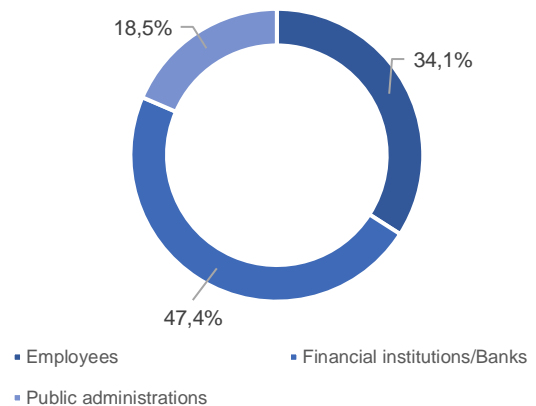
ADDED VALUE DISTRIBUTED (MILLION EURO)



ALLOCATION OF ADDED VALUE TO STAKEHOLDERS (2023)



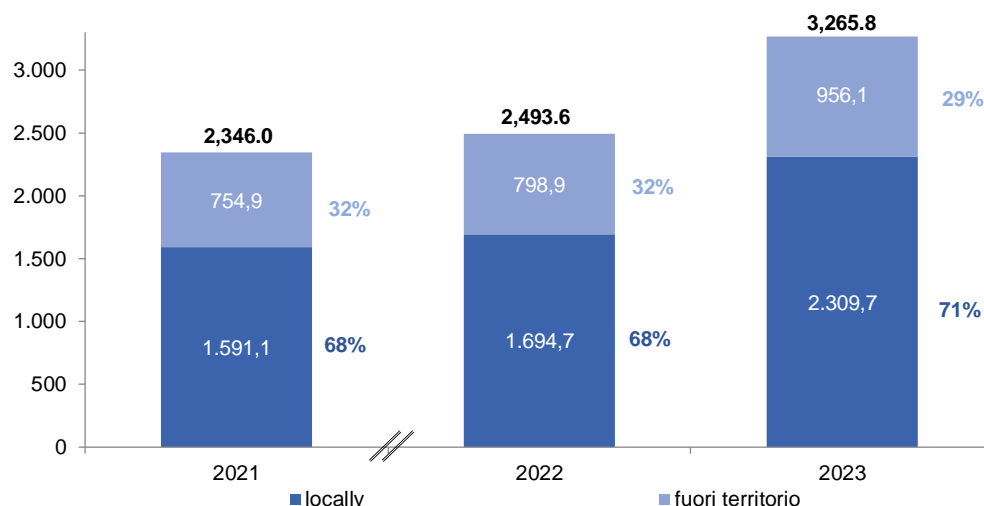
ALLOCATION OF ADDED VALUE TO STAKEHOLDERS (2023)



Including the added value distributed to local area stakeholders. The amount of supplies from local suppliers (which constitute 72% of the group's total supplies at the consolidated level and can be estimated at 1.4 billion euro), the **economic value** that was distributed to the **local area stakeholders** in total in 2023 can be estimated at 2,309.7 million euro (+36% compared to 2022), accounting for 71% of the total wealth produced, which amounted to 3,265.8 million euro. The growth in the economic value distributed is above all attributable to the inclusion of HSE in the scope of the data on the value of supplies, as better described in the section [“Hera's contribution to the economic development of the local area”](#)

[201-1]

ECONOMIC VALUE DISTRIBUTED (MNEURO)



ECONOMIC VALUE DISTRIBUTED TO LOCAL STAKEHOLDERS

million euro	2022	2023	%
Suppliers (value of local supplies)	880.9	1,421.5	61.5%
Employees (salaries for local workers)	601.1	641.1	27.8%
Shareholders (dividends to local Hera Spa shareholders in the local area);	102.6	115.3	5.0%
Public administrations (taxes, fees and royalties to local bodies);	106.4	127.6	5.5%
Local community (local donations and sponsorships)	3.8	4.2	0.2%
Total	1,694.7	2,309.7	100%

If we consider the share of economic value going to stakeholders outside the local area: 58.5 percent was distributed to suppliers; 19.7% to lenders; 14.1% to shareholders; and 7.7 to public administrations.

Note that in the calculation of the added value going to local areas, minority shareholders of subsidiaries were not considered and that, with regard to the dividend distribution of Hera Spa, we refer to the shareholding composition as of the date of the 2022 ex-dividend date.

For detailed information on the distribution of added value and for comments on trends, see the paragraph [“The production and distribution of added value”](#).

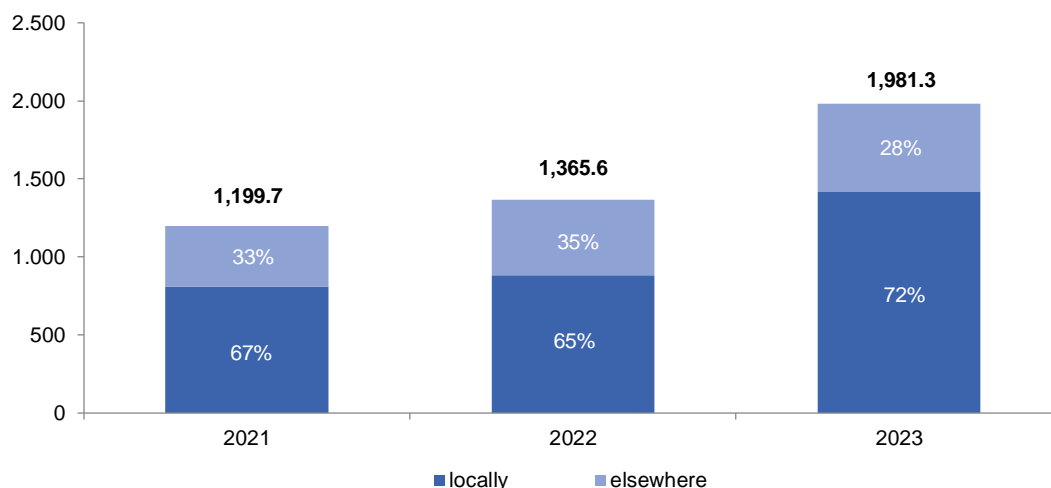
Economic value distributed to suppliers
[203-2]

At the end of 2023, the number of companies supplying the Hera Group with goods, services, professional services and works included in the record stood at 4,001. More than 63% of the companies listed in the supplier registry have sales offices in the reference area (Emilia-Romagna, Triveneto, Marche, Molise and Tuscany).

In terms of **economic value**, on the other hand, the Hera Group commissioned purchases of 1.4 million euro (+61% compared to 2022) from companies that have their business headquarters in the local area (72% of the total). The increase in the value of supplies is attributable to the inclusion in the data perimeter, from 2023, of the company HSE Spa, which has commissioned a high value of supplies to local suppliers as it is active on the 110% bonus front. Net of this change, the total amount commissioned by Hera would be 1,391.9 million euro (+2% compared to 2022).

[204-1]

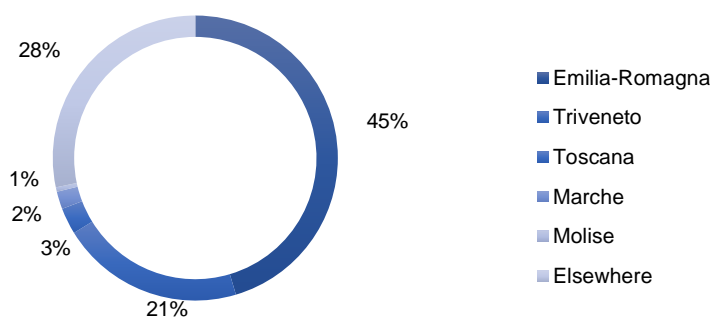
VALUE OF SUPPLIES BY GEOGRAPHIC AREA (MILLION EURO)



Data from 2021 to 2022 do not include Hera servizi energia Spa. The 2023 data does not include the companies A.C.R., Aliplast, Aresgas, ASA, Biorg, Feronia, F.lli Franchini, Green Factory, Hera Comm Marche, Hera Trading, Horowatt, Macero Maceratese, Marche Multiservizi Falconara, Recycla, Tiepolo, Vallortigara, Wolmann; intercompany purchases are excluded.

Over 33 million were purchases from other European countries and 4.3 million from non-European countries (Switzerland, United Kingdom, San Marino, United States, Canada).

VALUE OF SUPPLIES BY GEOGRAPHIC AREA (2023)



The data does not include the companies A.C.R., Aliplast, Aresgas, ASA, Biorg, Feronia, F.lli Franchini, Green Factory, Hera Comm Marche, Hera Trading, Horowatt, Macero Maceratese, Marche Multiservizi Falconara, Recycla, Tiepolo, Vallortigara, Wolmann; intercompany purchases are excluded.

Focus on distributed economic value with donations and sponsorships

In 2023 the Hera Group supported more than 123 initiatives, contributing a total of more than 2.8 million euro to the cultural (exhibitions, theatres, festivals, music, cinema) and sports sectors. Through social campaigns and a dedicated communication plan, the multi-utility promoted initiatives in partnership with the finest expressions of the local area, encouraging participation and increasing accessibility for the greatest possible number of users.

SPONSORSHIPS

thousand euro	2021	2022	2023
Recreational activities	378	179	177
Culture	816	1,087	1,255
Sports	420	654	702
Social	73	104	159
Environmental	155	309	222
Other	191	277	347
Total	2,033	2,610	2,862
<i>of which local</i>	<i>1,965</i>	<i>2,463</i>	<i>2,666</i>
<i>of which non-local</i>	<i>68</i>	<i>147</i>	<i>196</i>

Exhibitions. The Hera Group brand has been combined with some of the most important exhibitions organized in the area. Tra le principali sponsorships: **San Domenico Museum** in Forlì With the exhibition “**L’arte della moda(The Art of Fashion). L’età dei sogni e delle rivoluzioni 1789-1968” (The Age of Dreams and Revolutions 1789-1968)**”.The event was also an opportunity to collaborate on the exhibition with works created by SCART, the Hera Group’s art project. In Bologna, two exhibitions attracted great public interest: “**Only rock’n roll**”, dedicated to Mark Allan, and “**Concetto Pozzati XXL**”, hosted at **Palazzo Fava**. In the halls of the Estense Castle in Ferrara, Hera was the main sponsor of the exhibition “**Il vero ideale**”, dedicated to the twentieth-century artist Arrigo Minerbi.The partnership with the “**Si Fest**” in Savignano sul Rubicone was also confirmed in its second edition with Alex Maioli as artistic director; the famous photographer investigated places on the contemporary fringe by collaborating, through the “**Testimone oculare**” project, with other photographers and inmates of the Forlì prison.

Music, theatres and festivals. Major sponsorships include: support for jazz music seasons with the “**Jazzzer**” project, which brings together three prestigious and historic cultural realities of the Emilia-Romagna Region, and support for the **Porretta Suol Festival**, a European event dedicated to soul music; **A Cielo aperto** show in the Cesena area, which features artists of Italian and international independent music; **Ravenna Festival**, which promotes more than one hundred shows in theatres, sacred places, cloisters and museums in the area of the province of Ravenna; support for the **Ferrara Busker Festival**, the international street musician festival that has returned to the historic centre. The partnership with the latter has made it possible to organise an increasingly green festival where various activities on the environmental sustainability front have been promoted: complete recycling and workshops for adults and children. In the Modena region, the main sponsorships include the event “**I Giardini d’ Estate: di sera con Hera** (The Gardens of Summer: in the evening with Hera)”, a programme of music, shows and reading staged in Modena; the Philosophy Festival dedicated to the theme “**Word**”, with the Hera Group lectio magistralis held by researcher Eva Meijer entitled “**Animal Languages. Towards a communication between species**”, a dialogue in relation to the environment and the climate emergency. In Santarcangelo di Romagna, the multiutility confirms its role as main partner of the historic International Theatre Festival in Piazza, which also promotes **Presente Sostenibile** (Sustainable Present), a series of actions introduced to limit the Festival’s environmental impact and to encourage virtuous behaviour among the event’s audience.

Cinema. Among the main collaborations: support to the Cineteca di Bologna for the festivals “**Il cinema ritrovato**” and “**Sotto le stelle del Cinema**”; also renewed the successful partnership with **Biografilm Festival**. Interest in movie theatres and films is also confirmed through support for initiatives present in other areas, including “**Rassegne itineranti**,” which involves ten municipalities in the Imola area; the Cinema Estivo in Sassuolo, the Rassegna “**La settima arte**” in Rimini and the Porretta Film Festival.

Environment, sports and electric mobility. Among the main sponsorships: partnership with the Hera Group on the occasion of the **Davis Cup**;support for the **Padova Marathon** event, which promoted sustainable behaviour and lifestyle choices that are mindful of resource consumption; participation in the historic Barcolana international sailing regatta in Trieste. Environment and sustainability are also topics addressed in the partnership withthe **Festival Dello Sviluppo Sostenibile** (Sustainable Development Festival), which also made a stop in Bologna; the Group’s presence in support of the **Resilienze Festival** was confirmed, which tackled the theme of environmental sustainability through the languages of art and promoted the Summer School, a training path, with the aim of inspiring change towards an ecological

model of balance between human beings and Nature, between production and consumption systems and the protection of all forms of life on Earth.

The brand's presence is also recognised and appreciated in other excellent initiatives in Emilia-Romagna, Friuli-Venezia Giulia, Tuscany and Umbria and Veneto through the valuable contribution of the Group companies operating in these local areas: Hera Comm, AcegasApsAmga ed EstEnergy.

CHARITABLE GIFTS AND DONATIONS

thousand euro	2021	2022	2023
Recreational activities	4	4	8
Culture	56	247	493
Sports	9	9	22
Social	201	600	726
Environmental	40	47	19
Other	124	288	62
Total	434	1,195	1,330
<i>of which local</i>	<i>303</i>	<i>882</i>	<i>1,279</i>
<i>of which non-local</i>	<i>121</i>	<i>313</i>	<i>51</i>

In 2023, the Group disbursed **more than 1.3 million euro in donations**, 96% of which went to the local area.

These donations are another opportunity to demonstrate **closeness to and supports the local area**. Focus was placed on proposals from entities that can promote the principles of solidarity and social inclusion, spread the culture of participation and promote social cohesion, including through projects aimed at enhancing the value of the environmental heritage.

The tragedy that struck the people of **Romagna** has put the local area and its inhabitants to the test. There have been many evacuees and a great deal of work that the company has had to carry out to restore water, electricity and gas utilities and to recover and dispose of the waste produced by the **flood**. In addition to the work guaranteed through staff and volunteers, the multiutility wanted to participate with a donation in favour of the Civil Protection. In the context of initiatives with a high social value, the company supported the PASS project of the Bimbo Tu Association, which enabled the creation of a reception centre, created to provide free hospitality to the families of young patients hospitalised in the paediatric wards of Bologna's healthcare institutes.

The Group's sensitivity is also demonstrated by the **HeraSolidale** initiative, which promotes solidarity and support for social projects of selected organisations. See the case study "Thanks to the fourth edition of HeraSolidale, 58,000 euro were collected" (chapter "[People](#)").

Solidarity, inclusion and closeness are also broadly centred themes in the "**Psicologo di base**" (Basic Psychologist) **project**, sponsored by the Association Centre for Study and Research in Therapy and Psychosomatics and supported by the Hera Group. It concerns a project to promote people's health, well-being and quality of life that offers a real service desk for residents who wish to schedule free interviews with psychologists within the outpatient clinics of general practitioners in the Bologna area. An experimental service whose growing demand, especially among young people, has enabled it to provide support to more than 94 users in 2023.

In 2023, the multi-utility confirmed its support for entities engaged in inclusion and socialization activities, including the **AiAsport non-profit** association, which offers an equestrian activity service for people with disabilities, and the **Mus-e project** for art programmes aimed at schools located in difficult contexts, aimed at accompanying the child in the discovery of self and of the other, experimenting with different artistic disciplines together with classmates and teachers.

PHILANTHROPIC GRANTS

	thousand euro	2021	2022	2023
Monetary contributions		2,823	4,206	4,438
Time		805	767	653
Donations in nature		756	941	985
Total		4,384	5,914	6,076

Monetary contributions refer to sponsorships and donations, HeraSolidale and Digi e Lode. The "Time" category refers to the hours spent by employees to train their colleagues. The category "Donations in nature" refers to tree planting and the CiboAmico and PharmacoAmico projects.

Taking into account not only sponsorships and donations, but also disbursements related to the HeraSolidale project from Hera Group employees and customers, the in-kind donations from the CiboAmico and FarmacoAmico projects, and valuing in economic terms the hours that employees have devoted to internal training as trainers, it can be said that the total philanthropic activities of the Hera Group in 2023 will amount to over 5.6 million euro.

Hera's contribution towards social inclusion

Social bonuses for families in economic and physical hardship

The **social bonus** is a benefit that **reduces the expenditures** borne by household customers on electricity and gas supply. On 1 April 2022, the amendment included in the Ukraine bis decree (Decree-Law no. 21/2022) came into force, raising the maximum Isee threshold with which it is possible to access the 2022 Bill bonuses, the social electricity and gas bonuses that guarantee a discount on bills for all those households that find themselves in conditions of economic hardship. From 1 April to 31 December 2022, **households with an ISEE up to 12,000 euro** (the previous limit was 8,265 euro), and with an **ISEE up to 20,000 euro in the case of households with more than three children**, could access the bonus bills. As of 2021 (through ARERA Resolution 63/2021), bonus disbursement is no longer linked to a request by the eligible customer but is done automatically through the Integrated Information System managed by the company Acquirente Unico. In fact, it is sufficient for the client to submit the Dichiarazione Sostitutiva Unica (DSU) to INPS for the purpose of obtaining the ISEE. The DSU can be submitted to the entity providing the subsidized benefit, to the municipality, to a Tax Assistance Centre or online to INPS through the dedicated service.

The **electricity bonus** is designed to guarantee savings on the annual electricity bill for two types of households: those in economic hardship and those where a person with a serious health condition lives and is kept alive by household electromedical equipment. In the case of households in economic hardship, for the year 2022, the electricity bonus allows annual savings from a minimum of 713 euro to a maximum of 1,015 euro (in 2021 the annual amount ranged from a minimum of 128 euro to a maximum of 177euro), in the case of households in physical hardship it allows savings from a minimum of 376 euro to a maximum of 1,155 euro (in 2021 the annual amount ranged from a minimum of 189 euro to a maximum of 676euro). These amounts also include the supplementary bonus planned by ARERA era for 2022.

The **gas bonus** is determined differently according to climate zones and allows for the year 2022 an annual saving from a minimum of 13 euro per quarter to a maximum of 2,059 euro per quarter (in 2021 the annual saving ranged from a minimum of 30 euro to a maximum of 245 euro); with ARERA resolution 396/2021, a supplementary bonus came into effect from October 2021 to December 2021, subsequently the amounts were updated by Resolution 635/2021, and also include the supplementary bonus for 2022.

GAS AND ELECTRICAL ENERGY BONUSES DISBURSED

	2021	2022	2023
Number of bonuses disbursed	109,506	228,674	393,411
Value of bonuses disbursed (thousand euro)	10,781	31,845	311,882

The data refer to the year in which the bonuses enjoyed by the customer in the previous year were reported to ARERA.

In 2023, the **gas and electrical energy bonuses** disbursed to Hera Group customers amounted to 393,411 totalling 311.9 million euro (an amount almost tenfold higher compared to 2022. These

considerable changes are due to the increase in the bonus amounts granted, the increase in the ISEE threshold from which bonuses can be accessed, as described above, and the price increase in 2022.

The percentage of electricity and gas contracts that have received at least one bonus stands at 13.2% (vs 7.4% in 2022). The percentage is somewhat higher for gas contracts (13.4%) than for electricity contracts (13%).

Regarding the **water service**, ARERA Resolution 897/2017 established the water **social bonus** for the **supply of water** to resident household users experiencing economic hardship as of January 1, 2018. A subsequent ARERA Resolution 3/2020 updated the Integrated Text of the application modalities of the social water bonus in order to further strengthen the previous support mechanisms for vulnerable consumers. In this regard, as of Jan. 1, 2020, the right to claim the bonus was also extended to those granted a guaranteed minimum income.

WATER BONUSES DISBURSED

	2021	2022	2023
Number of bonuses disbursed	44.423	161.748	136.479
Value of bonuses disbursed (thousand euro)	3.644	19.392	15.471

In 2023, the water bonuses granted to the customers amounted to 136,479 totalling 15.5 million euro. These values are decreasing compared to the year 2022 which included the disbursement of bonuses for the years 2021 and 2022.

For **waste collection services**, a total or partial exemption from payment of the Pay as You Throw Tariff may be granted to individuals experiencing severe social welfare hardship. It is the municipalities that allocate funds for these facilities, based on the income of applicants. In some areas of Emilia-Romagna there are also reductions for families consisting of a single member with a disability or permanent disability, the percentage of which may vary from municipality to municipality.

Starting in 2010, Hera introduced a **bonus** to offset the expense of the **district heating service on a voluntary basis**, to be granted to customers who also meet the income requirements for gas and electricity bonuses. The ordinary bonus for 2023 has a value, for the areas served by the Group, of between 60 and 80 euro per year, depending on the municipality of supply, the economic situation and the size of the household. During the year 2023, Hera introduced, as a measure aimed at coping with the high energy prices for its customers experiencing economic hardship, an extraordinary supplement to the ordinary bonus that redefined the total annual contribution up to a maximum amount of 460 euro for larger households with certain income requirements. At the date of approval of this financial report, an estimated approximately 1,473 applications are estimated for the year 2023 (there had been 1,534 in the previous year) for a total economic value of about 561,000 euro, with a decrease of about -39% compared to the value paid in 2022 (925,000 euro).

The definition of the additional compensation, recognised by Hera (always on a voluntary basis) similarly to the provisions for the gas service, took into account the changed energy scenario compared to the previous year. The district heating bonus met with a number of requests that were on the whole in line with the previous year, confirming itself as an effective tool for customers in situations of economic difficulty, even temporary ones, in line with the Group's Code of Ethics.

Per capita tariff bonuses for water saving and benefits for large households

ARERA 665/2017 resolution With the **per capita tariff for all resident household users** was introduced, which was to be applied in all municipalities.

Starting from 2023, **Hera Spa** has applied a per capita rate structure to resident households based on the actual number of household members per 103 municipalities, accounting for 79% of the households served. For the other 63 pro capita tariff municipalities, Hera applies the tariff breakdown based on the standard number of household members (equal to three).

As of 2023, all 16 municipalities in the **Triveneto** region and 47 managed municipalities in the **Marche** region have switched to the pro capita type tariff.

Hera's initiatives to support users experiencing economic hardship: payments of utility bills in instalments

In the event of a customer's financial difficulty, Hera allows bills to be paid in instalments. For amounts of up to 2,000 euro, **households in economic difficulty** (who are up to date with payments, including those of previously granted instalments) are granted an instalment plan over three instalments with application of an interest rate equal to the Tur (the official reference interest rate at which the European Central Bank grants loans to other banks and equal, from 20 September 2023, to the base rate of 3.50%)

plus 4.5%. For amounts exceeding 2,000 euro and for requests for repayment plans exceeding three instalments, Hera reserves the right to carry out more accurate checks before proceeding to grant the instalment plan. This procedure also applies to professionals and small condominiums. For certain types of customers experiencing hardships (customers who have been laid off, in a redundancy scheme, beneficiaries of the income support fund of the Bilateral Agency of Emilia-Romagna or unemployed as a result of reduction or closure of work activities or workers who are part of a defensive ojob-security agreement, with an hourly reduction of more than 30%) the instalments are extended to six without interest.

Even for the corporate segment, instalment payments can be requested from Hera, which grants it, following a check on the solvency conditions, with customized conditions.

AcegasApsAmga grants the payments of bills in instalments should these be requested. Payment in instalments may be requested through the contact channels indicated on the bill. In case the request is made for bills that have already been the subject of arrears, the instalment plan shall have a minimum duration of 12 months with non-cumulative instalments and a periodicity corresponding to that of billing. Any customized plans of payments in instalments must be requested in writing or otherwise documented, as stipulated in Article 5.1 of ARERA Resolution 311/2019 (Remsi).

In those territories managed by **Marche Multiservizi**, Resolution 655/2015 stipulates that the operator is obliged to grant, upon the customer's request, which must be made by the fifth calendar day prior to the deadline for payment of the same reminder, the payment in instalments of the bill if the latter exceeds by 80% the value of the average charge referred to the bills issued during the last 12 months. Such a request can be submitted to the call centre, customer office, or credit office.

At the discretion of the company, in cases of particular hardship, the request for payments in instalments may be granted under the following conditions:

- the request must be received by the tenth calendar day after the due date of the bill;
- there must be no existing payment in instalment plans for other bills;
- the customer must have settled all previous bills.

It is not possible to proceed with payments in instalments for amounts that are overdue and less than 50 euro if they concern household supplies, for amounts overdue and less than 3,000 euro if they relate to VAT and condominiums, and 50% of the amount must be paid.

For household customers, the number of instalments granted varies, depending on the amount to be paid in instalments, from two to six, and from two to three for those holding VAT accounts and condominiums.

During 2023, **735,586 instalment payments were granted** (more than double compared to 2022), of which 714,693 to mass market customers and 20,893 to business customers. **The total value of the instalments was equal to 339.6 million euro** (+10% compared to 2022). The increase compared to 2022 is related to instalments granted as a form of support to the populations affected by the floods in Emilia-Romagna. The provinces with the strong increase compared to 2022 are Forlì-Cesena and Ravenna, which account for 32% and 30% of total instalment payments, respectively. The overall instalment value without the two provinces mentioned would be equal to 242.8 million eur in 2022 and 230.6 million euro in 2023 (-5% compared to 2022).

The customers who requested that payments be made in **instalments of at least one bill** during the year were **16.8%** of total customers up from 6.5% in 2022. More specifically, 17.6% of residential customers asked for at least one payment in instalments, up from 6.6% in 2022, and 6.3% of business customers asked for at least one payment in instalments, up from 4.6% in 2022. The customers who requested that payments be made in instalments of at least one bill during the year, excluding the two provinces most affected by the flooding, accounted for 9.6% of the total.

The increase in both the number and value of payments in instalments confirms the Group's commitment in terms of granting payments in instalments, which has always been at significant levels over the years. Compared to 2022, the aggregate figure is up overall, both in absolute terms of instalment plans granted, and of customers to whom at least one instalment plan was granted due to the **support guaranteed to the populations affected by the flood**, as described above. However, the overall value paid in instalments, shows a lower percentage increase, due to the **high bills** that occurred in 2022.

NUMBER AND VALUE OF INSTALMENT PAYMENTS

	2022	2023
Instalment payments (no.)	306,517	735,586
<i>of which mass market (no.)</i>	295,141	714,693

	2022	2023
<i>of which business (no.)</i>	11,376	20,893
Instalment payments (thousand euro)	307,614	339,603
<i>of which mass market (thousand euro)</i>	156,237	190,978
<i>of which business (thousand euro)</i>	151,377	148,625
The data does not include the company AresGas. The calculation criteria have been changed from the 2022 Sustainability Report.		

Hera's initiatives to support users in economic distress: preventing the suspension of supplies

The Group's focus on the weakest social groups is also confirmed in 2023, with particular attention to the areas affected by the flood of May 2023, during which year the application of the **Agreement Protocols** continued, aimed at preventing the suspension of services for assisted persons, reported by the social services of municipalities and bodies that deal with personal services. The collaboration activated through these protocols with the social services of municipalities and with entities that deal with services to the people, represents a distinctive element of Hera in the panorama of multi-utilities and sales companies. Hera, has as a matter of fact, for over seven years, established a dedicated channel with operators who offer **support and advice to social workers** through structured forms of facilitation for the segment of the population subject to economic fragility. Collaboration with these entities makes it possible to **avoid the suspension of service or restoration** when interrupted, optimizing the management of financial contributions by the entities themselves. There are a total of 138 municipalities with which a Protocol of Intent has been signed (135 in 2022). All of the provincial capitals in Emilia-Romagna are involved with the exception of Rimini, where energy contracts have a lower impact.

In 2023, a new Protocol was signed in the areas of the Ferrara that had not yet adhered to specific agreements (municipalities of Argenta, Portomaggiore, Ostellato), and renewed all the Protocols with an expected expiry date in 2023, thus consolidating the current scope of application of the Protocols.

The Protocols dedicated to active assisted customers between the Hera Group and the entities responsible for providing personal services, are formal agreements that consolidate the facilitated procedures that Hera dedicates to all customers followed by the social services, but above all they offer an additional tool to safeguard the provision of services to those households reported by the entities. Thanks to the Protocols, Hera, before activating the suspension of customer services, notifies the Entity in advance, adding a further moratorium that allows the Services or the customer himself to be able to manage the debt situation in time to avoid shutting down supplies.

Requests handled in 2023, following reports from social workers, totalled about 13.5 thousand (30% less than in 2022); the synergy between the enlargement of the perimeter of customers with ISEE characteristics eligible to access the energy bonus, the increase in the number of areas adhering to the Memoranda of Understanding, the strengthening of preventive actions dedicated to managing the debt of needy customers, together with the suspension of activities of limitation/closure of services for the second half of 2023 in the local areas affected by the May 2023 flood, favoured a lower request for targeted economic interventions by the authorities. In 2023, **the percentage of suspensions avoided was 80%** (it was 58% in 2022). Protocols were also updated in the municipalities of Trieste and Padua.

By 2024, it is envisioned that new municipalities (Upper and Lower Ferrara area, Po Delta and Bologna metropolitan area) will be proposed to sign Protocols of Understanding.

As far as Hera and AcegasApsAmga are concerned, in the event of non-payment of the bill, it is contractually stipulated that the provision of the service covered by the supply contract may be suspended.

In the case of **gas, electricity and district heating** customers, the procedure involves sending an initial reminder by regular mail after about 20 days from the due date of the bill only in the case of good-paying customers and with debts of less than 150 euro, and the subsequent sending, after an additional 20 days, of a registered letter with return receipt or PEC (certified e-mail) if available, in which the risk of suspension of service is communicated. In the case of non-payment, following 40 days after delivery of the registered letter with return receipt (or 25 days for customers with low-voltage electricity supply), the supply is suspended. On average, in those cases of debts amounting to less than 150 euro, therefore, suspension takes place about three months after the bill is due. If the invoice subject to the reminder is more than 150 euro, a single reminder shall be sent, by registered mail with return receipt or PEC (Certified e-mail) if available, in which the risk of suspension of supply is communicated. Again, suspension of supply can also occur 40 days after delivery of the registered letter with return receipt (or 25 days for customers with low-voltage electricity supply) and approximately two months after the bill is due.

Should the suspension of supply not be possible (e.g., inaccessible meter), further notice shall be sent to the customer to inform him/her of the interruption of supply (disconnection of power supply) in case of non-payment within the specified time. In the event that the interruption is also technically infeasible, it is the vendor's option to proceed with contract termination by activating the services of last resort.

Based on the provisions of the Regulation of Arrears in the Integrated Water Service (Remsi), in all the served territories of Emilia-Romagna, Triveneto and Marche, as far as **water** supply is concerned, the procedure involves sending an initial reminder by registered letter with return receipt or PEC (Certified e-mail) if available, after about 12 days from the due date of the bill in which the risk of service suspension is communicated and the subsequent sending after a further 15 days of a registered letter with return receipt or PEC if available, in which the risk of service suspension is communicated. Hera on the basis of what is governed by the Remsi and the regulations, after 40 days from the receipt of the amicable reminder, for household users, shall proceed to the operations of supply restriction, and in case restriction is not possible for technical reasons, which must be reported to the user in a special letter, it shall proceed to suspension; in case of non-household users, it shall proceed directly to suspension or closure of the street valve if suspension is not possible.

In the period prior to the suspension of supply, the customer can always request that the bill be paid in instalments.

All initiatives to support families experiencing economic hardship are summarized in the **SOSTegno Hera guide** which is available on the Group's website and periodically updated. The guide contains all the information needed to learn about opportunities to curb spending on energy and water services, reserved for Hera Spa and Hera Comm customers experiencing economic hardship or physical difficulties. It is an easy-to-follow reference tool, which also provides information on how to obtain payment in instalments of bills and what to do if you are late in making payments. SOSTegno Hera indicates the requirements, methods and economic value of social bonuses for electricity, gas, water and district heating, and what to do in the event of water leaks on the network downstream of the meter. Finally, advice is provided on good practices to curb consumption.

Furthermore, there is additional guidance focused mainly on electricity and gas supplies: **SOSTegno Energia**, which can also be consulted online, in addition to numerous energy-saving tips, describes the means and opportunities available to Hera customers to monitor their consumption and adopt the right behaviours in order to reduce waste and curb consumption and spending. The guide also mentions the 'Energy Tutor' project, continued throughout 2023 in the areas of Modena and Ferrara, which provides for the training of representatives belonging to associations in contact with the most vulnerable subjects on energy consumption and analysis of energy needs. See the paragraph "Relations with the local community" for further details.

The Hera Group, even in 2024, will continue to guarantee installments and other voluntary facilities dedicated to customers in economic difficulty.

Job placement through social cooperatives **[203-2]**

In 2023, the **value of supplies** for types of works or services requested by Hera Group from social cooperatives amounted to approximately **92 million euro** (+12% compared to 2022). The 10% increase compared to the 2022 figure derives from the progressive implementation of the activities of the Atersir concessions for environmental services in the Modena, Bologna-Imola and Ravenna-Cesena areas. In 2023 the turnover of social cooperatives working on behalf of AcegasApsAmga increased compared to previous years, thanks in particular to the environmental services carried out in the provinces of Padua and Trieste. In Trieste in particular, social cooperation workers are also employed in the maintenance of public green areas and in cemetery services

About 91 million euro are related to the provision of **environmental services, and these are both contracts to social cooperatives and partnerships between Hera and social cooperatives**. Supplies and partnerships involved 57 cooperatives and consortia of social cooperatives in total (+29% compared to 2022), with the employment of 962 disadvantaged people (pursuant to Art.4, Law 381/91). At the territorial level, there were 805 people placed in the Emilia-Romagna area, 102 in the Triveneto area and 55 in the Marche region.

SUPPLIES FROM SOCIAL COOPERATIVES

	2021	2022	2023
Social cooperatives or consortia (no.)	61	44	57
Supply value (thousand euro)	72,253	82,302	91,951
Disadvantaged individuals placed (no.)	882	899	962

The disadvantaged persons placed included workers employed for periods of less than a year. The data include job placements related to partnerships between Hera and social cooperatives, i.e., temporary business groupings for the management of environmental services in which Hera Spa is the agent.

The “Valoris” economic valuation model developed by the University of Brescia in 2013 makes it possible to measure the value created by job placement social enterprises, based on the results of empirical research. In particular, the model makes it possible to quantify **the economic impact for public administrations** resulting from the social placements made by B-type social cooperatives. The study shows that the benefits are mainly derived from lower welfare costs and higher tax revenues, determined by the payment of taxes on the employment income of disadvantaged individuals. The reduced revenue to the state from the tax and contribution exemptions enjoyed by B-type social cooperative were deducted from the benefits. All this translates into a benefit to the public administrations of an average of 4,209 euro per year per disadvantaged person. The economic benefit to public administrations from the Hera Group’s contracting of social cooperatives for the year 2023 can thus be estimated at more than 4 million euro.

Hera helped insert a specific clause in the national collective agreement for environmental services (renewed in July 2016) in order to safeguard outsourcing in favour of social cooperatives. This clause stipulates that a **portion of outsourcing** for sweeping, waste collection, waste transportation, and cesspool and dumpster cleaning activities will be excluded from the obligation to apply the national contract for environmental services, through the definition of social inclusion projects. This quota is 5% and may be raised at the company level to 15% at company level and must be calculated with reference to personnel expenses only. Hera applies the 15% quota in accordance with the agreement signed in March 2012 with the trade union organizations and with the Group’s trade union coordination.

Protected categories among Hera’s workers

Hera complies in all provincial areas in which it operates with the obligations arising from Law 68/1999, which establishes to a defined **extent the mandatory hiring of personnel belonging to protected categories**.

The regulations on the right to employment of people with disabilities, stipulate that companies that due to the special conditions of their business cannot employ the full percentage of eligible workers (persons with disabilities) may apply for **partial exemption** from the obligation to hire on condition that they pay to the Regional Fund for the Employment of the person with disabilities a sum equal to 39.21 euro for each worker not employed and for each working day not worked; the maximum percentage that can be authorized is 60 percent. Hera also takes advantage of this option, which specifically provides for payments by individual Group companies to the provinces in which there is a smaller proportion of persons with disabilities with respect to legal obligations.

According to the legislation, which is aimed at promoting the inclusion and integration of certain categories of people (the disabled, orphans, etc.) into the world of work, the worker’s placement path takes place with solutions that are mutually agreed upon among the company, territorial employment centre and the worker himself.

With particular reference to the environmental services sector, the Group is committed to continuing to promote the employment of disadvantaged people.

At the end of 2023, **356 people belonging to the categories protected by Law 68/1999** were working in Group companies, of whom 307 (225 in Hera, 52 in AcegasApsAmga, 30 in Marche Multiservizi) were present pursuant to Art. 3 of the law (disabled).

PERSONS BELONGING TO THE CATEGORIES PROVIDED FOR IN LAW 68/1999

Number	2021	2022	2023
Persons belonging to the categories provided for in Law 68/1999	357	324	356

This data does not include the companies: Etra Energia, Recycla, Vallortigara and Wolmann. 2% of the Hera Group’s employees work in the aforementioned companies.

4.03 Job creation and development of new skills

Hera's contribution to increased employment

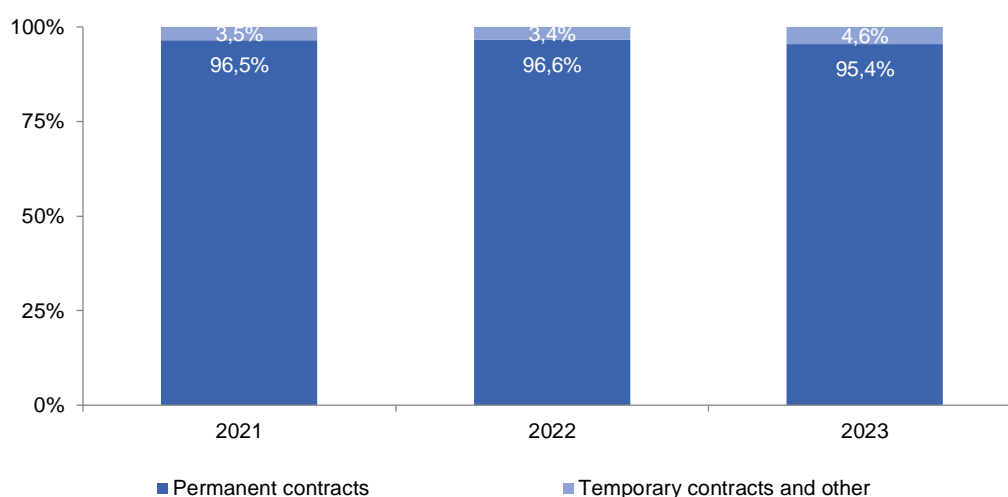
The importance attributed by the Hera Group to employment growth, as discussed in this paragraph, is not only reflected in the number of employees hired by the Company, but also in the creation of indirect employment and in the development of social responsibility initiatives in procurement procedures. By adding the workforce employed in supplier companies to the number of the Group's employees, the **overall number of personnel exceeds 21,000**.

Stable
employment and
turnover
[401-1]

95.4% of the Group's workers are employed on the basis of permanent contracts.

Compared to 2022 **the number of permanent workers has remained stable**, thanks to the consolidation of employees who previously had a fixed-term contract within the Group. The slight decrease was mainly due to the entry of A.C.R., which uses a higher percentage of fixed-term workers than the Group average for the business in which it operates.

AVERAGE NUMBER OF EMPLOYEES



10,010 employees work at the Hera Group, of which 9,547 are **permanent employees**, 376 **temporary employees** (3.7%) and 87 **non-subordinate employees** (approximately 0.9%), hired in accordance with other flexible employment solutions (contract-based employment agreements).

These numbers confirm the Group's firm intention **to limit the flexible solution formula to ad hoc urgent circumstances** only (season-based needs, special and temporary work peaks and temporary replacement of workers on leave). In any case, employees hired on the basis of flexible solutions constitute a priority recruitment pool for permanent contracts.

ENTRIES IN THE YEAR BY QUALIFICATION

Number	2021	2022	2023
Managers	1	1	4
Middle managers	15	6	20
White-collar workers	321	343	548
Blue-collar workers	324	334	486
Permanent employees	661	684	1,058
<i>of which for company acquisitions</i>	<i>185</i>	<i>52</i>	<i>400</i>
Temporary Employees	301	342	591

Number	2021	2022	2023
Contract-based Employment Agreements (temporary)	109	93	109
Seasonal Employees and Apprentices	0	0	0
Permanent employees	410	435	700

In 2023, 1,058 **permanent employees entered**, of whom 312 as a result of consolidation process from fixed-term contracts and 400 as a result of changes in the company perimeter (entry of the companies A.C.R. 330, former Asco TLC 31 and F.Ili Franchini 39 in the scope of consolidation).

External recruitment mainly focused on highly skilled personnel (both specialised and assigned to operations) who are otherwise difficult to find internally.

In 2022, **there were 647 permanent workers**, of which 52 following changes in the scope of consolidation (inclusion of companies Biorg, Macero Maceratese and Con Energia into the scope of consolidation). In 2021, the number was 661, of which 185 following changes in the scope (entry of the companies Eco Gas, Recycla and Vallortigara into the scope of consolidation).

In the last three years there have been a total of **2,403 permanent entries** (including changes in the company scope).

WOMEN HIRED WITH PERMANENT CONTRACTS DURING THE YEAR BY QUALIFICATION

Number	2021	2022	2023
Managers	0	0	0
Middle managers	3	2	3
White-collar workers	144	153	142
Blue-collar workers	2	5	3
Total	149	160	148

In 2023, **148 female workers hired with permanent contracts**. As far as Executive, Manager and Clerical Staff categories, the percentage of new permanent employees was 41%, of a total of 353 permanent hires.

ENTRIES DURING THE YEAR BY AGE GROUP AND GENDER

Number	2021			2022			2023		
	F	M	Total	F	M	Total	F	M	Total
Younger than 30 years of age	117	257	374	138	291	429	174	342	516
Between 30 and 50 years of age	129	488	617	138	471	609	193	803	996
Older than 50 years of age	10	70	80	8	73	81	22	224	246
Total	256	815	1,071	284	835	1,119	389	1,369	1,758

Data refer to total open-ended and fixed-term contract employees.

There were 516 new hires concerning personnel under the age of 30 (87 more than in 2022), , 996 between 30 and 50 years of age (387 more than in 2022) and 85 over 50 years of age (24 more than in 2022).

QUITTING PERMANENT EMPLOYEES BY REASON

Number	2021	2022	2023
Voluntary resignation	182	223	240
Retirement	326	335	342
Death	12	15	15
Termination	17	26	20
Job Description Mismatch	10	9	16
Transfer to other Companies/Demergers	1	5	0
Total	548	613	633

In 2023, 633 employees left the Company, a 3% increase compared to last year, 54% of which resulting from **retirement**. The figure is up slightly compared to 2022, as are voluntary resignations.

OUTGOING PERMANENT EMPLOYEES BY AGE GROUP

Number	2021	2022	2023
Younger than 30 years of age	22	45	35
Between 30 and 50 years of age	123	154	180
Older than 50 years of age	403	414	418
Total	548	613	633

In 2023, the number of employees under the age of 30 who left the Company decreased by 28% on the total compared to the 2022 figure, while between 30 and 50 years of age it increased by 17%. In 2023, most of the employees who left the Company belonged to the 50+ year category.

EMPLOYEE TURNOVER RATE BY QUALIFICATION

%	2021	2022	2023
Managers	5.9%	5.3%	5.7%
Middle managers	4.3%	3.4%	6.6%
White-collar workers	5.4%	5.8%	5.1%
Blue-collar workers	7.3%	8.7%	8.9%
Average	6.0%	6.7%	6.6%

EMPLOYEE TURNOVER RATE BY GENDER

%	2021	2022	2023
Men	6.8%	7.7%	7.5%
Women	3.8%	4.0%	4.1%
Average	6.0%	6.7%	6.6%

EMPLOYEE TURNOVER RATE BY AGE

%	2021	2022	2023
Younger than 30 years of age	3.7%	7.1%	6.2%
Between 31 and 50 years of age	2.7%	3.3%	4.3%
Older than 50 years of age	9.5%	10.1%	8.6%
Average	6.0%	6.7%	6.6%

The **turnover rate** is calculated by dividing the number of employees who left during the year by the number of permanent employees at the end of the year: in 2023 it is equal to **6.6%**, a slight **decrease** compared to the previous year.

The cluster most subject to turnover is the male population over the age of 50, a phenomenon in line with the trend of recent years due to retirement. The percentage of the **turnover rate** of employees **under the age of 30** is decreasing.

Considering the disclosure requirement S1-6 - Characteristics of the company employees, as required by the new European ESRS standard, the **turnover rate** for the year 2023 **was 6.2%** of permanent employees. This indicator is calculated by dividing voluntary quitting, layoffs and retirements by the total number of employees at the end of the year.

The **hiring rate** is calculated by dividing the number of hires during the year by the number of permanent employees at the end of the year divided by age group, gender and geographical area. For 2023, this index is **6.8%** (7.3% for men, 5.6% for women, 33.4% for employees under 30, 10% for those between 31 and 50 and 1% for those over 50).

Employment generated indirectly by suppliers

[2-8]

To comprehensively assess the social impact of the Hera Group on the country, it is also useful to consider the **employment generated Indirectly by suppliers** procuring goods, services, professional services and work, which can be estimated within the workforce of suppliers who carry out activities on behalf of the Hera Group.

In 2023, the estimated employment generated indirectly by suppliers amounts to **over 11,400 jobs**, of which 7,361 in Emilia-Romagna, 1,925 in the Triveneto region, 178 in the Marche region and 2,001 in other non-managed areas. Approximately 83% of such indirectly-generated employment concerned the Group's areas of operation.

This figure was obtained by analysing the Financial Statements of the main suppliers of the Group and of the temporary business groupings in which Hera Spa is a partner, which cover approximately 60% of the volume purchased in 2023. To estimate the employment generated by suppliers, we considered the **ratio between the value commissioned by Hera and the suppliers' total turnover**: this percentage was multiplied by the total number of employees declared in the suppliers' Financial Statements.

Social responsibility in procurement

The employment impact of the Hera Group also derives from concrete actions of social **responsibility as it pertains to procurement contracts**, which the Group has continued also in 2023, in line with the principles of the Group's **Code of Ethics** and with attention to working conditions in the supply chain.

2023 was also characterised by the application of the **Memorandum of Understanding on tenders (Procurement Protocol)**, entered into on 26 October 2016 between the Hera Group and the National Trade Union Organisations representing the relevant employment categories. The Protocol has a binding/contractual value between the Hera Group and Trade Union Organisations, entailing an obligation for the Group to implement the provisions set forth in the Protocol as it pertains to procurement activities.

The Procurement Protocol, in addition to providing for specific National Collective Labour Agreements to be applied to the main company activities, also deals with regulating issues related to **employment continuity** by providing for the "voluntary" application of the **social clause** (i.e., when not required by National Collective Labour Agreements), in particular in regulated and labour-intensive sectors, in work and service contracts relating to post-first intervention activities, networks and services related to the management of the relationship with end customers (consumption readings and metre-support activities). The social clause requires a new contract awardee to make a **job offer consistent with the overall conditions in place at the time of contract change** (such as salary and professional requirements, as well as duration of the contract) to permanent staff who are directly and mainly assigned to contract duties and who are employees of the outgoing contractor, in the 90-day period prior to the

takeover of new management. In all other cases where a so-called “change of contract” occurs, i.e. where it is a replacement for a corresponding contractual relationship that is expiring and objectively similar in scope to the existing one, and whose labour costs is greater than 50% of its total financial value, it is necessary to schedule a preventive meeting between the outgoing contractor, the incoming contractor and the competent trade union organisations for the purpose of evaluating every possible solution intended to **protect employees (absorption project)**.

It should also be noted that in 2023, the **new Public Contracts Code** (Legislative Decree 36/2023) came into force, which, in continuity with the previous regulatory framework, consolidates and strengthens even more the provisions on the **protection of the personnel of contracting and subcontracting companies**. One of the “General Principles” set out at the beginning of the Code is Article 11, which establishes that in the notices and invitations the contracting stations must indicate the **CCNL applicable** to the employees employed in the contract. In addition, Article 57 further develops the aforementioned principle, providing that the awarding of contracts for works and services other than those of an intellectual nature must contain specific **social clauses** aimed at guaranteeing, not only **employment stability** as in the previous Legislative Decree no. 50/2016, but also **equal** gender and generational **opportunities** and the **employment inclusion** of disabled or disadvantaged persons.

The indication of the national and local area collective labour agreements of the sector must be made taking into account, in relation to the subject matter of the contract and the services to be rendered, those stipulated by the associations of employers and employees that are comparatively the most representative at the national level and those whose scope of application is closely connected with the activity that is the object of the contract carried out by the company, even in a prevalent manner. A generic reference to the principle of a close connection with the activity that is the subject of the contract is therefore no longer permitted, as was possible in the previous regulatory context, but the reference collective agreement must be specifically indicated. In order to guarantee entrepreneurial freedom, economic operators are allowed to indicate, in their offer, a different CCNL. applied by them, as long as they demonstrate that the same guarantees their employees the same economic and regulatory protections as the one indicated by the Contracting Authority.

It is also envisaged, for the tenders to be awarded with the criterion of the **most economically advantageous offer**, the possibility of establishing reward criteria oriented to promote the employment inclusion of persons with disabilities, gender equality and the employment of young people and women (see Attachment II.3, paragraph 4, the Public Contracts Code). In particular, in order to promote gender equality, the Public Contracts Code has made it compulsory to provide, pursuant to Article 108, paragraph 7, last sentence of Legislative Decree No. 36/2023, for the attribution of a reward score to the economic operator's adoption of policies aimed at achieving gender equality, in compliance with the principles established by Article 46-bis of the equal opportunities code under Legislative Decree No. 198/2006. In order to combat irregular work, it is expected that the same economic and regulatory protections must be guaranteed to employees employed by subcontractors as to the contractor's employees.

During 2019, the Central Personnel and Organisation Department and the Purchasing and contract Department of Hera Spa drew up a document, updated on June 2023 following the entry into force of the new Public Contracts Code, with which the **company guidelines** on the economic and regulatory treatment of personnel working on contracts were defined. This has made it possible to direct the activities of the contract representatives to ensure **uniformity of conduct** in the content of the contracts with regard to the correct identification of the CCNL to be applied to the workers of contracting and subcontracting companies and the inclusion of social clauses.

There are 22 major tenders in which the above-mentioned rules set out in the Procurement Protocol were applied. Below are those with an amount exceeding 10 million euro:

Type	Description	Legal entity	Amount (mnEuro)	Duration (years)	CCNL	Clause
Negotiated procedure	Negotiated procedure for the outsourcing of Customer Care services (Inbound Call Centre and Back Office activities)	Hera Spa	108	3	CCNL for personnel employed by companies providing telecommunications services	Transfer of all personnel on the basis of the social clause provided for in the CCNL
Negotiated procedure	Water and Gas emergency services	Hera Spa	85	4	CCNL construction sector and similar sector	Voluntary application of social clause (proposed to

Type	Description	Legal entity	Amount (mnEuro)	Duration (years)	CCNL	Clause
						at least 51% of personnel employed)
Restricted procedure	Services related to the supervision services and access control service and waste weighing acceptance service at Hera Spa group plants	Herambiente Spa	14	3	Social Co-op.	Transfer of all personnel on the basis of the social clause provided for in the CCNL
Restricted procedure	Services connected to the urban and similar waste collection and transport service, street sweeping and ancillary services, to be carried out in the area of the Municipality of Ferrara	Hera Spa	14	2	Servizi Ambientali FISE	Transfer of all personnel on the basis of the social clause provided for in the CCNL
Restricted procedure	Conclusion of framework agreements for the assignment of ordinary and extraordinary mechanical maintenance and mechanical investment activities at the waste-to-energy plants and waste treatment plants of Herambiente S.p.A.	Herambiente Spa	13	2	Metalworkers	Absorption project

* The application concerns at least 51% of personnel employed in the Hera contract.

Note furthermore that the **discount percentage limitation clause** was added to the following tenders, normally formulated as follows: "taking into account the technical peculiarities inherent in the contract and the economic analysis, which is the basis of the price items that make up the single price list offered in the tender, the Contracting Authority believes that reductions of the tender basis exceeding 25% may be untenable and reductions exceeding 30% may be impossible to accept" (the reference percentages may be different depending on the tender prices and the specific nature of the contract):

- tender for gas volume converter operation and maintenance services (Inrete and Acegas);
- tender for road paving repairs (the entire Emilia-Romagna area);
- tender for emergency intervention, extraordinary maintenance, new constructions and network connections for water, sewerage and gas services (Hera Spa and Inrete);
- tender for the hidden water leak detection service in the area covered by Hera Spa;
- tender for the green maintenance service in the technical offices of Hera Spa and Inrete;
- tender for ordinary and extraordinary mechanical maintenance service and mechanical investment activities at the waste-to-energy and waste treatment plants of Herambiente Spa.

In 2023, the **clause requesting authorisation for the use of temporary workers** and the clause which **prohibits the use of support work** (so-called "voucher") were kept in the standard specifications of the Group for the categories of works and services used in the tender procedures, as it pertains to contract-based works and services.

The Hera Group, as part of its corporate social responsibility, guarantees the constant control of the **regularity of Inps/Inail contributions** at the competent Single point of contact Social Security Office and Construction Fund for all suppliers active and present on the Hera Group list, including entities grouped in temporary business associations (agent and principals), consortia and specific contractors and sub-subcontractors linked to the individual document for the purchase of services (order and/or contract).

Diversity and inclusion

The Hera Group's commitment to **inclusion and diversity protection policies** is long dated and was consolidated in 2009 with the **signing of the Charter for equal opportunities and equality at the workplace**, by which the Company is committed on the front lines to the fight against discrimination at

the workplace, together with other public and private entities. Furthermore, the creation of the role of the **Diversity Manager** in 2011 was fundamental in further promoting the processes of development of inclusion policies and of diversity enhancement. Since 2011, the Company put together a **working group** comprising employees of the Group companies, heterogeneous in terms of age, position held, profession and training, which, coordinated by the Diversity Manager, has been focusing on projects, activities and initiatives hinging on diversity and inclusion.

In 2018 Hera also signed the “**Utilitalia Agreement - Diversity makes the Difference**”, a programme of concrete principles and commitments to promote inclusion in corporate activities. The agreement, promoted by Utilitalia (the Federation of water, environmental and energy companies) among its associates, supports inclusive policies at all levels of the organisations, work-life balance measures, transparent and neutral management of merit with respect to diversity of gender, age and, culture, adoption of progress monitoring systems and internal and external awareness-raising policies.

Hera has received **important recognitions** from the main national and global financial indices, dedicated to investors who pay particular attention to policies of inclusion and enhancement of diversity: in 2023, Hera was confirmed for the fourth time within the **Bloomberg Gender-Equality Index**, a global index that represents a fundamental benchmark for the responsible financial community.

Further evidence of the Group’s focus on diversity issues is its inclusion in Refinitiv’s “**Diversity & Inclusion Index**” for 2023, in which Hera, out of more than 15 thousand companies surveyed, remains the only multi-utility among the four Italian companies in the ranking.

The **partnership with Auticon** continued in 2023, through which an individual with Asperger’s syndrome performed work activities for the Group, which, in turn, contributed to raising awareness and creating an inclusive culture with respect to different cognitive abilities.

In 2023 Hera achieved **certification for gender equality**, according to the Reference practice UNI/PdR 125:2022, for its 11 largest companies: further confirmation of its achievements in this area, the result of its commitment to creating a culture inclusive, people-focused corporate. The Hera Group Board of Directors has approved the “**Gender Equality Policy**”, which defines the company’s commitment to gender equality, to guarantee equal opportunities at the workplace, and has appointed a Steering Committee to ensure its effective adoption.

In 2023, Hera began a journey to raise awareness and recognise **inclusive language**, which will continue in 2024, involving the entire company population through a dedicated event and the dissemination of a document facilitating its practical application and understanding. To support this initiative, a calendar has also been created, available to all employees, which accompanies them through the 12 months of 2024 on a journey towards the main themes of inclusive language.

The Group’s commitment to spreading an inclusive culture beyond the company perimeter will continue in 2024, activating inclusion projects aimed at local schools, and producing and disseminating new inclusive videos aimed at customers.

[405-1]

FEMALE PERSONNEL BY QUALIFICATION

%	2021	2022	2023
Managers	22.1%	21.6%	22.2%
Middle managers	32.8%	33.6%	35.4%
Total Executives and Managers	30.5%	31.1%	32.6%
Management employees	35.7%	36.2%	36.1%
Total Executives and Managers and Managerial Employees	34.0%	34.5%	34.9%
Non-managerial Employees	45.9%	46.4%	45.9%
Total employees	43.0%	43.6%	43.2%
Blue-collar workers	2.5%	2.4%	2.1%
Total female employees	27.3%	27.6%	27.5%

Data at 31 December and total open-ended and fixed-term contract employees.

Among Managers and Executives, the incidence on the total stands at **32.6%**, an increase compared to 2022. The percentage of women in contractual qualifications with a **management role** is **34.9%** in 2023.

Of the 1,043 career advancements that took place in 2023, 214 involved female employees, with the exclusion of blue collar workers where the female population amounts to approximately 2.1% of the total, career advancements involving female workers accounted for 40.8% of the total. 45.2% of new Managers and Executives are women.

Lastly, with regard to the composition of the Board of Directors, we note full compliance with the legislation on gender balance based on the provisions of Law 160/2019 and the European Directive of 17 October 2022: the quota reserved for women is **2/5 of the current Board of Directors**.

The Sustainability Report 2023 drafted by the Utilitalis Foundation on behalf of **Utilitalia**, the Federation of Water, Waste and Energy Companies, measures the sustainability of 89 utility companies. Considering the percentage of female Executives in 2022, Hera's value (21.6%) is more than three percentage points higher than the average of the companies evaluated (18%). Considering the percentage of female Managers in 2022, Hera's value (33.6%) is more than five percentage points higher than the average of the companies evaluated (29%). Considering the total percentage of women in 2022, Hera's value (27.6%) is more than five percentage points higher than the average of the companies evaluated (22%).

PERSONNEL BY QUALIFICATION AND GENDER

%	2021	2022	2023
Executives - Women	22.1%	21.6%	22.2%
Managers - Women	32.8%	33.6%	35.4%
Clerical Staff - Women	43.0%	43.6%	43.2%
Manual Labourers - Women	2.5%	2.4%	2.1%
Total - Women	27.3%	27.6%	27.5%
Executives - Men	77.9%	78.4%	77.8%
Managers - Men	67.2%	66.4%	64.6%
Clerical Staff - Men	57.0%	56.4%	56.8%
Manual Labourers - Men	97.5%	97.6%	97.9%
Total - Men	72.7%	72.4%	72.5%

Data at 31 December and total open-ended and fixed-term contract employees.

PERSONNEL BY AGE CATEGORIES

%	2021	2022	2023
Younger than 30 years of age	6.4%	6.7%	7.3%
Between 30 and 50 years of age	48.2%	49.4%	50.4%
Older than 50 years of age	45.4%	43.9%	42.3%
Total	100.0%	100.0%	100.0%

Data at 31 December and total open-ended and fixed-term contract employees.

There are 4,219 workers over 50 years of age, representing 42.3% of total employees. The share of under-30 personnel increased to more than 7%.

PART-TIME CONTRACTS

	Number	2021	2022	2023
Men		52	43	65
Women		349	347	350
Total		401	390	415

Data at 31 December and total open-ended and fixed-term contract employees.

WORKERS BY GENDER AND TYPE OF CONTRACT (2023)

	Number	Men	Women	Total
Full-time		7,155	2,395	9,550
Part-time		65	350	415
Total		7,220	2,745	9,965

Data at 31 December and total open-ended and fixed-term contract employees.

The **part-time** formula, as governed by current employment contracts, is recognised as a useful tool for responding to the **flexibility** of work organisation and the needs of workers. It is characterised by willingness, reversibility, compatibility with the technical, organisational and production requirements of the Company and the needs of the workers. Requests motivated by family needs for the health protection of or assistance to individuals with disabilities and duly certified serious medical conditions are taken into consideration as a priority.

In 2023 there were 31 new applications for part-time work, all of which were accepted. Part-time work continues to be the employment formula of choice of female staff.

[405-2]

WOMEN-TO-MEN BASE SALARY RATIO

	%	2021	2022	2023
Managers		86.6%	85.2%	86.0%
Middle managers		97.1%	96.5%	96.5%
White-collar workers		92.5%	92.5%	93.0%
Blue-collar workers		101.1%	100.4%	100.0%

The salary **differential between women and men** in the Executives category is significant (86%); however, this figure is affected by the number of female Directors (6 of 43). The differential is much smaller for middle managers and white collar workers: the ratio of women's pay to men's pay is 96.5% and 93% respectively. In both cases, the differential is obviously influenced by the level of company seniority as well as for the qualifications employed, by the level of classification. The differential between male and female employees is motivated by the fact that 64% of managerial employees are men. There is no differential for workers.

For 2023, the monthly salary is 9,430 euro per executive - women, 10,967 euro per executive - men, 4,867 euro per managers - women, 5,043 euro per managers - men, 2,783 euro per white-collar worker - women, 2,991 euro per white-collar worker men, 2,375 euro per blue-collar worker men.

The total wage differential between women and men is equal to 103.4% by virtue of the greater presence of men in the Manual Labourers category;

All the data relating to Hera are better than the Italian average for Utilities: executives 79%, middle managers 82% and white-collar workers 82% (Source: Utilitatis). The Energy, Utilities and Environmental Services sector average is 91.4% (Source: Job pricing 2022).

The Group's remuneration policy system is based on the ability to offer the most appropriate remuneration package based on individual performance achieved, skills deployed, organisational position occupied and specific market-level comparisons. Any pay differential between individuals can

be exclusively attributable to these factors and is in no way conditioned by other elements (age, gender, culture, etc.), except as provided for by the applicable National Collective Labour Agreements.

[401-3]

MATERNITY, PATERNITY AND PARENTAL LEAVE

Number	2021	2022	2023
Women who have taken maternity leave	185	83	102
Men who have taken parental leave	-	126	199
Women who have taken parental leave	-	239	292
Total parental leave taken	355	365	491

This data does not include the companies: Aresgas, Biorg, Etra Energia, Fratelli Franchini, Macero Maceratese, Recycla, Vallortigara, Wolmann. 4% of the Hera Group's employees work in the aforementioned companies.

The number of mandatory maternity leave requests used in the Group in 2023 was 102 (average duration 146 days), the number of compulsory paternity leaves was 169 (average duration 8 days). Since 2021, the Company grants 10 days of mandatory paternity leave, but fathers, despite having the right to it, can decide whether to use their leave or not. 491 employees took parental leave (199 men and 292 women), and the average duration per capita was 25 days a year (10 days a year for men and 35 for women).

All employees are entitled to take maternity leave; compared to the 102 leaves taken in 2023, only one female employee is no longer an employee having resigned before returning to work (return to work after maternity leave and retention rate after maternity leave of 99%).

Development of new skills in the Hera Group

As in previous years, in 2023 too the Hera Group developed a variety of projects and training initiatives for its employees, in order to address the **necessary evolution towards new skills related to the transitions underway (digital, energy and environmental)**.

Every year we update our skill "map" by evaluating skill evolution (new, changing and declining skills); among the main initiatives already launched or planned for 2024 on new skills and skills undergoing "transformation" we cite:

- training interventions aimed at updating **managerial skills** linked to the new **leadership model** with particular reference to the **purpose driven style** and **new skills** (e.g. entrepreneurship);
- provision of training contents aimed at **developing and improving** person's **skills and behaviour in line with the evolution of working methods** with specific focus on activity planning, online meeting management and the sharing of effective behaviour and tools to better integrate private life and professional dimension within a hybrid organisational context;
- continuation of the **Her@futura** training initiatives for the development of **digital skills in the company**, consistent with the Group's new Digital DNA model updated in 2023, with a specific focus on the development and possible applications of generative artificial intelligence tools. At the end of 2023, employees with digital transition skills were 56% of the total, this percentage refers to the results of the assessment carried out in 2023. The population achieving digital transition skills will be 75 % by 2027 and 90 % by 2030;
- training initiatives connected to the adoption of the **Group's new Erp Cloud** (Rise with Sap);
- training initiatives for the development of **knowledge and skills** aimed at implementing the **Corporate Social Responsibility Directive** (CSRD) in sustainability reporting processes, also with a view to integration with economic-financial reporting processes;
- **change management programme in the front office area** to support the transformation from the role of teller to that of energy consultant;
- training initiatives for the development and updating of skills related to the application of **district heating service tariff regulation**;
- training initiatives connected to **regulatory updates in the field of waste management**;
- continuation of training initiatives connected to the **ecoHERA** programme for the development of skills related to the knowledge of the networks, energy and environment business chains and **energy and environmental transitions**. At the end of 2023, employees with skills for **energy transition** were 36% of the total, while employees with skills for **environmental transition** at 2023 were 32%. These percentages refer both to the result of the survey sent out in 2023, and to employees who were found not to have the competence during the survey but who filled it following the use of the special training content made available. The population achieving skills for environmental and energy transition will be 53% by 2027 and 60% by 2030;

- **change management** programme related to the evolution of **skills in the Networks sector**.

Development of digital skills

The **Her@futura programme**, the cornerstone of the development of the Group's culture, processes, skills and digital tools, continues for the seventh consecutive year. In 2023, the **Group's digital DNA**, the reference system for digital skills, was updated and on the basis of the new DNA, questions were formulated for the entire company population to become aware of their own level of digital knowledge, the so-called "digital proficiency". At the same time, the provision of training initiatives continued: clips, webinars, specialisation courses, digital labs, virtual factories, etc., while the planning of new initiatives based on the results of the Her@futura 2023 survey was started.

Starting from 2017 the Hera Group realised the first applications of artificial intelligence, in particular machine learning, 2023 saw the start of reflections on the opportunities to use **generative artificial intelligence in the Group** and on the related change management plan: following a moment of in-depth analysis for Top Management, an assessment was conducted with specific interviews and in-depth analysis for each Business Unit to identify possible use cases and the first pilot project was carried out in the Customer Relationship Management of Hera Comm.

With regard to initiatives in the **Digital Workplace** area, in addition to the constant updating of courses on the applications of the Microsoft 365 suite available on the Group's MyAcademy training portal and the constant support of the Tutor Network to colleagues, two important courses were held:

- **master's degree in community management** with twelve participants representing the main business areas impacted,
- **digital Workplace dissemination with a focus on the Digital Bar**, consisting of fourteen workshops aimed at the various Business Units with the involvement of Tutors, Business Process Key Accounts and Functional Managers with the aim of deepening the potential of the Power Platform (Microsoft 365 automation and business intelligence applications) and the supporting role of the Digital Bar in the Information Systems Department.

In addition, an advanced dashboard was developed to monitor the use of Microsoft 365 in order to keep Top Management updated and direct improvement actions through the digitisation of processes.



In addition, the **Data Strategy change management plan** continued, which saw the holding of meetings with the Directors of the Business Units and those responsible for digital innovation activities, with the aim of identifying the business objectives that can be achieved through the Data Strategy and sharing the awareness and training path, specific by skill profile, of the people identified to implement the Data Analytics and Artificial Intelligence projects. In parallel, the traditional dissemination events of the Data Analytics Community were held on the topics of greatest interest, such as generative Artificial Intelligence, Cloud Computing and Data Strategy itself, and workshops were held to present and share the Group's main Data Analytics projects.

In 2023, the initiatives linked to the cyber **security training and awareness programme** (Cyber Guru and Cyber Campus) also continued.

The development of the **Data analytics community** continued in 2023 with courses, activities and training events to spread data culture and skills, reaching **420 participants** from all the Group's business units. The main topics covered in 2023 with the support of industry experts were:

- **Databricks: cutting-edge solutions at Hera:** innovative solutions for the advanced management of data in the cloud and related governance, through some new paradigms (Data Lake House) consistent with the Data strategy model adopted by the Hera Group with some examples developed in our company.
- **Generative Artificial Intelligence: a reasoned view on the main concepts and technologies in the light of the initiatives in the Hera Group:** project examples, most successful use cases, demos of some tools to explore the potential of the technology.
- **Data journey: how to trust data:** presentation of a path, under the guidance of Da.Ma. Italy, on the concepts of 'data governance', discovering the figures that guarantee the quality of information. All in the light of the data operating model.
- **Managing data in the cloud: do you really know how it works?:** cloud computing at Hera has changed the technology of modern services, from SaaS platforms to cloud applications and Internet of things based services; the opportunities and vision of the future of cloud computing were presented.

How does the initiative contribute to responsible digital transformation? The benefits achieved in terms of Corporate digital responsibility factors (see the section on “Corporate digital responsibility”)

Social		The strengthening of the data community is aimed at disseminating and learning digital skills; therefore, it promotes the digital inclusion of employees and through the more focused acquisition of skills enables the development of individual analytical aptitudes.
Technological		Corporate awareness of the importance of disseminating the “data culture” among employees is a sign of a responsible digitisation strategy aimed at transparency of processes and strengthening the Group’s identity. Sharing new guidelines enables business orientation in the choice and use of constantly evolving technological resources. Adoption of innovative analytical models based on cloud technologies.

Hera educational for school-work activities

In 2023, the Hera Group continued its activities with the “Hera Educational” system through the planning, for the 2022/2023 school year, of **80 Pathways for Cross-Cutting Skills and Orientation**, pertaining to the Emilia-Romagna area, comprising 72 individual courses held at the Company and 8 job orientation meetings delivered in group settings; in the second half of 2023, for the 2023/2024 school year, the Company began planning the annual delivery of 82 courses for cross-cutting skills and guidance, and comprising a total of 74 individual courses held at the Company and 8 job orientation meetings. In 2023, the interventions and guided tours conducted by expert staff of the Group also continued as part of the project “Hera teaches you a trade... at school”, which, for the 2022/2023 school year, involved the Guglielmo Marconi technical institute of Forlì, the Nullo Baldini technical institute of Ravenna and the Enrico Fermi technical institute in Modena.

In 2023, the Company created the **three-year curricular integration courses with a view to strategic workforce planning**, which envisage a teaching phase conducted by Hera staff at the Institute and, from the second project year, the creation of individual courses in the company designed in line with the topics covered in the teaching phase. In particular:

- a company testimonial with a focus on the gas supply chain aimed at class V of academic year 2022/2023 for the curricular integration pathway started with the Copernico-Carpeggiani institute in Ferrara for the “Energy” articulation.
- training contents were co-designed and created for classes III, IV and V of academic year 2022/2023 for the curricular integration pathway started with the Belluzzi-Fioravanti Institute in Bologna concerning the “Mechatronics” and “Automation” articulation.

In 2023, the Hera Group also continued its collaboration on the **Liceo Tred** experiment, which, with the coordination of Elis, a non-profit organisation operating in the training field, proposes a four-year training course focused on the themes of ecological and digital transitions. In particular, during the first four months of the year, thanks to the interventions held by Hera’s expert staff, workshops in the circular economy sector aimed at Tred first-year students were held. In the summer period the Hera Group also co-designed and participated in an activity organised during the Tred High School Summer Camp.

Through its **Corporate University HerAcademy**, for several years the Hera Group has had **framework agreements with the main universities in the regions in which it operates**, such as the University of Bologna, the University of Modena and Reggio Emilia, the University of Ferrara, the University of Padua, the University of Florence, the University of Milan Bicocca, the University of Pisa, the University of Trieste, the University of Udine and the Polytechnic University of Marche. With particular reference to the University of Bologna, the initiatives connected with the Framework Agreement renewed in 2019 continued during 2023, which further addresses the need to give continuity to a broad partnership aimed at promoting multidisciplinary activities and projects in the following areas: research, development and innovation; teaching, advanced and permanent training; orientation and job placement; internationalisation; technology transfer; development cooperation, sustainability and social innovation. Furthermore, scientific cooperation with the University of Milan - Bicocca and CRISP (Inter-university Research Centre for Public Utility Services) continued, with the general goal of supporting the development and implementation of activities within HerAcademy.

In 2023, a partnership was established with **Crif**, a company specialising in credit information systems, through its training programme called ‘Boom’, for the joint design and implementation of training courses aimed at junior and middle managers in the energy sector.

The Group also actively **collaborates** with some **business schools and innovation centres** such as: Bologna Business School (Bbs), Luiss Business School, Consorzio Mib School of Management in Trieste, Mip Politecnico di Milano, Centro Studi e Ricerche Safe, Sda Bocconi, The European House Ambrosetti; the Group also participates in the scientific committee of Assoknowledge-Confindustria Servizi Innovativi e Tecnologici.

Sustainability among the “new skills” of young people: the Hera Group’s contribution

Environmental education

The Hera Group has been offering numerous **free educational activities for schools in the areas it serves** for almost 20 years, with courses on water, energy, waste and sustainability, working alongside teachers to enrich and complete the school curriculum. The objective is to promote knowledge of the Planet’s resources among the younger people, with the aim of raising their awareness of respect for the environment and the importance of adopting more sustainable lifestyles. Each year the environmental education programme is renewed with new activities, themes and the latest methodologies to make classroom workshops more engaging, interactive and effective.

There are **70 educational paths** proposed in the catalogue *La Grande Macchina del Mondo* and *Un pozzo di scienza* (The Great Machine of the World and A well of science), for schools of all levels, from kindergarten to secondary school. In 2023, a total of **91,880 students aged between 4 and 19 years** took part in the project, taking part in **3,504 activities**, including science and recreational workshops, tinkering activities for learning by experimenting with hands, animation and graphic-creative workshops, role-playing games, debates, challenges between classes with digital technologies, Citizen Science courses and guided tours of Hera Group plants.

Over time, *La Grande Macchina del Mondo* has become a point of reference for schools for raising children’s awareness of environmental issues and the conscious use of resources (water, energy and waste), not only offering stimuli for reflection but also concrete tools for choosing more sustainable behaviour and lifestyles.

There are 33 educational proposals in the catalogue of **La Grande Macchina del Mondo** for pupils aged 4 to 13. In 2023, between January and June, 77,094 students participated in 3,159 activities, all framed within the UN 2030 Agenda and linked to the 17 goals. Many new features were introduced, including the possibility of choosing several themes for some workshops, the tinkering workshop, the Archimedes workshop, during which pupils tackled the themes of the use of resources, water and energy saving, and waste. Visits to the Group’s plants, which are always in high demand, were offered in different modalities: with the end of the health emergency, it was possible to take classes to the facilities again with in-person visits, but the virtual tour modality was also maintained for three facilities, to meet the needs of schools. Among the new features was a visit to the Cesena water purification plant, with a live link with a Hera expert from the plant, which illustrated the importance of the water purification process and told about wastewater recovery projects for agriculture, as a concrete example of circular economy in the water cycle.

A number of workshops were held, including ‘The Waste Inspector’ and the recycling case, to convey the importance of correct waste sorting and reveal the most common mistakes in a fun and effective way. The three live green events were also replicated, for the 4-13 year age group to coincide with World Water, Earth and Energy Saving Day and Sustainable Lifestyles to raise awareness and involve even the youngest children on these issues.

New content in augmented reality was produced for the “Gmm AR+” app created by Hera to raise awareness of environmental issues and bring useful anti-waste advice into the classroom and family, through games and digital innovation. In addition, a new training webinar on the role of emotions in environmental education was proposed to all primary and secondary school teachers in the local area.

The science dissemination programme entitled **Un pozzo di scienza**, which Hera dedicates to upper secondary schools, involved 14,786 girls and boys in 345 interdisciplinary activities between February and May. The workshops and meetings have been designed to spark young people’s curiosity about current topics such as science, innovation, technology and sustainability, stimulate the desire for knowledge and critical thinking, and develop the ability to understand the challenges of the future and face them as protagonists. ‘Generations on a journey’ is the underlying title of the 17th edition that included 37 unprecedented in-person and remote activities on topics related to the UN 2030 Agenda goals. These included science workshops on water, waste and energy; interviews by the young people with testimonials of innovative thinking, technological development and sustainable business visions; and streaming events with renowned scientists and experts such as Stefano Mancuso on the topic of plant intelligence and Luca Mercalli on climate change. Also worth mentioning was the special live connection with the CNR’s ‘Clean Room’, a sophisticated research laboratory for the development of new solutions and technologies useful to mankind. The classes also engaged in debates and Discussion Games. Many topics were discussed with experts such as: renewable energy, plastics, space technologies, green professions of the future, biodiversity, agriculture 4.0, the delicate balance of ice and oceans, and also how to communicate science and the environment between opinions and scientific truths, the risks of the internet and fake news.

Among the activities was also the special Citizen Science laboratory, with several meetings that allowed students to experience that science can also be within the reach of ordinary citizens; girls and boys

collected and processed data in the field, thus actively participating and contributing in a concrete way to scientific research projects already started by bodies operating in the environmental field. The international “Fresh Water Watch” project on surface water quality was chosen for this edition.

The Hera website for schools was the point of reference for schools with renewed content and new resources to support teachers (teaching kits, in-depth materials, recordings of events, and training webinars) to consult or download, useful for learning more about the topics dealt with by Hera or for conducting in-class courses even independently. The family area has also been updated with new green games to play at home and advice against waste.

AcegasApsAmga is also concretely committed to environmental education in the areas served dedicated to all schools of all levels by providing, through the Hera Group’s projects and with the involvement of specialised educators, an extensive programme designed in accordance with the Ministry of Education’s environmental education guidelines, using tools and new teaching strategies to achieve the 17 objectives of the UN 2030 Agenda. The environmental education initiatives for schools from pre-school to secondary school are part of La Grande Macchina del Mondo, while those dedicated to secondary school children, with a more scientific and informative approach, are part of Un pozzo di scienza. A wide choice of activities and courses is foreseen for all school levels and are designed both in presence and remotely, the latter not intended as emergency teaching but as integrated digital teaching to facilitate curricular learning and foster students’ cognitive development through technology. Within the educational offer, a part is reserved for teachers with webinars and training activities and for families with games and challenges for all ages. To all this, visits to AcegasApsAmga company plants must be added. Educational consistency, innovation, support for teachers, and proximity to families are the pillars of the multiutility’s commitment to bring the entire community closer to environmental issues and make the goals of sustainable development possible.

ENVIRONMENTAL EDUCATION PROJECTS

Number	2021	2022	2023
Participating students	82,178	111,091	103,852
School involved	818	1,160	1,241
Teachers involved	6,350	9,432	8,747

In 2023, the student participation figure was slightly down, even though some workshops were cancelled by schools due to last May’s flooding.

A total of 91,880 students and 7,809 teachers from 1,027 kindergarten, primary and secondary schools were involved in the area managed by **Hera in Emilia-Romagna**. In the area managed by **AcegasApsAmga**, 11,648 students and 916 teachers were involved, while in the **Marche** region, 324 students and 26 teachers were involved.

4.04 Resilience and adaptation

Resilient management of aqueducts and water sources

Relations with institutions

[303-1]

2023 brought even more attention to the extensive and holistic dimension of the water cycle, both in months of water scarcity and extreme phenomena such as the May 2023 flood, highlighting the need for continuous dialogue between local stakeholders for a common vision of management. In fact, the quality of **relations with institutions**, which play a role both in territorial planning and in the management of emergency events, is essential for the mitigation of the risk and impacts deriving from climate change.

On spatial planning issues, the **National Climate Change Adaptation Plan** is the main planning tool for addressing climate emergencies, aiming at four objectives: contain the vulnerability of natural, social and economic systems to the impacts of climate change; increase their ability to adapt; improve the exploitation of any opportunities; and promote the coordination of actions at the various levels of governance.

At the river basin level, the information frameworks and sector plans developed by the **district Basin Authorities** are essential, whose activities intersect with the relevant role played by the **Regions and their Agencies** both in the planning phase and in the management phase of emergency events. The Emilia-Romagna, Veneto and Friuli-Venezia Giulia Regions define the cognitive frameworks of availability and needs and the lines of action in their own Water Protection Plan (being updated for Emilia-Romagna and issued in 2021 for Veneto and in 2023 for Friuli-Venezia Giulia).

Hera's active participation in the Coordination Tables for the new 2030 Water Protection Plan of the Emilia-Romagna Region underlines the importance of the **strategic lever of cooperation and interaction between stakeholders**, as well as the system's ability to **increase and diversify the availability of the resource**.

The **government body of the optimal territorial ambit** (Egato) deliberates the investment plans of the integrated water service that outline, for each territorial ambit, not only the "standard" interventions for the maintenance and development of services, but also those oriented to **increase the resilience of the supply**, adduction and distribution systems and the urban drainage systems. **In these plans, however, there is no space for large strategic works (for example reservoirs) which, as recalled further on, need extraordinary planning, financing and construction procedures.**

For water supply, specific roundtables coordinated by the Region and/or the Civil Protection Agency are set up to define short/medium-term management and sampling programmes at significant points should conditions of scarcity and competitive uses of the water resource emerge in certain periods of the year or emergency situations (for example, releases from the artificial basins of the upper Reno valley and derivations from the Casalecchio dam, management of sources in Romagna during dry summer periods).

A virtuous example of cooperation and interaction between entities aimed at water resilience is the activation of **agreements for the reuse of purified water** that Hera is promoting in the local area, consolidating and extending an increasingly conscious and virtuous use of the purified resource, through constructive dialogue with the Land Reclamation Consortia and the Emilia-Romagna Region.

It is necessary for this process too to regulate responsibilities and allocate investments useful for strengthening, where necessary, refining/transportation works **to increase the volumes of purified water destined for reuse**: if in fact indirect re-use, i.e. the one in which the mixing of purified water and surface water takes place, is the form that best corresponds to the structure of the consortium networks currently present in most of the managed area, the development of **risk analyses extended to the entire supply chain** may require control measures, improvement actions in the treatment, conveyance or cultural irrigation phases on which responsibilities and ownership of investments must be identified.

The regulatory framework on re-use is currently being updated, with the expected transposition of the European Regulation on re-use, where clarifying elements are expected to be provided precisely on the meaning of re-use and the planning, management and financial responsibilities placed on the various stakeholders.

Limits of management leverage of water service operators and need for institutional commitment

Beyond the interventions "intended to promote greater resilience" currently envisaged in the investment plans of the integrated water service approved by the competent local bodies, and the mitigation management actions that can be implemented under the coordination of the aforementioned national and regional bodies, it is clear that **a significant reduction in the risk of potential unavailability of water resources for drinking water needs can only be achieved by planning and building important water banking and system interconnection infrastructures** which:

- must be effective in terms of technical response (e.g., compensation capacity such as to respond to increasingly frequent and severe multi-year lows);
- must be environmentally compatible and socially accepted;
- must be organically included in the territorial planning instruments;
- require exceptional financial resources, certainly far exceeding those that can be made available by the fees of the integrated water service.

The operator of the integrated water service can provide data and information within its purview, that are necessary to define the current and prospective scenario for infrastructural development, as well as make its design and construction know-how available in the various stages of development of the works, and of management.

However, these are works which, due to their technical and economic scope and their environmental and social impact, need a **firm institutional commitment**, especially in a country like Italy where planning and approval processes can be particularly complex and lengthy, with a high number of subjects called to carry out technical-administrative and consultative roles often lacking coordination.

The severity of the context and prospects undoubtedly requires the rapid implementation of **extraordinary actions substantially outside the management leverage of the water service operators**, and which are necessary in order to:

- secure the financial resources for the construction of large works, such as reservoirs (whether they are dedicated to drinking water regulation or for multiple uses), and large transfer/interconnection schemes;
- speed up all phases of the administrative and technical processes, from the approval of local plans, to the authorizations of individual works, to the procedures for assigning the works, up to testing and commissioning.

Drought risk monitoring, identification and classification

At present, the setting up of a **consolidated methodology for the classification of drought risk** differentiated on the basis of the territorial context is being defined. In fact, initiatives are underway aimed at quantifying the impact of climate change on the water distribution networks, and at identifying solutions to improve the resilience of the network itself.

In order to better monitor the state of drought in the managed aqueduct systems, the **drought status monitoring platform (Resilient Dashboard)** has been consolidated, updated in near real time with data relating to the weather-climate trends of surface and underground sources in the aqueduct macro-systems of the managed area. By analysing the percentiles for the variables of interest (rainfall, temperature, source levels and flow rates), the trend of a **“Global Drought Score”** was reconstructed for each area of management relevance (11 aqueduct systems), which can objectively quantify the system’s criticality status on the basis of time series of the relevant parameters, appropriately weighted. In 2024, the tool will be evolved to **create perspective scenarios** that provide a medium-term view of the drought status of an aqueduct system, foreshadowing possible trends in the drought indicator based on different input conditions of the variables. The results will consist of planning indications regarding, for example, the optimal balance between surface and underground supplies, network connections, the need for additional reserves or alternative supply sources.

[How does the initiative contribute to responsible digital transformation? The benefits achieved in terms of Corporate digital responsibility factors \(see the section on “Corporate digital responsibility”\)](#)

Environmental



Creation of a predictive model and a digital platform for monitoring the consistency of groundwater and surface water resources, aimed at developing resilient water networks, reserves and sources of supply.

In 2023, in collaboration with the University of Bologna, the Company continued on the **analysis of the potential of the aquifers** of the Arpolli (Gaggio Montano) and Tolè (Vergato) spring systems in order to evaluate scenarios for optimising and/or enhancing the underground detection of the Apennine area. This activity will continue over the years, with an in-depth assessment of possible project scenarios, also thanks to the activation of a specific doctorate with the University of Bologna, which makes use of NRRP co-funding.

With the use of the **FVG aqueducts Masterplan**, a tool for analysing drinking water requirements for assessing the degree of reliability of the availability of sources from a geological, climatic, morphological and land use point of view, in scenarios of severe environmental stress linked to climate change and consequent extreme events (fires, floods and prolonged droughts) AcegasApsAmga identified the main structural interventions to be implemented to interconnect the various aqueduct systems of the Friuli Venezia Giulia region and some municipalities in eastern Veneto. The MasterPlan, drawn up on behalf of the network of integrated water service managers operating in the Friuli-Venezia Giulia Region, also

defines the prioritisation of interventions on the basis of various drivers, including residential intensity, the risk of disruption to supply sources, and the service standards required by national and community regulations, and was shared with the Basin Authority of the Eastern Alps. Furthermore, the MasterPlan has been attached to the Plan for the management of water emergencies that the Region is approving.

An agreement was signed with the Marche Polytechnic University within the Marche Multiservizi scope, for the critical and experimental analysis of the phenomena of ageing and wear of materials and infrastructures, with the ultimate aim of supporting the design, construction and management of new distribution systems and purification. Furthermore, a feasibility study was launched in partnership with the Universities of Ancona and of Bologna, to identify new supply sources for the province of Pesaro and Urbino through the “Action plan for the adaptive management of the resource against drought and water scarcity”. The study analysed the available resources and the hydrological balance of the Pesaro-Urbino province and the drinking water, agricultural and industrial needs. The identified resources and needs were compared, from which it was possible to identify different short-, medium- and long-term optimisation scenarios to recover the necessary water resources and identify the actions to be implemented.

With regard to the classification of the areas served by Hera based on the drought risk available from external sources, see the paragraph [“Quality of Drinking Water”](#)

Drought risk management and mitigation

From the point of view of risk mitigation and management initiatives, the water stress situation that occurred in particular in the summer of 2022 made it possible to verify the actions implemented over the years in order to **increase the resilience of the aqueduct systems**, and to launch a variety of projects aimed at increasing the level of service with a view to sustainability and efficiency.

From the point of view of management interventions, the strategy linked to the **use of innovative technologies in leak detection** in the managed areas continued in 2023, in order to increase the resilience of the aqueduct system by combining experimental technologies with traditional acoustic detection. Of particular interest for the search for leaks in the network and in user branches are the advanced type **smart meters equipped with an acoustic sensor** that allows the detection of anomalous noises on the network, facilitating the pre-localisation of leaks. These advanced tools, integrated into the analyzes of the volumes entering the districts configured in the network, allow us to better direct the leak detection activity in the field while also acting more promptly to reduce the lost volumes.

The **districtisation of the network** is confirmed as a priority action to reduce water losses. In 2023, it was **extended to more than 16,000 km of network**, with coverage of more than 55% of the managed network; by monitoring significant quantities via remote control, the creation of network districts allows for a better orientation of the active search for dispersions in the field, identifying portions of the network that have anomalous values of representative variables, monitored remotely via remote control.

DISTRICTISED WATER NETWORK

km	2021	2022	2023
Emilia-Romagna	13,300	14,041	15,300
Triveneto	1,435	1,435	1,435
Total districtised water network	14,735	15,476	16,735
Total thermal energy	30,192	30,202	30,233
Total districtised water network (%)	48.8%	51.2%	55.4%

The data does not include Marche Multiservizi

Over the period covered by the Plan (2024-2027) **systems for the automation of plant structures and pressure adjustment** will be increasingly consolidated and extended, which will make water networks even more resilient to environmental stresses. Adaptive network management, regulated on the basis of variable demand profiles, will evolve towards **Smart water grids**, making it possible to actively control the network remotely with the possibility of adjusting the pressure. Furthermore, by 2027 it is expected to reach 73% of the districtised network in Emilia-Romagna and Triveneto.

The **network predictive maintenance** project, undertaken to **investigate the causes of breakage in water mains**, was also scaled up in 2023 to an industrial dimension: the algorithm, developed with the University of Bologna and the Hera Group's data management and data analytics skills, was extended to the entire network managed by Hera Spa, becoming a useful tool for guiding network renewals on the sections that are most likely to break in the following year. The algorithm updating architecture has been

integrated into the various Hera systems, allowing a recalculation of the forecasting routine as the quantities of interest vary breakages, reference network, exogenous variables such as water table depth or soil type). As of 2024, the project will also be extended to AcegasApsAmga, with the goal by 2027 of achieving almost total coverage of the water network subject to predictive maintenance in the areas managed in Emilia-Romagna and Triveneto.

WATER NETWORK UNDERGOING PREDICTIVE MAINTENANCE

km	2021	2022	2023
Emilia-Romagna	2,800	13,925	27,250
Triveneto	0	0	0
Total water network with predictive maintenance	2,800	13,925	27,250
Total water network	30,192	30,202	30,233
Total water network with predictive maintenance (%)	9.3%	46.1%	90.1%

This data does not include Marche Multiservizi.

In 2023, the **project for remote reading of water-demanding users** also continued, in line with the objectives of the Industrial Plan, which envisage proceeding with installations until reaching about 310,000 users by 2027, combining the remote reading of users with high consumption with that of residential users, starting from the areas of Forlì, Padua, Ravenna and Trieste. By 2023, the telemetered volume corresponds to about 8% of the volume distributed. The remote-reading utilities can benefit from a platform for monitoring consumption and receiving alerts on presumed leaks in the internal system, so that the verification and repair of a possible internal breakage can be started promptly.

For the areas of Veneto and Friuli-Venezia Giulia, AcegasApsAmga has obtained funding from the National Recovery and Resilience Plan (NRRP) M2C4 - I4.2 **"Reduction of losses in water distribution networks including digitisation and monitoring of the network"** with two separate projects (one in Veneto and one in Friuli-Venezia Giulia), respectively the result of the two partnerships with the managed Ambit operators for the Veneto part and the entire Friuli-Venezia Giulia Region for the Trieste part. Measures such as the installation of smart metres, the efficiency of leak detection, the reduction of pressures and the application of algorithms based on machine learning to optimise pipeline repairs have been funded. With these interventions it is estimated that by 2026 it will be possible to **save 4.5 million cubic metres every year**. The area extension of these projects is an important lever to disseminate European best management practices and ensure a lasting effect of loss reduction to the benefit of the whole area.

Main interventions, in progress and planned

In 2023, the investment plan was developed according to strategic axes focused on interconnections between aqueduct systems and new wells to increase the redundancy of the resource.

Work continues on **upgrading the water supply system of Castel Bolognese (Ra)** and other municipalities in the Imola area, which will connect the current aqueduct systems, guaranteeing an important water reserve.

In accordance with the business plan schedule, various interventions are also being developed for the **construction/expansion of wells** in the Ferrara and Bologna areas, and the **renewal and upgrading of supply/distribution systems** in some municipalities of the Bolognese Apennines, Rimini and Modena areas.

The connection between the aqueduct of Trieste and the Slovenian one of Capodistria-Pirano and Isola d'Istria is underway at AcegasApsAmga, to ensure the possibility of mutual aid in the event of a water shortage in one of the two aqueduct systems. In addition to technical issues, in this case it is necessary to solve problems of a geopolitical, administrative and water quality nature. For this reason, the work of a cross-border working group is underway, and the group is expected to conclude its work by the next summer season.

In the Padua area, AcegasApsAmga has created **interconnections with the Veneto regional aqueduct system** in the last five years, benefiting from alternative supply sources. Also from this perspective, interventions are under way to strengthen water interconnections with the operators adjacent to the area served by AcegasApsAmga, which is expected to be completed in 2024.

Investments sustained in 2023 towards interventions to increase the resilience of aqueduct systems amount to approximately 7.4 million euro (7 million in Emilia-Romagna and 400 thousand in Triveneto).

On the occasion of the update of the **National Plan of Strategic Water Infrastructures** (Pniissi), in accordance with regional planning in both Veneto and Friuli-Venezia Giulia, a strategy was defined for:

- **the adaptation of infrastructures to climate change**, particularly with regard to the effects of prolonged summer droughts, which have led to profound salinity penetrations at the mouths of watercourses and a decrease in the levels of some aquifers;
- developing infrastructure to respond to the **risk of perfluoro alkyl substances** (Pfas) in groundwater.

By developing a partnership with the other operators, a set of **enhancement and interconnection interventions** has been defined, which have been nominated for funding and will be the subject of the Strategic Planning for the next regulatory period (MTI-4).

In particular, in the **Padua region**, it was proposed to upgrade a supply line (Branch C) that will contribute to the regional system, to revise the operation of the Ferrarin power station, and to build a new connection from the Saonara network to the Padua network to guarantee the supply of the new hospital in the city of Padua. In the **Trieste region**, the completion of the by-pass of the Randaccio water plant and its electrical efficiency upgrading was proposed. In addition, the best possible alternative for the completion of the third aqueduct in Trieste was proposed at the level of the Feasibility Document of Design Alternatives (Docfap).

The total amount of interventions in the Triveneto region described above is around 250 million euro and requires a major contribution from the public financing system, since these proposals represent the framework of water works in the area for the next decade.

In the **Marche region**, interventions have been studied to further differentiate the sources of supply, develop the interconnection of the aqueducts and further develop systems of hydraulic districts of the distribution networks. These projects were presented to the relevant authorities in order to collect the necessary funding sources.

The interconnections of the systems, the strengthening of the sources and the implementation of various interventions in recent years have made it possible to **reduce the supply of mountain reservoirs by tank trucks** in situations of particular criticality of the spring sources.

WATER DISTRIBUTED BY TANKS FOR THE MANAGEMENT OF WATER EMERGENCIES

Cubic metres	2021	2022	2023
Emilia-Romagna	47,639	39,461	5,196
Triveneto	0	0	0
Marche	82,967	47,206	39,166
Total water distributed by tank trucks	130,606	86,667	44,362
Total water distributed by tank trucks (% of volumes sold)	0.04%	0.03%	0.02%

In 2023, 44.4 thousand cubic metres of water were distributed by tank trucks due to water shortages, equal to **0.02%** of the total sold at Group level, an improvement over previous years characterised by more critical drought situations. It should be noted that in the areas managed by AcegasApsAmga there is no need to resort to this situation, and that in the areas of Hera Spa and in the Marche region the situation is improving, thanks to the interventions carried out in recent years.

Evaluation of hydraulic risk and Group asset flooding for insurance purposes

The risk assessment project called “**Analysis of Hydraulic Risk in the Context of Climate Change**” was completed in 2022 within the risk management activities carried out within the Hera Group.

The purpose of the project was to investigate the **hydraulic risk**, in terms of material damage and damage from interruption of operational activities, that the physical assets of the Hera Group (plants and infrastructures) may suffer, assessing their exposure both to the current climate situation and to future climate scenarios. Indeed, climate change affects rainfall, the frequency and severity of extreme events such as **floods**.

The result of the project was to provide the Group companies with a series of **tools to support decisions** aimed at increasing resilience to flooding events. The following two types of flood events were evaluated:

- **flash flood:** intense rainfall in a short period of time capable of generating damage from wetting even in the absence of a watercourse or river flooding;
- **river flood:** intense rainfall in a short period of time capable of generating damage from wetting caused by the overflowing of watercourses or river flooding.

In particular, through a probabilistic simulation model, some economic quantities have been defined capable of expressing hypothetical material damage to corporate assets following **flood events**, considering both the current and hypothetical future climate conditions; A single key risk indicator (KRI – Key risk indicator) was defined and calculated in order to represent the **level of hydraulic risk** of each of the 137 physical corporate assets under investigation, using a single measurement scale and taking into consideration the characteristics of each single asset also in terms of hypothetical damages from operational interruption. **Suggestions for the prevention and mitigation of damage** (as defined above) were provided to the Group companies in order to deal with the adverse atmospheric events associated with climate change.

Following an analysis of the characteristics of the insurance coverage currently in place, it was established that these are **suitable for dealing with** the economic aspects of the damages resulting from flood events deriving from the current and hypothetical future climate events.

Interventions in gas and electricity networks to deal with hydrogeological instability

In the face of adverse climatic events and situations of **hydrogeological instability** found in the Emilia-Romagna area, in recent years an intense **partnership** has been in place between the company Inrete Distribuzione Energia, the Emilia-Romagna Region and the Department of Civil Protection, aimed at allocating some funding to restore emergency situations and increase synergies between infrastructure managers and public bodies.

In particular, the Civil Protection Department is responsible for carrying out a preliminary reconnaissance phase to capture any problems on the regional area. The proposed interventions are evaluated and, in the event of a positive outcome, financed, following the collection of reports, which may be provided by infrastructure management bodies, municipalities, public bodies and reclamation consortia. Inrete Distribuzione Energia manages electricity lines and **about two thousand kilometres of gas network in the foothills and mountains, often subject to instability**; this makes it necessary and desirable to collaborate closely with the entities responsible for **safeguarding the local area**.

The interventions implemented in this perspective are numerous. Indeed, between 2019 and 2021, a total of **22 interventions** (19 in the gas sector and 3 in the electricity sector) were brought to the evaluation of the Emilia-Romagna Region for possible overall approval of 3.9 million euro in loans covered by the Region. Of these interventions, **18 received approval** for the regional funding, for a total amount of 2.7 million. Of the 18 interventions:

- **seven were completed in 2020** and fully paid with the disbursement of 1.1 million euro;
- **three were completed in 2021** and fully paid with the disbursement of approximately 460,000 euro;
- **seven more were completed between 2021 and 2022** and paid in 2022 for a disbursed amount of around 960,000 euro;
- an intervention is currently excluded from funding due to failure to complete it within the times set by the Decree. It could be completed by 2024, and the possibility of requesting the re-allocation of the previously authorised amount will be evaluated.

Of the four interventions not financed by the Region for which a request for financial assistance with reconnaissance was made in 2020 and 2021, two interventions were completed with internal financial resources and two are still in the study/planning phase.

Finally, 10 gas sensors for monitoring landslide events were active in 2023.

Electricity grid resilience

Inrete Distribuzione Energia has developed a multi-year work plan to **increase the resilience of the electricity system** in accordance with the ARERA guidelines. The Plan takes into consideration the risk factor deriving from the **formation of sleeves of ice and snow**.

The specifications of the plan were defined on the basis of the mechanical stresses and the mechanical characteristics of the conductors, the geometric characteristics of the lines and their geographical location and altitude; it includes the **Modena-province municipalities** of Fanano, Fiumalbo, Guiglia, Lama Mocogno, Montecreto, Montese, Pavullo nel Frignano, Pievepelago, Polinago, Riolunato, Sestola

and Zocca. An analysis of the medium voltage distribution network was performed in order to identify the scope of the works at hand; the process identified the secondary substations which feed the **most critical users** and considered the best supply route, subsequently pinpointing all the stretches of overhead conductors with an unsuitable section which needed to be replaced.

The type of intervention planned for the resolution of the identified criticalities mainly consists in the **replacement of stretches of bare overhead** conductors, whose sections are not suitable to withstand the stresses considered, with overhead corded cables. The plan is made up of **54 interventions** over 15 medium voltage distribution lines. The goal is to optimise activities, giving priority to the most critical areas and with a view to **minimising any adverse impact on the distribution service**, to reducing the risk of disservice and to upgrading of power supply lines.









As of 2023, a total of **42 interventions** have been completed, with five more in the execution phase: this is a medium voltage lines of **55 km** (there were 38 at the end of 2022), which matches **82% of the expected total**, meeting the target set for 2023.

In 2024, the **total renewal** of the medium-voltage lines in the ARERA Resilience Plan is expected to be **completed**, at least **67.5 km** (100% of the originally planned total).

Furthermore, among the various projects intended to promote the resilience of the electricity grid, there are also **new operating methods of remote inspection and management**. In order to manage the electricity distribution network more effectively, the Group is in fact implementing projects aimed at optimising the inspection and maintenance of assets through the use of technology. Among these, the **use of drones** will make it possible to carry out a significantly higher number of preventive inspections of overhead power lines, capturing potential infrastructure problems more frequently. The use of **robots** and the extension of the remote control of the secondary substations and their fibre optic connection will allow to intervene remotely without the need for teams, thus reducing costs and intervention times. The project will play an even more decisive role in the Apennine areas, where atmospheric events often cause difficulties for technical operations.

5. GOVERNANCE AND CREATING VALUE

5.01 Objectives, performance and targets

We said what we would do	What we did	SDGs	Progress*
Sustainability and risk management			
Organise initiatives to distribute the new purpose-driven Code of Ethics, update and continue training on the Code of Ethics for new recruits.	Once the informative document for the new purpose-driven Code of Ethics was drawn up and distributed, training for new recruits and new employees who entered the Group after corporate acquisitions was updated and continued, with the participation of 590 workers. (see p. 193)	-	
Economic value to stakeholders			
2.1 billion euro. Added value for stakeholders by 2026 (+25% compared to 2022).	2,037 million euro: added value for stakeholders by 2023 (+22% compared to 2022). (see p. 218)	8	
4 billion euro. Investments made between 2022 and 2026.	815 million euro, gross operating investments made in 2023 (+15%compared to 2023). (see p.223)	8	
Shareholders and financial institutions			
60% of 2022-2026 investments in activities aligned with the EU Taxonomy (54% in 2022).	56% of 2023 investments in activities aligned with the EU Taxonomy (vs. 54% in 2022).(see p.338)	8	
Communications with our stakeholders			
Complete the 4 local HeraLAB initiatives: 2 in the Modena area and 2 in the Forlì-Cesena area. Launch the third edition of HeraLAB in the Imola and Modena areas (6 meetings planned for 2023). Define the local areas and the topic on which to focus the 2024 HeraLABs.	Completed one initiative of the last edition of the Modena LAB. Four additional initiatives underway in Modena and Forlì-Cesena. The third edition of HeraLAB started in 2023 in Imola and Modena (six meetings in total).(see p.239)	11.17	
*  Result achieved or in line with planning;  Result with slight variance compared to planning;  Result with significant variance compared to planning.			
What we will do		SDGs	
Sustainability and risk management			
Continuity in training new employees with AlfabEtico, including by involving workers as trainers.			
Economic value for stakeholders			
2.4 billion euro. Added value for stakeholders by 2027.		8	
4.4 billion euro. Investments made in the period 2023-2027.		8	
Shareholders and financial institutions			
59% of 2023-2027 investments in activities aligned with the EU Taxonomy.		-	
Further increase the share of debt financed with ESG instruments.		All**	
Communications with our stakeholders			
Continue listening to and involving stakeholders on the topic of carbon neutrality. Launch HeraLABs in two additional areas in 2024.		11.17	
**This target cuts across all SDGs to which Hera contributes (4,5,6,7,8,9,11,12,13,14,17)			

5.02 Sustainability and risk management

Corporate governance

Hera is a multi-utility company with a majority public sector shareholding and a markedly diversified shareholder base. In terms of corporate governance, the Group has adopted statutory procedures, paying specific attention to the implementation of the principles contained in the **code of corporate governance** drafted by the Corporate Governance Committee of listed companies.

The main **governance bodies** of Hera are the Board of Directors, the Executive Committee, the Board of Statutory Auditors, the internal committees and the Shareholders' Meeting. The Board of Directors is supported in its duties by two committees: the Remuneration Committee and the Control and Risks Committee. The Board of Directors has also established a Supervisory Board pursuant to Legislative Decree no. 231/2001, as well as an Ethics and Sustainability Committee to monitor, disseminate and implement the principles in Hera Group's Code of Ethics and to supervise sustainability issues linked to business activities.

All detailed information concerning the Group's corporate governance and the functioning of its main bodies is dealt with in the **Corporate Governance Report** in the Group's consolidated and separate financial statements approved by the Board of Directors on 26 March 2024.

The Ethics and Sustainability Committee

The Ethics and Sustainability Committee is **tasked** with monitoring the dissemination and implementation of the Code of Ethics and exercising the functions for the supervision of sustainability issues linked with business activities. In particular:

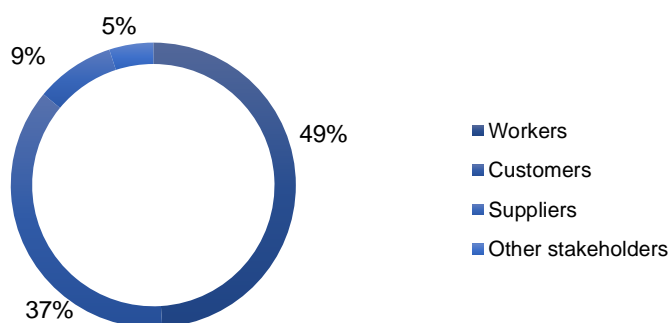
- receives reports of violations of the Code and evaluates whether or not proceedings should be initiated,
- monitors the implementation of sustainability policies,
- draws up, at the request of the Board of Directors, an opinion on specific sustainability issues,
- examines company procedures on social and environmental issues,
- previously assesses the sustainability report to be submitted to the Board of Directors.

Hera's Ethics and Sustainability Committee is made up of at least one independent director of Hera S.p.A., the Director of Shared Value and Sustainability and at least one external member who is an expert in social responsibility and sustainability.

The members of the Committee currently in office were appointed by the Board of Directors of Hera Spa on 10 May 2023. The **Committee met eight times in 2023**. On 21 February 2024, the Ethics and Sustainability Committee submitted the annual report on the activities carried out and on reports received in 2023 to the Board of Directors of Hera Spa.

In 2023 the Ethics and Sustainability Committee received **14 reports**. Seven reports came from workers, five from customers and two from other stakeholders; 285 reports have been examined by the Ethics and Sustainability Committee since 2008.

REPORTS TO THE ETHICS AND SUSTAINABILITY COMMITTEE FOR STAKEHOLDERS (2008-2023)



The seven reports from **workers** concerned compliance with current environmental regulations for two company offices, remote-working management also relating to specific cases (workers with children under 14 and compatibility with law 104/1992), overtime, holidays and sharing of individual performance

by the manager with their team, job enhancement, diligence and efficiency in the use of company resources, work-life balance and communication between managers and employees. The reports received from workers at 31 December 2023, were all closed with the exception of the report received in December. The **Committee's contribution** consisted of: verifying the compliance of the behaviours reported with the Code of Ethics, in one case facilitating dialogue between workers and their Department, in another case, directing the Department towards the right channels, in particular the Whistleblowing channel, which is also for environmental offences within the scope of law 231.

The five reports received from **customers** were related to the clarity and completeness of communication with customers, the fairness of trading practices, the attention paid to customer needs, the continuity of service and the relationship with the customer. The reports received from customers at 31 December 2023 are all closed. The **Committee's contribution**, in summary, consisted of: evaluating the findings of Hera Comm (and EstEnergy) that were not fully compliant with the principles of the Code of Ethics and suggesting an increase in clarity, completeness and proximity to the customer when responding to complaints, as well as evaluating the potential of increasing the efficiency and effectiveness of direct telephone contact with the customer with the aim of avoiding repeated complaints. The Committee successfully facilitated dialogue between the whistleblower and the company, reassuring the whistleblower of the Group's focus on the fair trading conditions of its sales agencies.

The two reports received from **residents** (other stakeholders) were related to the topic of waste service management. The Committee found no violations for one report and for the other it found no link to the Code of Ethics.

In particular, it should be noted that no violations were found in relation to: corruption, discrimination and harassment, customer privacy data, conflict of interest, money laundering and insider trading.

The Committee maintained a **high level of interaction and collaboration** with Departments/Companies, always aimed at identifying and sharing, where possible, **opportunities for improvement**, as well as **promoting good corporate practices** even externally.

The Committee, whose members changed in 2023, **followed its work plan** relying on the support of the Shared Value and Sustainability Department.

In 2023, in line with the shared work plan, the Committee discussed the **sustainability report** project by validating the materiality analysis and examining the main contents before the Board of Directors, and it examined the specific sustainability reports "In buone acque" (In good waters)" and "Sulle tracce dei rifiuti (Tracking Waste)", and it explored the **new elements of the CSRD** (Corporate Sustainability Reporting Directive) and the related **ESRS** (European Sustainability Reporting Standards) **application standards**.

Risk management

[2-12]

Hera adopts an organisational structure that appropriately and conscientiously manages the **exposure** and **risk appetite** arising from its business, defining an integrated approach aimed at ensuring the effectiveness, profitability and sustainability of management throughout the entire value chain.

Top management plays a fundamental role in this process and is called upon to express the medium/long-term vision of the desired risk profile for the Group defining the risk areas within which the Group intends to move.

The Group's risk appetite is managed through three fundamental pillars which are:

- the establishment of a Governance system that through the definition of roles and responsibilities approves **risk limits** and the **risk management policy**;
- the development of a **method** to measure risk exposure in relation to which risk limits are set;
- the implementation of a **risk monitoring** and **management process** and remediation **actions** in the event of overrun.

The main risk categories identified in the **Group's risk management policy** and **risk model, associated with the strategic aspects of the Business plan** and identified as having a potential impact on the company for 2023 are shown in the table below:

HERA GROUP'S RISK MODEL

DRIVER	ESTERNI			STRATEGICI
Categorie	Eventi naturali e catastrofali	Finanziari	Ambiente competitivo-regolamentare	Indirizzo
Tipologie	<ul style="list-style-type: none"> Fattori climatici Eventi catastrofali Eventi naturali Atti di terrorismo/sabotaggio/vandalismo Pandemia 	<ul style="list-style-type: none"> Prezzo commodity Tasso d'interesse Liquidità Controparte Credito Downgrading Rating 	<ul style="list-style-type: none"> Evoluzione normativa Scenario macroeconomico Processo autorizzativo Concorrenza Disponibilità di rifiuti Condotta degli Organi di vigilanza/regolazione/indagine 	<ul style="list-style-type: none"> Iniziative di piano e investimenti Operazioni di M&A Business model Investor Relations Framework organizzativo & Governance Partner strategici
DRIVER	INTERNI			
Categorie	Operativi	HR/Organizzativi	ICT	Legal & Compliance
Tipologie	<ul style="list-style-type: none"> Ambientale Business continuity operations Guasti e avarie Qualità di servizio al cliente 	<ul style="list-style-type: none"> Gestione e sviluppo risorse umane Salute e sicurezza Change management Adeguatezza funzionalità dei processi 	<ul style="list-style-type: none"> Business continuity ICT IT provisioning IT security 	<ul style="list-style-type: none"> Compliance interna Compliance esterna Contenziosi Condizioni contrattuali Frodi esterne e interne

Neutralità Carbonica
 Gestione Rischio
 Rigenerazione risorse
 Innovazione Digitalizzazione
 Equità sociale e Prosperità
 Profitabilità e sostenibilità finanziaria

For a description of the corporate governance system for the management of the risk and for the nature of the risks and their handling, please see the Group's Corporate Governance Report and the Management Report included in the Group's Consolidated Financial Statements at 31 December 2023. For a description of the risks linked to climate change, see the section "[Hera for the climate](#)".

Compliance system for corruption and fraud prevention

Importance for the Hera Group and monitoring of this aspect [2-26] [2-25]

Corruption and fraud pose a significant risk to business activities as they can significantly compromise the company's reputation and image and cause significant financial damage. HERA promotes the combating of corruption by taking a "zero tolerance" stance towards corruption and fraud in any form, reiterated both in the **Code of Ethics** and in the **Corruption and Fraud prevention model**. Furthermore, Hera Spa, again in 2019, obtained ISO 37001 certification for the Management system for the prevention of corruption.

Hera's commitment applies to both employees and third parties (e.g. consultants, suppliers and business partners) through appropriate preventive measures, a disciplinary system and specific ethical clauses that all employees and third parties must accept and adopt.

Hera has adopted a structured compliance system consisting of tools and policies designed to prevent and combat active and passive corruption, in addition to the matters envisaged in the Group's **Code of Ethics** and the **231 Organisational Model**.

Hera's anti-corruption system comprises the following:

- Code of Ethics;
- Quality and Sustainability Policy;
- **Corruption and Fraud prevention model** that supplements the existing **231 Organisation Model**, which already covered the types of corruption included in Legislative Decree no. 231/2001;
- **Guidelines** for the prevention and management of fraud;
- periodic **audits** and **training** activities with a view to corruption and fraud prevention;
- a "**whistleblowing**" system for handling reports relating to offences concerning both corruption and those potentially significant for 231-related purposes.

The 231 organisational model

Legislative Decree 231/2001 introduced a **regime of administrative liability** into the Italian legal system for offences committed, in their own interest or to their own advantage, by natural persons acting as representatives, directors or managers on behalf of the entities, or by natural persons acting under the supervision of such persons or subjected to supervision or management on their part.

The Board of Directors of Hera Spa and the boards of the main Group subsidiaries have adopted the Organisation, management and control model (231 Organisation Model) aiming to ensure conditions of correctness and transparency in conducting business and company activities. 231 Organisational Model is aimed at **preventing all 231-related offences**, including bribery and corruption; conflict of interest cases are regulated and measures to protect the confidentiality of information are foreseen. The model includes the principles of conduct formalised in the Code of Ethics. In December 2021, the Group approved the revision of the organisation, management and control model pursuant to Legislative Decree no. 231/2001, which renewed the Hera Group's commitment to combating corruption and any offence relevant to 231 and to preventing situations involving a risk of crime being committed, spreading a culture of ethics and legality.

The companies **equipped with a 231 Model** are: Hera Spa, Acantho Spa, AcegasApsAmga Spa, A.C.R. Spa, Aliplast Spa, ASA Scpa, Biorg Srl, Estenergy Spa, Etra Energia Srl, F.lli Franchini Srl, Feronia Srl, Frullo Energia Ambiente Srl, Hera Comm Marche Srl, Hera Comm Spa, Hera Luce Srl, Herambiente Servizi Industriali Srl, Herambiente Spa, Hera Servizi Energia Spa, Heratech Srl, Hera Trading Srl, Hestambiente Srl, Inrete Distribuzione Energia Spa, Marche Multiservizi Spa, Recycla Spa, Uniflotte Srl, Vallortigara Servizi Ambientali Spa. As a whole, these 26 companies encompass **98% of Group employees**. Marche Multiservizi Spa set up its own "231 Model".

The Group companies, with the support of the Supervisory Board and the Group's Internal Auditing Department, after a mapping of company activities sensitive to the risks of offence included in Italian Legislative Decree no. 231/2001, have defined 30 protocols to be followed when carrying out sensitive company processes given that they are exposed to the potential risk of committing 231-related offences, a number of which were specifically tailored to meet the specific characteristics of the companies. In addition, companies periodically provide 39 information flows informing the Supervisory Board of processes at risk of 231 offence, including fraud and corruption. The protocols are widely distributed to all workers through their publication and periodic updating on the corporate intranet. Their application is analysed and monitored during the audit phase. In 2023, five were revised ("Management and communication of confidential, privileged and relevant information (P002)", "Hera Spa Separate Financial Statements and Group Consolidated Financial Statements (P016)", "Search, Selection and Recruitment of personnel and assignment of collaboration assignments (P021)", - "Procurement (P023)" - "Management of reports to the Supervisory Board (whistleblowing) (P029)". The Supervisory Board also approved specific protocols for the companies Vallortigara and Recycla (on environmental protection and health and safety at the workplace) and for Hera Luce (on the management of procurement contract accounting).

For more information on 231 Model, see the Corporate Governance Report in the 2023 Annual Financial Statements.

231-related risk assessment activities
[205-1]

The risk assessment activity (both standard and for 231 Model purposes) carried out by the Internal Auditing Department concern all the business processes of the Hera Group. A mapping of the activities carried out by the business and staff units is carried out every three years, determining whether they are exposed to risk. **The risks examined are:** regulatory compliance, reliability and integrity of information, protection of company assets and effectiveness and efficiency of operations. The risk map has logics and assessment scales in line with those used by the **Enterprise risk management**. It includes the risks of fraud, corruption (also in relation to ISO 37001 Certification) and the offence referred to in Italian Legislative Decree 231/2001. Specifically, **one thousand risk scenarios** were identified (the monitoring of which is constantly being updated), against which the inherent risk (i.e. not yet involving mitigation measures) was initially assessed and, downstream of the mitigation actions carried out by the internal control system, the residual risk as well. These activities were carried out on the basis of the results of the previous assessments, on the outcomes and the key aspects of the audit activities performed, the Enterprise Risk Management analysis presented to the Board of Directors of Hera Spa in January 2021 and in relation to the sector risks deriving from benchmarks of other peer companies. The assessments, referring to the risk event, were guided and gauged in relation to the type of the processes or the business: the drivers which supported the assessments and the prioritisation of the risk aspects also took into account the peculiarities of the Group. The risks referred to in Legislative Decree no. 231/2001 have been identified by macro-processes, assessed ad hoc and included in the risk assessment within the sphere of the compliance risks.

As part of the risk assessment activities, the areas of risk from the **crime of corruption** are identified mainly in the dealings with Authorities and supervision and control bodies governed by public law that the Group maintains, for example, within the scope of participation in public tender procedures, in the application for licences, administrative measures and authorisations, in the sending of reporting documents, in the stipulation and execution of contracts with public administrations. These areas, together with spheres such as tenders, donations and sponsorships, entertainment expenses and the management of credit positions and tax risk, are constantly monitored. In addition to these areas, there are areas exposed to the offence of corruption between private parties, such as the management of

active contracts (preparation, participation in tenders, negotiation, etc.), commodity trading, dealings with third parties, the selection, recruitment and administrative management of personnel and the procurement of goods, work and services.

The risk assessment activities generated a **risk-based audit plan** for the Hera Group. The risk assessment, developed for the three-year period 2022-2024, was approved by the Board of Directors of Hera Spa in the meeting of 15 December 2021, along with the audit plan for 2022-2024. On 14 December 2022, the relevant annual audit plan for 2023 was approved. During the year the related audits were conducted, the most significant risk areas were identified and the related risk mitigation actions were agreed with management. Finally, on 13 December 2023, the annual audit plan for 2024 was approved.

Based on the matrix identified in the risk assessment, the Hera Group's Internal Auditing Department specifically focused on the risk of **fraud and corruption**, examined in its implementation methods with respect to the various processes and stakeholders of reference (e.g., Public Officials or Hera business partners). During 2023, the audits envisaged in the plan that are significant for anti-corruption purposes were carried out. The analyses **did not reveal any corruption incidents**; furthermore, there were no reports of proven corruption incidents pursuant to Decree 231.

[205-3] On 12 April 2019, the 231 protocol "Handling of reports to the Supervisory Board (whistleblowing)" was published, which governs the process of reporting offences to the Supervisory Board and the subsequent investigation activity that involves the Internal Auditing Department, with the involvement of the competent company departments (Central Legal and Corporate Affairs Department). There are channels for reporting to the Supervisory Board both by post and by email. Since 2021, a web tool has been created that allows reports to be forwarded to the SB promptly and anonymously. These channels are made public through indications on the Group website.

In 2023, after Legislative Decree no. 24/2023 entered into force, both the tool and the 231 protocol on reporting offences were updated, also appearing in the information found on the Group's websites, with additional communication channels also being provided (oral with in-person meetings, if requested by the whistleblower).

The cited procedure for "whistleblowing" envisages measures to protect the confidentiality of those who makes reports and establishes a specific channel for receiving reports on corruption, fraud and 231-related offences in addition to the one envisaged by the Group's Code of Ethics. During 2023, 11 reports were received by the Supervisory Board; none of which led to a positive finding of the commissioning of 231-related or other offences. Those deemed relevant mainly concerned: sales activities, health and safety, personnel management and alleged harassment, supplier management, environmental protection.

In 2023, the Internal Auditing Department carried out all its activities, process audits, Risk Assessment, 231-related activities and all other additional activities, in line with the best practices complying with the international Quality Assurance Review certification.

Management and prevention of fraud

The Hera Group published the "**Model for the Prevention of Corruption and Fraud for the Hera Group**" in October 2023, with the aim of defining the principles adopted by the Group for this issue, the roles and responsibilities in the field of prevention, detection and investigation of potential fraud, promoting behaviour within the organisation that is consistent and aligned with the principles expressed.

[205-3] The Central Legal and Corporate Affairs Department **did not receive any reports about fraud risk** in 2023.

At present, fraud risks are assessed and managed in the Internal Auditing Department's Risk Assessment, and the associated reports are dealt with through the Compliance Function/Supervisory Board's own whistleblowing tool, in close correlation with 231 and anti-corruption issues.

As part of the 262/05 compliance activity, the control matrices (Risk Control Matrix) are supplemented with fraud risks, whenever considered potential; the result of the testing activity is considered to cover both compliance risk and fraud risk.

Main activities and results achieved [2-16]

Since 2019 a comprehensive management system for the prevention of corruption and fraud has been operational which in 2021, after an audit by the third-party certification body Bureau Veritas, allowed Hera Spa, the parent company that manages the most important services most exposed to the risk of corruption, to renew the ISO 37001 certification, obtained in October 2019, in July 2023. The system is based on the Quality and Sustainability Policy which guarantees the Group's commitment not to tolerate any form of illegality, corruption and fraud and envisages a system of sanctions for such behaviour, also encouraging the reporting of illegal or even only suspicious events, without fear of any retaliation. All the Hera Group Companies which adopt the Group's 231 Organisation Model implemented the **fraud and corruption prevention model**, which supplements the already existing model for the prevention of 231-

related offences. In July 2023 the Model was updated in order to strengthen fraud prevention activity. This document defines the concept of corruption, both active and passive, and disciplines the measures to prevent corruption and unpermitted conduct in the various dealings subject to risk of offence: with public officials, customers, suppliers and all other business partners.

Moreover, the Compliance Unit is operational, supervising the anti-corruption management system, examining the results of the audits conducted to these end by the Internal Auditing Department and monitoring corruption risk and preventive and risk mitigation actions.

From 2023 onwards, the principles present in the Fraud Risk Prevention Guideline, approved as early as 2018 to support the prevention and management of fraud, started being merged into the Model for the prevention of corruption and fraud which has therefore been renamed "Model for the prevention of corruption and fraud"

The aforementioned model assigns roles and responsibilities within the sphere of the prevention, detection and investigation of potential fraud, promoting behaviour within the organisation that is consistent and aligned with the principles expressed.

At present, fraud risks are assessed and managed in the Internal Auditing Department's Risk Assessment, and the associated reports are dealt with through the Compliance Function/Supervisory Board's own whistleblowing tool, in close correlation with 231 and anti-corruption issues.

In relation to activities in **compliance with Law No. 262/05**, the planning foreseen in the reporting Manager's Plan for the year 2023 was adhered to, with the exception of changes occurring during the year. The controls in the matrices used for assessing the processes were integrated with fraud risks in cases in which the risk existed; the result of the test for the purpose of proper preparation of the financial reporting also covers the linked fraud risk. The tests carried out **did not find any anomalies linked to fraud**.

With regard to the separation of roles and activities (SoD-Segregation of Duties), the verification of the correct definition of roles continued in order to avoid functional overlaps and operational allocations that concentrate critical activities on a single subject, taking into account the correct alignment between the IT profile and its related organisational role.

Risk rules in the SAP environment for the Active Cycle and the Passive Cycle were mapped in specific SoD Matrices; the activity will continue in the coming years for all further processes identified.

Managing sustainability

[2-9]
[2-12]
[2-13]

In order to ensure **social responsibility and sustainability in planning and corporate management**, in May 2005, the Board of Directors of Hera Spa set up a Corporate Social Responsibility Organisation Unit, reporting to the CEO, which became a Department in 2010. Hera has thus been one of the first companies in Italy to endow itself with a unit dedicated to corporate social responsibility. As from 1 March 2019, in line with the development process undertaken in the last few years, the CSR Department was renamed the **Shared Value and Sustainability Department**. The Department is responsible for proposing and defining the company guidelines on corporate social responsibility and on the creation of shared value as well as the policies concerning reporting on the shared value and on sustainability; it oversees the **balanced scorecard** system, drafts the **reporting on sustainability** and **shared value** and proposes initiatives and pilot projects within the CSR/CSV sphere; it works together on the stakeholder engagement initiatives and is responsible for the periodic up-date of the Group's Code of Ethics. The SVS Director is a member of the Group's Ethics and Sustainability Committee.

In 2023, the Department conducted an analysis on the current Sustainability Report in order to understand how to respond to the European legislation regarding sustainability reporting, which will come into force with the 2024 report (**EU directive 2022/2464 - CSRD**). In February 2024, a working group composed of various Group Departments was established, tasked with identifying and implementing the actions required to draw up the 2024 Sustainability Statement in full compliance with the new legislation.

At **AcegasApsAmga**, the sustainability report unit is part of the Administration, Finance, Control, Sustainability Report and Regulatory Department. It carries out the sustainability accountability activities, laying down in the context of AcegasApsAmga the corporate guidelines related to corporate social responsibility, and ensures that top management is informed on the progress of the pertinent issues. It also guarantees the implementation of the balanced scorecard system in line with the Business plan, the Budget and the Group guidelines.

At **Marche Multiservizi**, the sustainability report unit is part of the External Relations, Institutional Relations and Regulatory Affairs department and carries out sustainability accountability work.

The Code of Ethics
[2-23]
[2-24]
[2-25]

The Code of Ethics is the document that contains **the commitments and ethical responsibilities** to be implemented by the managers, the workforce and collaborators of the Group for the achievement of corporate objectives. The Code of Ethics guides the business management and the individual conduct towards the observance of the ethics values and the functioning principles of Hera which represent, together with the mission, the basis of the principles contained in the articles which make up the Code. **Supplier qualification** is subject expressly to acceptance of the Code and the supply contracts drawn up by the Group companies include **termination clauses** in case suppliers fail to comply with the principles of the Code of Ethics.

The Code of Ethics was approved by the Board of Directors in 2007 and is subject to **checking and updating on a three-yearly basis** by means of a participative process which involves all the workers and trade unions. The sixth and current version of the Code of Ethics was approved by the Board of Directors on 8 February 2023. This review process involved management, workers in various forms and trade unions and was one of the most attended in the history of the Code. The Code was updated in the light of Hera's purpose introduced in 2021 in the Articles of Association of Hera Spa and the major changes in the external scenario that have taken place over the last three years. Commitment to a just ecological and digital transition, attention to vulnerable customers, the promotion of the working and personal well-being of our people, and the importance of engaging in dialogue and listening, even in times of crisis, were also introduced. In addition, more emphasis was placed on striving for environmental and social sustainability together with local communities and integrity in dealing with institutions and authorities. The language, a fundamental tool for transmitting and grounding the contents of the Code, was subject to innovation and simplification.

The Code of Ethics is one of the main instruments underpinning Hera's commitment to **human rights and workers' rights**: it ensures that international reference texts are applied within the company and disseminated to all stakeholders. In fact, Article 6 of the Code provides that **the implementation and dissemination of the Code is the responsibility of all addressees**, in proportion to their responsibilities. The main ethical references of the Code are the International Labour Organisation (ILO) Declaration on Fundamental Principles and Rights at Work, its eight main Conventions and the UN International Bill of Human Rights, the OECD Guidelines for Multinational Enterprises, the Charter of Fundamental Rights of the European Union.

All the new recruits and the new employees entering the Group further to corporate acquisitions are involved in a training session on the contents of the Code of Ethics via the ethic game **AlfabEtico**. During 2023, the training content was updated in line with the new Code of Ethics and the training continued. Thanks to the contribution of internal facilitators, 31 training sessions were held and 590 people were trained at Group level. The satisfaction rating of the initiative was very high (4.7 out of 5). The group will engage in providing continuity of training, including through the involvement of workers as trainers.

In 2022, **CSR seminars** were designed dedicated to the management of relations with suppliers in the event of anomalies: they were formulated in pills involving employees. A number of articles of the Code of Ethics are part of the teaching materials. In 2023, seminars were broadcast in distance learning mode. 482 workers were involved in the supplier monitoring processes covered in training.

In 2023, an **informative document** for the new **purpose-driven Code of Ethics** was drawn up and distributed with the aim of promoting its purpose, mission, values and operating principles. The document also contained a map highlighting the articles where the purpose was referred to.

The quality, safety, environmental, and social responsibility management system
[403-1]
[403-8]

In 2023, the Hera Group companies **maintained or renewed** the validity of all existing **certificates**. The certification body took around 450 man-days in total to conduct its audit activities for the various certification schemes. It highlighted the overall compliance with the requirements of the reference standards and suggested ideas for improvement to Hera to allow it to constantly develop its management systems. All the audit activities concluded positively making it possible to **maintain the certification of quality, safety, environment and energy system** of Hera Spa and the other Group's companies including Inrete Distribuzione Energia, Uniflotte, Heratech and Acantho, as well as the Herambiente, AcegasApsAmga and Hera Comm Groups, including the AFNOR XP X30-901 certification relating to the management system of the Circular Economy projects of Hera SpA, AcegasApsAmga, Hera Luce and Hera Servizi Energia.

In 2023, the Hera Group developed a **management system for gender equality** and obtained **UNI/PDR 125 certification** for 11 corporate names (Hera SpA, Inrete, Heratech, Hera Comm, Acantho, Herambiente, HASI, Acegasapsamga, Hera Luce, Hera Servizi Energia, Marche Multiservizi).

In 2023, ISO 50001 certification was also obtained for the energy management system of Herambiente Servizi Ambientali and ISO 14001 certification was obtained for Acantho. The development of management systems in line with the most recognised international standards will continue in 2024.

Indeed, significant projects are already underway, such as ISO 37001 certification for Marche Multiservizi's corruption prevention system.

Finally, in 2023, Bureau Veritas was again awarded the contract to carry out all certification activities for all Hera Group companies. The decision to entrust all checks to a single certification body guarantees a uniform approach and helps the assessors gain a better understanding of the reference context. This decision also helps respond to the requirements of efficiency and means that commitments can be rationalised thanks to the synergies that can be found during the planning of activities and when audit teams interact.

**Hera's
commitment to
quality, safety,
environment and
social
responsibility
certification**

The management systems adopted establish the requirements that are necessary in an organisation to improve corporate processes in order to increase the satisfaction of the end customer, who is the end beneficiary of the services provided by Hera, to develop and improve its environmental and energy performances, to improve workplace health and safety and its social performance. The high diffusion of the Group companies' certified management systems is shown in the following table.

CERTIFIED MANAGEMENT SYSTEMS AT GROUP COMPANIES (2023)

Management system	Group	
	No. of companies	% of employees
ISO 9001 - Quality	29	99%
ISO 14001 - Environment	23	90%
ISO 45001 - Health and safety [403-8]	22	88%
ISO 50001 - Energy	11	72%
UNI/PDR 125:2022 – Gender equality	11	81%
SA 8000 - Social responsibility	4	23%

Excluding the sales companies (Hera Comm and subsidiaries, Hera Trading) from the calculation of the percentage of workers with environmental certification (ISO 14001), the value totals 99.7%.

The percentage of energy consumed at Group companies that have **ISO 50001 energy certification** is 98% of the total (it was 96% in 2022).

In addition to the certified management systems described above, Group companies hold the following certifications:

- **ISO 37001** (management system for corruption prevention): Hera Spa, A.C.R. Spa.
- **Uni 11352** (companies providing energy services - ESCO): Hera Spa, Hera Servizi Energia Spa, Hera Luce, Hera Servizi Energia and Marche Multiservizi.
- **ISO 17025** (laboratory accreditation): Herambiente Servizi Industriali, HeraTech, Marche Multiservizi, Recycla.
- **ISO 27001, ISO 27017 e ISO 27018** (set of rules comprising the data security management system), **ISO 27701** (privacy certification) and **Tia-942 Rated 3** (international standard that evaluates the configuration and maintenance of the key aspects of Data Centres): Acantho and Aresgas (the latter for **ISO 27001** only).
- **AFNOR** (circular economy project management system): Hera Spa, Hera Luce, AcegasApsAmga, Hera Servizi Energia Spa.
- **EuCertPlast** (European certification of companies that recycle plastic materials), **ISO 22000** (food safety management system), **ISO 28000** (supply chain safety management system), **RecyClass** (Recyclability of packaging): Aliplast.
- **AWS International Water Stewardship** (international standard in water conservation): Hera SpA Val di Setta drinking water treatment plant.
- **ISO 14067** (carbon footprint): Ferrara district heating service;
- **CPR** (Building materials certification - aggregates): Herambiente Servizi Industriali;
- **F-GAS** (Companies authorised to operate with fluorinated greenhouse gases): Hera Servizi Energia Spa;
- **Mass Balance** (private regulation owned by MATREC for the creation of a management system for the application of mass balances): Hera Servizi Energia Spa, Hera Luce;
- **Biomethane**: (certification based on the National sustainability certification for biofuel and bioliquids) Herambiente, Biorg.

The Group's main waste treatment plants are **EMAS registered**. Therefore, the new objectives envisage the maintenance of the results achieved to date for the plants registered and any implementation of the registrations for the new plants that will be created or that will enter the Group. At the end of 2023, **37 facilities had EMAS registration. 100% of the waste treated** by the Group was treated **at plants with ISO 14001 certification**.

5.03 Added value for stakeholders

The production and allocation of added value

[201-1]

In this Sustainability Report, added value is understood as the difference between revenues and production costs not constituting corporate stakeholder remuneration and the purchase costs for goods and services useful for the production process. It is therefore the difference between the revenues and costs incurred for the purchase of the production factors from other businesses and thus **represents the value that the production factors within the company, its own capital and labour, "added" to the inputs coming from outside**. The concept of added value adopted here is distinct from the definition of added value applying strictly to accounting practices. Here, the methodology applied is the one proposed in 2001 by the Gruppo di studio per il Bilancio Sociale (GBS). **With respect to GBS methodology**, rental payments for the use of assets owned by shareholder municipalities and sponsorship costs are considered, as they are deemed significant for stakeholders. In addition, in contrast to the proposal of the GBS, the portion of value allocated to financial institutions was calculated considering the balance of financial income and charges, as this is deemed a better quantification of the relationships with this type of stakeholder as opposed to the sole figure of financial charges. With this framework, the gross overall added value distributed is almost equal to the gross added value produced by normal operations.

There are two important reasons for using the indicator of added value. Firstly, it enables **quantification of the wealth generated by the company**, and accounts for how this wealth was generated and how it is allocated to stakeholders; it is therefore useful for comprehending the economic impacts the company produces. Secondly, through this report it **connects the sustainability report with the annual financial statements**. In this sense, production and distribution of added value is an instrument by means of which we can reconsider the corporate annual financial statements from the vantage point of stakeholders.

PRODUCTION OF ADDED VALUE

(mn€)	2021	2022	2023
Revenues	10,377.1	19,871.3	14,976.8
Other operating and non-operating revenues	400.1	548.2	667.8
Grants received from public institutions	-36.0	-60.6	-95.7
Consumption of raw materials and consumables (net of changes to raw materials inventories and stocks)	-6,668.5	-16,730.0	-9,672.2
Costs for reclassified services	-2,380.2	-2,023.1	-3,570.0
Bad debt provisions	-94.4	-133.9	-158.0
Accruals to risk provisions and other provisions	-54.4	-56.1	-76.4
Other reclassified operating costs	-25.8	-31.6	-48.5
Capitalised costs	60.8	82.5	82.1
Core gross added value	1,756.8	1,684.1	2,026.4
Portion of profit (loss) pertaining to associated companies and joint ventures	13.2	10.0	10.3
Gross overall added value	1,764.4	1,674.1	2,036.7

The values of the consumption of raw materials and consumables, costs for services and other operating costs are indicated net of the costs considered as stakeholder remuneration.

Gross overall added value generated for stakeholders in 2023 came to **2,036.7 million euro**, increasing by 362.6 million euro on the previous year (+21.74%). As of 2027, the value added to stakeholders is expected to amount to 2.4 billion euros.

DISTRIBUTION OF ADDED VALUE TO STAKEHOLDERS

mn€

	2021	2022	2023
Employees	592,8	601,1	641,1
Shareholders	217,9	236,3	250,3
Company	618,1	546,1	752,2
Financial institutions/Banks	218,0	135,0	187,9
Public Administrations	115,1	151,8	201,0
Local communities	2,5	3,8	4,2
Gross overall added value	1.764,4	1.674,1	2.036,7

The portion of added value allocated to **employees** increased by 40 million euro compared to 2022 (+7%). About 30 million euro of this increase was related to the change in the scope of consolidation generated by corporate acquisitions (see the “Methodological Guide” section for changes in the scope of consolidation). Net of these events, the increase in personnel costs was limited to 1.7%, due to the salary increases provided for by the national collective labour agreements.

The portion allocated to **shareholders** of Hera Spa and to minority shareholders of subsidiaries increased by 14 million euro (+6%). This portion consists of 208.5 million euro for dividends distributed to Hera Spa shareholders (an increase compared to 2022 due to the increase in the portion of dividends distributed from 12.5 to 14 eurocents per share) and 41.8 million euro for the portion of profit attributable to minority shareholders of Hera Spa subsidiaries.

37% of the added value produced in 2023 was **reinvested within the company**. This portion increased compared to 2022 (+38%) and includes operating profit that is not distributed to shareholders (232.9 million euro, vs 69 million euro in 2022) and depreciation and amortisation of investments made (519.3 million euro; +9% compared to 2022). The increase in retained earnings is related to the significant increase in the result for the period against a dividend that continued to grow according to the expectations of the business plan, but less than proportionally to the respective profit.

The share of added value distributed to **financial institutions** amounted to 187.9 million euro in 2023 (9.2% of the total; up 39.2% from 2022). This share consists of 345.0 million euro in financial expenses (vs 217.2 million euro in 2022) and 157.1 million euro in financial income (vs 82.2 million euro in 2022). The increase in financial expenses was mainly due to the financial funding transactions carried out during the second half of 2022, within an environment of rising interest rates, and the higher volume of loans in the portfolio at the end of 2023, as a result of the 110% bonus with subsequent transfer. The increase in income, on the other hand, was mainly due to the increase in income from loans to Group companies for centralised treasury and loans disbursed and the increase in bank interest due to an increase in average available deposits, remunerated at rising interest rates compared to 2022.

The portion distributed to **public administrations** amounted to 201.0 million euro, 10% of the total (up 32% from 2022). The main items are described below.

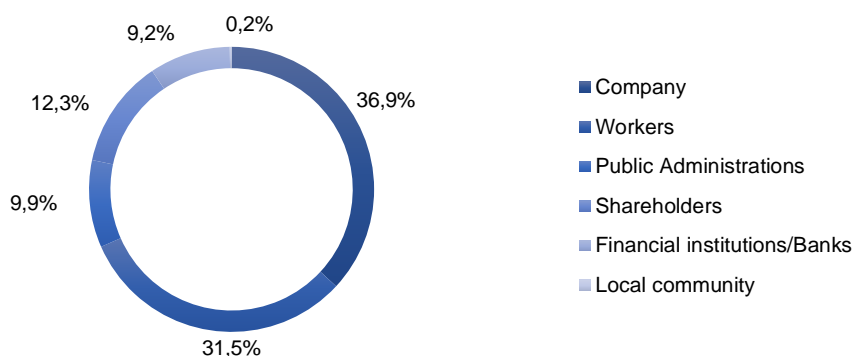
Taxes and duties amounted to 198.2 million euro (9.7% of the total value added distributed), up 66% from last year. Taxes and levies amounted to 129.4 million euro paid to the national government (vs 68.7 million euro in 2022), 43.8 million euro to Regions and 25.0 million euro to Provinces and Municipalities (27.1 million euro and 23.3 million euro respectively). In 2023, corporate income taxes amount to 173.2 million euro (+81% compared to 2022).

The portion relating to public administrations includes **fees** paid for the use of production facilities used by the company owned by the member municipalities, amounts allocated to municipalities for **environmental compensation** relating to waste disposal plants, and the **operating costs of the national (ARERA and AGCM) and local authorities**. In 2023, total fees and compensations amounted to 91.6 million euro (vs 87.4 million euro in 2022), while the operating costs of the authorities amounted to 7.0 million euro.

Public subsidies received in 2023 amounted to 95.7 million euro (+58% compared to 60.6 million euro in 2022); this portion is subtracted from the share of added value distributed to public administrations.

Finally, 4.2 million euro was allocated to **donations** (1.3 million euro) and **sponsorships** (2.9 million euro); these items are detailed in the section “Economic development and social inclusion”.

ALLOCATION OF ADDED VALUE TO STAKEHOLDERS (2023)



[203-1]

Investments

Including capital grants, the Group's operating investments, amounted to 815.8 million euro, up 106.3 million euro compared to the previous year (+20.5%) and mainly concerned work on plants, networks and infrastructures. In addition, regulatory adjustments were made, particularly on gas distribution for the large-scale replacement of meters and for the purification and sewage sectors. See the Hera Group's "Directors' report" for further details. As of 2027, realized investments are expected to amount to 4.4 billion euros.

Hera Group tax strategy and model

[207-1]
[207-2]
[207-3]

With the aim of ensuring full control over tax risk, the Group launched a project in previous years to improve its procedures and organisational set-up, i.e. to promptly detect all potential factors that generate it and that are partly exogenous (interpretative uncertainty caused by ambiguity or lack of clarity in tax regulations) and partly endogenous (incorrect and/or untimely compliance with mandatory requirements, failure to detect new regulations, conducting operations that may be disputed by the tax authorities as abusive).

The first part of the project concerned the introduction for the parent company Hera Spa of a **Tax control framework (TCF)**, which may be defined as a set of rules, procedures, organisational structures and controls, aimed at detecting, measuring, managing and controlling tax risk, understood as the risk of incurring tax violations or conflicting with the principles and purposes of the Italian legal system (abuse of law). The second part of the project, currently being completed, involves the operational launch of a cooperative compliance process with the tax authority (a collaborative compliance regime under Italian law) which requires that the taxpayer adopt a TCF model.

The **TCF model** is based on four fundamental pillars:

- **control environment:** adopting a tax strategy, approved by the Board of Directors, aimed at defining the principles and limits guiding tax risk management;
- **risk assessment:** identifying potential tax risks impacting the company and introducing appropriate safeguards to detect their emergence and mitigate their effects;
- **governance:** identifying the roles and responsibilities of the actors involved in the management of the tax variable, defining information flows between these actors and processes for the effective and, whenever possible, preventive control of tax risk;
- **monitoring:** verification activities carried out on an ongoing basis to assess the adequacy and effectiveness of the implemented tax control framework.

The Hera Group's TCF is part of the internal control and risk management system set up by the Group. As part of the internal control system, TCF integrates and borrows the operating logic of the accounting and administrative control system, aimed at ensuring the reliability, accuracy, trustworthiness and timeliness of financial reporting in accordance with the regulations governing its preparation. At the same time, the presence of an internal control model on tax risks makes it possible to introduce specific policies with regard to the organisational model of management and control for the purposes of the liability of the entity, pursuant to Legislative Decree no. 231.

The design, implementation and maintenance of this system, as well as its periodic evaluation, are inspired by international best practices (i.e. "CoSo" framework). TCF's monitoring activities are entrusted

to the **tax risk officer** who, as head of the tax control department, has the role of verifying the adequacy and effectiveness of the control system adopted for tax risk management.

The tax risk officer guarantees autonomy and impartiality in carrying out of tax audits and coordinates with the activities conducted to provide assurance within the other internal control systems, also in order to ensure efficiency in monitoring activities. The tax risk officer also provides an annual report, submitted to the Board of Directors for approval, describing the monitoring activities and adequacy of the TCF.

The internal audit department, as a third-level control function, ensures that the control system, and thus also the TCF, is adequate overall.

From a formal point of view, the TCF model comprises three fundamental governance documents:

- **tax strategy:** principles governing the management of taxation;
- **Tax compliance model:** roles and responsibilities for TCF management;
- **Interpretation risk management policy:** regulating the process of detecting, assessing and assuming interpretation risk.

The parent company Hera Spa has approved the Fiscal Strategy document approved by resolution of the Board of Directors, while the remaining documents are being completed and approved. These documents have, in any case, already been translated into applicable operating policies, but have not undergone the Board of Directors' approval process because they need to be fine-tuned with the relevant tax authority after full entry into the cooperative compliance regime, as discussed below.

In 2023, the TCF model was extended to the companies of the Hera Comm Spa Group, Hera Trading Srl, Inrete Distribuzione Energia Spa and Herambiente Spa, with the aim of maximising tax risk coverage and control.

Cooperative compliance

The most advanced countries, under the leadership of the OECD, have developed an innovative model for the relationship between the tax authorities and larger taxpayers, called "**cooperative compliance**", which was enabled by the implementation of the Tax control framework. In Italy, the **collaborative compliance regime** provides for constant interaction between the taxpayer and the Inland Revenue office, making it possible to move from a system based on post tax audits, initiated years after the end of the tax year in question, to a system of continuous preventive audits, through which the taxpayer and the Internal Revenue office discuss the best way to manage the tax variable; hopefully but not necessarily this leads to the sharing of the company's choices before the tax return is sent. The regime, which was introduced in 2015 and has been operational since 2017, was adopted by several of the country's largest taxpayers.

Adopting the cooperative compliance regime entails, in summary, the following advantages:

- evolved methods of interacting with the Inland Revenue office, being able to count on a single interlocutor, part of the Large Taxpayers and International Central office, with a view to obtaining prior certainty on the tax handling of doubtful cases, with a reduction in potential liabilities and disputes;
- reduction of the applicable administrative fines (by half of the minimum amount) for any violations subject to assessment, as well as suspension of the relevant collection until a judgement is made, and mitigation of the risk of criminal liability for any tax offences that may occur;
- reputational benefits, linked to the fact that the list of adhering entities is published on the official website of the Inland Revenue office, as well as positive spin-offs in terms of corporate social responsibility;
- compliance with the highest international standards of tax compliance.

On 21 December 2023 Hera Spa was formally admitted to the collaborative compliance regime and in 2024 we expect to receive updated information from the tax authority to render the collaborative and dialogue-based relationship fully operational.

In December 2023, the companies which the TCF model was extended to submitted applications to the relevant tax authority to join the collaborative compliance regime and at the end of 2024, once the preliminary investigation and dialogue phases are completed, it will formally enter this regime.

The main tax figures for Italy, which on average account for more than 99.5% of total Group values, are summarised below.

[207-4]

TAX REPORTING ITALY

(mn€)	2022	2023
Revenues from sales to third parties	19,791.4	14,921.6
Pre-tax profit/loss	415.4	662.5
Tangible assets, other than cash holdings and cash equivalents	1,978.6	2,053.6
Corporate income taxes paid on a cash basis	165.9	96.6
Corporate income taxes accrued on profits/losses	114.9	229.5

5.04 Shareholders and financial institutions

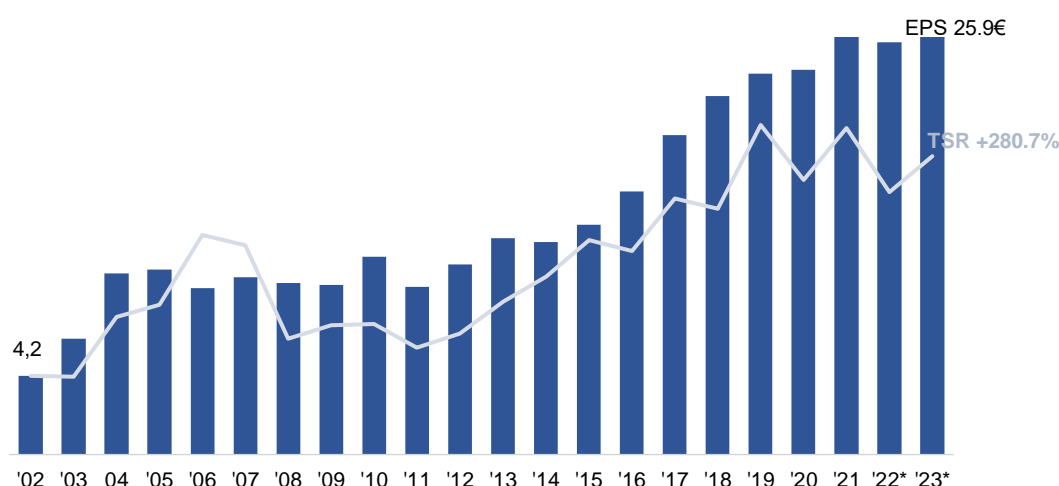
Hera's commitment towards investors

Hera undertakes to create value by placing the quality and efficiency of the services managed and the growth by lines, both internal and external, at the centre of its strategic approach; at the same time, it pursues a balanced development of the strategic areas of its business portfolio.

The stability of these strategic policies over time, the low-risk appetite and the sustainable management approach have contributed towards producing economic-financial results constantly on the up over 21 consecutive years, also under adverse market conditions.

Total Shareholders return with respect to the initial public offering (IPO), came to **+280.7%** at the end of 2023: a value which has always remained positive in periods characterised by considerable volatility on the financial markets.

TOTAL SHAREHOLDER RETURN (TSR) FROM THE IPO COMPARED TO EARNINGS PER SHARE (EPS) GROWTH



* Values adjusted to exclude transitory accounting effects due to gas inventory valuation. See the Directors' report on economic performance for more details.

Complete transparency with shareholders and financial markets on the creation of value










Hera promptly provides the market with significant economic-financial information in a **timely** way, facilitating the correct assessment and the transfer of the value generated by operations to the listed shares, respecting the different categories of shareholders by addressing dedicated communications to them.

Hera continues to make the greatest commitment so as to ensure a **plurality of professional and independent** appraisals of the company's value and the Group's sustainable approach.

In order to offer professional third-party opinions on the Group and its results, under the direct control of the Executive Chairman the Group Investor Relations maintain constant **monitoring of the analyses** conducted by financial analysts, even **ESG**, that cover the stock in order to intercept any changes in sensitivity and the evolution of the best practice, not to mention to promote ongoing improvement of the fulfilment of investor requests.

Beginning in 2019, the Group has an **ESG analyst management policy** to select the most authoritative external stakeholders with the best research quality, to whom it will provide the necessary assistance so that they can fine-tune their knowledge of the Group in order to more closely adhere to the practices and strategies undertaken since its foundation.

ESG SCORING OF HERA STOCK

Company	Scoring	Comment
 Member of Dow Jones Sustainability Indices Powered by the S&P Global CSA	82 Top 1% (December 2023)	Hera earned an overall score of 82/100, an outcome that places it as the second best multi-utility worldwide (43/100 the sector average). Hera also achieved the best score for the Environmental and Social sustainability areas
 SUSTAINALYTICS	16.6 low risk (January 2024)	Hera earned an overall score of 16.6, an outcome that includes it in the companies with a low ESG risk (best European multi-utility). The score increased +1,6 points in relation to 2022
 VE Moody's ESG	Advanced (September 2023)	Hera was ranked in the Advanced category, preliminary for inclusion in the Italian Stock Exchange's 'Mib Esg' index, which is based on assessments by Vigeo
 MSCI	A (January 2024)	Hera confirmed A rating by MSCI. In particular, the score shows a strong outperformance in the 'Carbon Emissions' category with a score of 10/10
 CDP	A- (December 2023)	In 2023 Hera was rated A-, an improvement compared to its B rating achieved the year before. This result places the Group at Leadership level. Hera's rating is higher than both the European regional average and the Energy networks sector average, which are both B.
 INTEGRATED GOVERNANCE INDEX	2 nd place (June 2023)	In 2023, Hera ranked first again for integrating sustainability policies into its business strategies
 REFINITIV TOP 100 COMPANY 2022 Diversity and Inclusion index	Top 100 (September 2023)	In 2023, Hera was the first multi-utility company in the world in the ranking drawn up by Refinitiv for the promotion of diversity, inclusion and staff development.
 Bloomberg Sustainability 2023	80.1/100 (January 2024)	With a score of 80/100, in line with last year and better than the average for both the sector and the Italian companies examined, Hera is one of the 484 listed companies included in Bloomberg GEI 2023, selected out of over 11,700 companies
 ISS ESG	B- Prime	Hera secured its B- rating with Prime status, positioning itself as one of the leaders in the sector. It also ranks at the top for environmental and social areas

The **sustainable indices** include securities of excellent companies from the standpoint of business sustainability in order to facilitate the investment choices of socially responsible funds (Sri). The organisation of these indices considers that the companies with sustainable management, from an environmental standpoint, as well as with regard to the dealings with the stakeholders and the corporate governance, **obtain significantly higher results** than their competitors over the long-term.

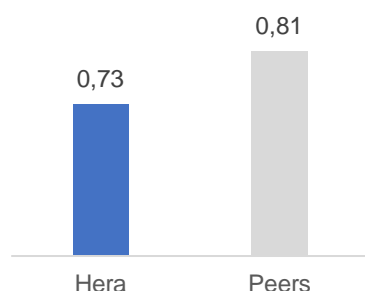
SUSTAINABLE INDICES IN WHICH HERA STOCK IS PRESENT



The commitment to reducing investment risk

Hera pays great attention to the **monitoring of the risk components** associated with the trend of its stock on the stock market, such as the volatility of the listed prices (beta index), which was lower than other local utilities over the three-year period.

HERA AND PEER 3-YEAR BETA (2023)



These characteristics of the stock are consistent with the **strong resilience of economic results**, the low risk profile of the portfolio of assets under management, the **solidity of the governance** and the business model, oriented towards constant growth also through M&A.

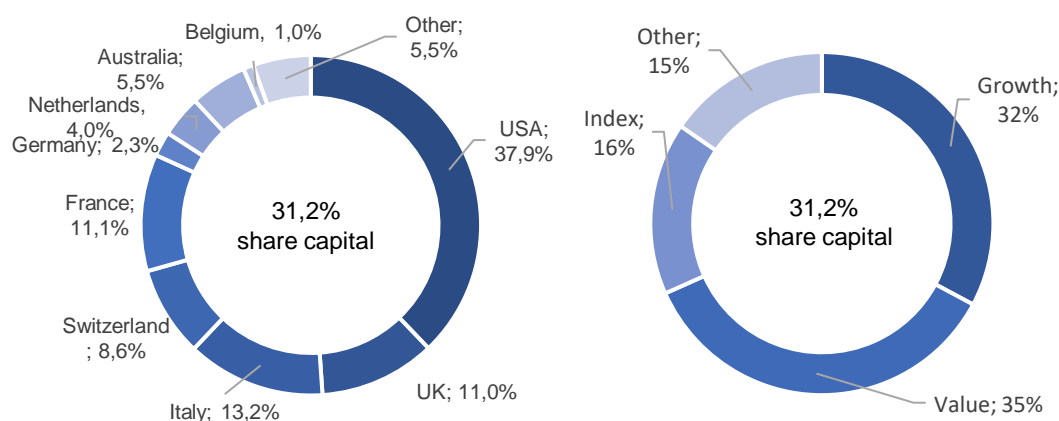
There were **377 contacts in 2023** including the launch of new relations with professional investors which have an investment style consistent with the Group's share profile. Management has participated in theme-based and sustainability conferences, meeting with investors who combine ESG aspects with financial assessments and now account for approximately 30% of total assets under management globally.

Institutional shareholding

The **diversification of the institutional investors** between the shareholders of the company is an important factor for facilitating an on-going evolution of the shareholding structure and a balance of the listed prices of the stock over time.

As the following diagrams show, Hera presents a balanced geographic and investment style diversification of the professional investors, benefiting the resilience and low volatility of the stock.

INVESTMENT FUNDS BY GEOGRAPHICAL AREA AND INVESTMENT STYLE AT 31 DECEMBER 2023



In the graph on the left, the item Other includes: Austria, Canada, Hong Kong, Ireland, Liechtenstein, Luxembourg, Portugal, South Korea, Spain, Taiwan. In the graph on the right the item Growth refers to investors looking for companies that are likely to grow at a higher rate than the market and competitors or companies operating in sectors with high current or potential growth; Value, to investors looking for companies whose market price is discounted compared to their intrinsic value or companies that trade at low valuation multiples; Index, to investors using passive investment strategies, structuring portfolios in imitation of benchmark indices and following their performance. The item Other includes: hedge funds (investors who use investment strategies with the intention of maximising the return on investment in any market situation), long/short (they undertake investment strategies to exploit the return differential between financial instruments), momentum (they use quantitative investment strategies that seek to exploit trends in financial instruments), sector specific and specialty (they invest only in particular equity sectors (e.g. financial, utility, industrial sectors), yield (look for companies that provide the highest return from dividend distribution).

Source: Refinitiv and dividend Shareholders book

The Hera stock is included in the FTSE Mib, FTSE All Share and FTSE Italia Servizi Pubblici of Borsa Italiana **share indices**.

The last Shareholders' Meeting authorised the exercise of a plan for the repurchase of treasury shares for a maximum of 60 million shares (equal to 4% of the share capital) for the purpose of creating value for the shareholders, contributing to the liquidity of the trading, avoiding anomalous fluctuations with respect to the benchmark and serving M&A transactions with the intention of counter-diluting the shareholders.

Corporate Governance and safeguards for shareholders

Since its establishment, the Group has adopted a Corporate Governance system based on the traditional model, with a Board of Directors made up of **executive and independent directors**, which ensures, in line with the company mission, the **protection of the shareholders, the return on invested capital and satisfying** stakeholders' interests.

Hera's activities are handled by management in accordance **with the Code of Ethics** adopted by the Group and are in line with the Code of Conduct furthered by Borsa Italiana Spa.

Hera's management body has always been heedful of aspects of good governance and protection of the interests of the shareholder: any change to its structure which meets these objectives is promptly adopted without delay.

With this intention, in 2020 **the minimum threshold for electing the less-represented gender** on the Board of Directors was raised to 40% (from 33%), immediately accepted with the renewal of the officers of the Shareholders' Meeting on 29 April 2020.

Similarly, in 2015 the **loyalty vote was established**, an instrument which makes it possible to assign up to two votes for each share held by the same shareholder for a period of at least 24 months. Shareholders who demonstrate - with the stability of their investment - a greater sensitivity to the long-term growth of the Group and to the active participation in the appointment of the Shareholders' representatives, are thus rewarded.

During the same meeting which established the loyalty vote, the shareholders also approved the increase from three to four of the number of board directors appointed from the lists presented by the minorities: this innovation proposes to attract greater participation of private capital in the choice of the Group's strategies. Furthermore, to encourage greater participation of the minority shareholders, the percentage of share capital required to present a list for the election of the Board of Statutory Auditors has been reduced from 3% to 1%, as already envisaged for the election of the Board of Directors.

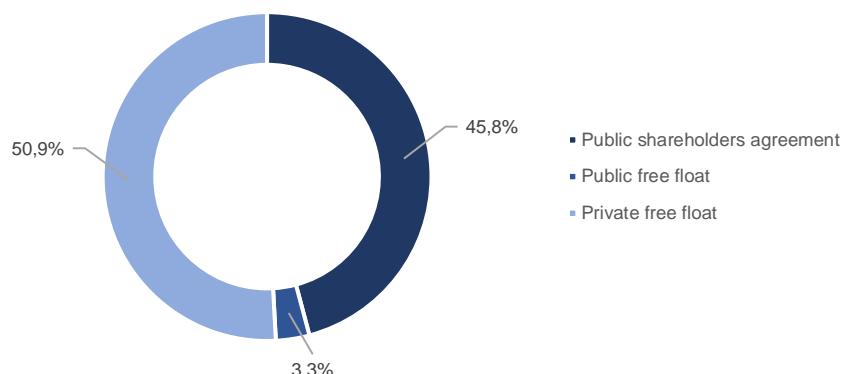
Composition of the shareholding structure

[2-1]

Hera's background particularly stands out: the Group is considered to be one of the main interpreters of the sector consolidation process with a combination model which has involved approximately 52 utility companies **since 2002**, ensuring approximately 40% of the growth of the results in the last 21 years. The merger operations were financed mainly by issuing new shares and have almost **doubled the overall number of shares representing the share capital**: from 789 million in 2002 they became 1,490 million at the end of 2023. These operations did not have diluting effects for the shareholders, as evidenced by the annual average growth of the earnings per share of around +9%. Value was created also thanks to the extraction of synergies and the increased economies of scale. The Group's capitalisation thus reached almost 4.4 billion euro (compared to 1 billion euro in 2003) on average in 2023, i.e. an average annual growth of +8% in line with the growth in earnings per share.

The expansion of the shareholding structure maintained a **constant balance between the public and private components** and extended the diversification of the shareholders both in terms of number and geographic origin.

SHAREHOLDING BREAKDOWN AT 31 DECEMBER 2023



Hera green bonds

Green bonds are debt securities issued for the financing of projects and activities that have a positive impact from an environmental point of view. The first financial instrument of this type was issued by the World Bank in 2008. This type of instrument has seen constant growth over time but suffered a decline in around 2022 due to the rise in ECB and FED interest rates, inflation and geopolitical tensions. Current trends show, however, that there has been a revival in market interest in ESG-related debt instruments, which are largely represented by Green Bonds, which have reached a record high of almost 600 billion in issues in just one year.

In 2023, the share of sustainable bonds issued by HERA S.p.A. of the total bonds in circulation was 57%, an increase of 8 percentage points compared to 2022 (share of 49%). The 2023 share grew as a result of the new issue of the Sustainability-Linked Bond made in April.

Green bonds 2014-2024

In 2014, the Hera Group was the **first in Italy to launch green bonds**, paving the way for other operators in the utility sector and other sectors. With the first green bond, 26 projects belonging to the categories indicated in the table below were financed or refinanced totalling 500 million euro. The Hera Group consolidated its sustainable strategy with the issuance of two more green bonds in 2019 and in 2022 with the **first green bond aligned with the European Taxonomy**.

Green bonds 2019-2027

In 2019, five years after the issue of the first green bond in Italy, **Hera launched its second green bond worth 500 million euro**. The financial instrument was presented by means of a roadshow in the main European markets, to illustrate to investors and analysts the allocation of resources in environmental sustainability projects in the fields of environment, water and energy. The operation enjoyed a significant participation by international investors (France, Germany, Great Britain, the Netherlands), who were largely focused on the environmental and social performance of companies.

The funds raised were used to finance or refinance numerous projects, already launched or planned in the Group business plan, which pursue one or more of the objectives of the 2030 UN Agenda:

- **energy efficiency** (SDGs 7 and 13): installation of innovative electronic gas and electricity meters (NexMeters), development of district heating networks, public lighting projects;
- **circular economy and sustainable waste management** (SDG 12): innovative projects in waste collection systems, extension of the quantity-based tariff, construction of facilities and infrastructures for recycling and energy recovery (including biomethane production);
- **sustainable management of the water service** (SDGs 6 and 14): sustainable wastewater management infrastructures, sewage and mains water infrastructure projects for resilience and adaptation to climate change.

These projects were defined on the basis of precise environmental criteria, described within the **Green financing framework**, published by Hera in June 2019 and verified by ISS ESG, to guarantee that funds are properly allocated. The environmental benefit produced by the projects was quantified using 11 performance indicators that are accounted for annually in the sustainability report, included in the GRI content index and, therefore, subject to external auditing.

USE OF FUNDS RECEIVED WITH THE GREEN BOND 2019-2027

Area	Total collection (mn Euro)	% of total
Sustainable management of the water service	188.4	37.7%
Circular economy and sustainable waste management	188.6	37.7%
Energy efficiency and gas infrastructures	45.9	9.2%
Energy efficiency and electricity, district heating and public lighting infrastructure.	77.1	15.4%
Total	500.0	100%

The definition of the funded projects was validated by a “Second Party Opinion”, drawn up by ISS-Oekom, which ranked Hera “Prime” in terms of ESG performance (sixth in a panel of 43 global companies) and highlighted its particular excellence in the water sector.

Green bond report 2022-2029

In 2022, Hera updated its 2019 **Green financing framework (Gff)** by bringing it in line with the principles of the European Taxonomy and market best practices. The net proceeds obtained were used to finance projects in the three categories listed below. The **updated Gff** has thus become a policy document defining the categories of “green projects” in line with the European Taxonomy that can be financed through a green bond, the process and criteria for selecting “green projects” aligned with the European Taxonomy and the procedure for managing the funding received and the commitments in terms of reporting and external auditing.

Hera’s GFF aims to finance **16 eligible economic activities** in line with the European Taxonomy, within the three categories outlined above.

“**Green projects**” indicate all projects that move towards achieving the **six environmental goals** defined by the European Taxonomy:

- climate change mitigation;
- climate change adaptation;
- sustainable use and protection of water and marine resources;
- transition towards a circular economy;
- pollution prevention and reduction;
- protection and restoration of biodiversity and ecosystems.

Following the updates made to the GFF, Hera issued the **first Green Bond aligned with the European Taxonomy** and thus became **the first European multiutility to issue this type of bond** certified by the external firm Sustainalytics. As of 2023, the Group’s operating investments that have been found to be aligned with the European Taxonomy are 55 percent, with the goal of reaching 59 percent by 2027.

Sustainalytics, a leading independent sustainable research and rating company, certified that Hera’s framework is in line with the technical criteria of the European Taxonomy for the corresponding 16 economic activities and in line with the 2021 Green bond and Green loan principles.

The funds collected are being used to finance or refinance numerous projects, already launched or foreseen in the Group business plan to 2027, selected on the basis of the Gff, which pursue one or more of the goals of the 2030 UN Agenda, or Sustainable Development Goals (SDGs), divided into 3 areas:

- **energy efficiency and energy infrastructures** (SDGs 7, 11 and 13): installation of innovative electronic gas and electricity meters, development of district heating networks, and public lighting projects;
- **circular economy and sustainable waste management** (SDG 11,12 and 13): innovative projects in waste collection systems, extension of the quantity-based tariff, construction of facilities and infrastructures for recycling, recovering and reusing materials as well as plants for bio/chemical waste treatment and the reuse of materials from plants that convert waste into energy;
- **sustainable management of water and wastewater** (SDGs 6, 13 and 14): through wastewater management, sewerage and water infrastructure projects for resilience and adaptation to climate change.

Following the GFF update, Hera issued the first Green Bond aligned with the European Taxonomy, becoming the first European multi-utility company to issue a bond of this type certified by the external company Sustainalytics.

The green bond provided for a 45% refinancing share for investments incurred in 2021 and a 55% financing share for investments incurred in 2022.

The environmental benefit produced by the projects was quantified using **18 performance indicators** that are accounted for in the sustainability report, included in the GRI content index and, therefore, **subject to external auditing**.

Below is the allocation of funds collected through the green bond issued in 2022 by single economic activity eligible for the EU Taxonomy.

USE OF FUNDS COLLECTED WITH THE GREEN BOND 2022-2029

Area (EU Taxonomy Activities)	Total collection (mn Euro)	Shares (%)
5.1 Construction, expansion and operation of collection, treatment and supply systems	183.5	36.7%
5.3 Construction, expansion and operation of collection and treatment of wastewater	109.0	21.8%
Total of sustainable management of water and wastewater	292.5	58.5%
3.17 Manufacture of plastic materials in primary forms	11.4	2.3%
4.13 Production of biogas and biofuels for transport and bioliquids	1.4	0.3%
5.5 Collection and transport service of non-hazardous waste in portions sorted at source	55.0	11.0%
5.7 Anaerobic digestion of organic waste	1.6	0.3%
5.8 Organic waste composting	1.1	0.2%
Total circular economy and pollution prevention and control	70.5	14.1%
4.1 Electricity generation through photovoltaic solar technology	6.0	1.2%
4.9 Electricity transmission and distribution	78.4	15.7%
4.15 District heating and cooling distribution	6.0	1.2%
4.22 Production of heat and cooling from geothermal energy	0.2	0.0%
7.3 Installation, maintenance and repair of energy efficiency devices	2.0	0.4%
7.5 Installation, maintenance and repair of instruments and devices for measuring, regulating and controlling the energy performance of buildings	43.0	8.6%
7.6 Installation maintenance and repair of renewable energy technologies	1.4	0.3%
Total energy efficiency and energy infrastructures	137.0	27.4%
Total	500.0	100%

Hera's Sustainability-linked bond

In October 2021, Hera published its **Sustainability-linked financing framework**, a tool that further strengthens the integration between the Group's financial strategies and sustainability emphasis, with a focus on carbon neutrality and circular economy projects.

In particular, the Group introduced **two key indicators**, in line with the strategies outlined in the Industrial Plan for the energy and environmental transition, and representative of the multi-utility's commitment to achieving the objectives of the 2030 Agenda. Specifically, the first indicator relates to the Group's **greenhouse gas emissions** (Scope 1+2+3 from electricity sales and downstream gas) while the second relates to the amount of **plastics recycled** by the Group. In both cases, the target is set for 2030 and, for the first indicator, the target was validated by the Science-Based Targets initiative (SBTi). The Hera Group aims to reduce greenhouse gas emissions by 37% in 2030 (compared to 2019) and to increase the quantities of recycled plastic by 150% (compared to 2017). For further details, see the paragraphs "Hera for the climate" and "The Hera Group's contribution to the plastics of the future" as well as the case study "Hera Group's commitment to the new plastics economy".

INDICATORS SET BY THE SUSTAINABILITY-LINKED FINANCING FRAMEWORK

	Basic year	2023	Target 2030
Reduction of CO ₂ emissions compared to 2019 emissions using the SBTi method (Scope 1+2+ from energy sales and downstream gas) (%)	11,781.3 kt (2019)	10,226.2 kt -13.8%	7,459.5 kt -36.7%
Plastic recycled by Aliplast (thousands of tonnes)	59.6 (2017)	84.6	148.9

The Scope 3 data relating to the sale of methane gas do not consider the transitory increases in volumes sold in last-resort services.

In addition, for both indicators, interim sustainability performance targets were defined that will be reported annually in the sustainability report, included in the GRI content index and, therefore, **subject to external auditing**. In 2023, Hera updated the Sustainability-Linked Financing Framework and the related intermediate targets. The new intermediate targets refer to 2026:

- Total GHG emissions decreased by 13% compared to 2019 against a projected reduction of 22.5% in 2026;
- recycled plastics increased by 42% compared to 2017 against a projected increase of 101% in 2026.

For more information on the performance of these indicators, see the sections “Hera for the climate” and “Transition towards a circular economy” respectively.

Following the publication of the Sustainability-linked financing framework, the Hera Group issued its first **Sustainability-linked bond of 500 million euro**, repayable in 12 and a half years. Hera paid investors an annual fixed-rate coupon of 1%. Starting from the interest payment date of 2032, a possible step-up (increase in the interest rate) is envisaged in the event that the company does not achieve the objectives of reducing GHG emissions measured in tonnes of CO₂ (increase in the by 0.20%) and the quantity of plastic recycled in thousands of tonnes (rate increase of 0.15%).

In 2023, Hera reconfirmed its commitment and interest in reducing its carbon footprint and increasing plastic regeneration, in line with the strategies for the energy and environmental transition outlined in our industrial plan, with the issuance of a new **Sustainability-linked bond of 600 million euro**, repayable in 10 years. An annual fixed-rate coupon of 4.25% is expected to be paid. Starting from the interest payment date of 2032, a possible step-up is envisaged in the event that the company does not achieve the objectives of 1) reducing GHG emissions measured in tonnes of CO₂ (0.30% increase) and 2) increasing the amount of plastic recycled in thousands of tonnes (0.20% increase).

Sustainalytics, one of the leading ESG rating agencies, validated and deemed ambitious the indicators, strategies and targets included in the Sustainability-linked financing framework; the agency also issued a **second party opinion** attesting to the framework’s consistency with the main international reference standards, beginning with the Sustainability-linked bond principles 2023 of the Icma (International Capital Market Association).

Sustainability-Linked Revolving Credit Facility

In May 2018 Hera signed the first “**ESG Linked RCF Facility**” which was a 200 million euro credit line introducing sustainability elements through a reward mechanism linked to the achievement of specific environmental, social and governance objectives. In the commitment undertaken with the banks, some **sustainability performance indicators** have been defined, by virtue of which the multi-utility company benefitted from more favourable rates.

The areas of the identified indicators coincide with the two drivers identified for the creation of shared value (Energy - pursuing carbon neutrality and Environment - regenerating resources and closing the loop) and these are: carbon footprint of energy production, separate waste collection rate and reduction of energy consumption.

This line was repaid in 2022, before the scheduled deadline in May 2023, in conjunction with the subscription of **several Revolving Credit Facility Sustainability-Linked lines** which refer to the KPIs and targets included in the Sustainability-Linked Financing Framework adopted by Hera in 2021 and updated in December 2023.

The Sustainability-Linked Financing Framework, which the Sustainability-Linked Revolving Credit Facility refers to, provides two **environmental indicators** and the related intermediate and long-term targets. Specifically, the first indicator relates to the Group’s greenhouse gas emissions (Scope 1+2+3 from electricity sales and downstream gas) while the second relates to the amount of plastics recycled

by the Group. In both cases, the target is set for 2030 and, for the first indicator, the target was validated by the Science-Based Targets initiative (SBTi).

In 2023, Hera signed a new **450 million euro Revolving Credit Facility Sustainability-Linked credit line** which expands the innovative financial products and instruments adopted by the company, helping to maintain its financial solidity.

5.05 Communications with our stakeholders

Communications and consultation initiatives

[2-29]

Hera's significant commitment to involving stakeholders is by now part of the operational structure of the departments that deal with relations with various stakeholders and has continued throughout 2023.

The main engagement and dialogue activities carried out with the company's stakeholders and the method used to identify the material issues that guided this activity are described in the methodological guide of this report in the section "[Stakeholders and materiality analysis](#)".

Customer
satisfaction
survey

Since 2005, the quality of our services has been assessed through annual customer satisfaction surveys aimed at defining improvement measures.

ASSESSMENT OF RESIDENTIAL CUSTOMERS' OVERALL SATISFACTION

CSI (from 0 to 100)	2021	2022	2023
Overall satisfaction index (CSI)	73	72	73
Overall service satisfaction index (Services CSI)	78	75	76

Data from 2020 to 2021 do not include Marche Multiservizi.

After the slight decline in 2022 (72 points), the **satisfaction index** increased again in 2023, reaching 73 points, which is above the high satisfaction threshold. The **overall level of satisfaction with services** increased to 76 points. In particular, satisfaction with all services increased (electricity: 77 points, water service 75 points, environmental services 73 points).

Satisfaction with contact channels increased again: branches, call centres, online services and apps are all rated above 78 points. Since 2023, website monitoring has been added, which stands at 76. This ensures that customers will always find competent customer assistance operators and appropriate procedures, regardless of the contact channel.

The customer **loyalty** reported by customers and word-of-mouth recommendation remain at excellent levels, 81 and 76 points respectively. Ratings for **bills** also stood at over 70 points, reaching 71 points in 2023.

SATISFIED CUSTOMERS

%	2021	2022	2023
Percentage of satisfied customers	92%	91%	93%

The percentage of satisfied customers (customers who expressed a satisfaction rating of 6 or higher) **was 93% in 2023**, up slightly from previous years.

The survey was also carried out for **business customers** in order to monitor customer satisfaction levels for both the free market and for those still in the protected market. In the case of companies, the survey involved interviewing the contact person for the services provided by Hera.

The results of the 2022 survey are reported here since the results for 2023 were being processed on the date of approval of this report.

ASSESSMENT OF BUSINESS CUSTOMER SATISFACTION

CSI (from 0 to 100)	2020	2021	2022
Overall satisfaction index (CSI)	73	72	70
Overall satisfaction index for services (Services CSI)	77	74	72

A slight decline was seen both for the **CSI** and for the **average satisfaction with the services** provided, which stood at 70 and 72 points respectively, but which still remain on the high satisfaction threshold for the fourth year in a row. The increase in energy prices and the related debate at national level influenced satisfaction levels.

Contact channels indicate excellent satisfaction from business customers, exceeding 70 points for both physical and online channels. The **loyalty** declared by customers in the free market stood at 80 points.

Methodology used for the customer satisfaction survey

The customer satisfaction survey has been carried out since 2005 by an external company and is based on an internationally recognized methodology for assessing the quality of services offered and customer satisfaction with Hera as a whole. 12,021 telephone interviews were carried out for the 2023 survey in two different periods of the year: May-June, September-October. The survey was conducted by Computer Aided Telephone Interviews (CATI) with a survey population chosen so as to ensure that the sample is representative of the customers of all of the Group's services. Monitoring was carried out by interviewing the main contact person for Hera within the household. The questionnaire, which lasts around 15 minutes, is designed to monitor the various satisfaction components and measure future behaviour (word-of-mouth, loyalty, etc.) in relation to the company. The assessments of the results are expressed in numerical scales, divided into levels of satisfaction: less than 50 points indicates insufficiency; up to 60, minimal satisfaction; between 60 and 70, a good level of satisfaction, and more than 70, a high level of satisfaction.

Since the second half of 2017, call centres, branch offices, online services and apps have been monitored through **daily interviews** conducted the day after the contact took place, in order to gain insight into the customer's satisfaction while the experience is still fresh. Around 16 thousand interviews a month are carried out using IVR (by telephone with pre-recorded questions) and CAWI (by email) methods. Thanks to the portal used for analysing customer evaluations, it has been possible to constantly improve channel performance. Around **200 thousand interviews** were carried out in 2023 to monitor the contact channels.

Other initiatives for dialogue with customers

Our **web portal for consumer groups** has been online since 2011: the section of the Group's corporate website is reserved specifically for representatives of the main associations operating in the local areas Hera serves, who are key contacts for the company in its relations with end customers. For associations, this web channel is an important interface with Hera. They can use it to handle reports and procedures, prevent disputes, and reduce the time needed to respond to and solve problems. In 2023, the web portal recorded **4,701 visitors** (-8.6% compared to 2022) and a total of 14,797 page views (+6.2% compared to 2022).

In addition to the portal, the contact people and members of the associations can use dedicated email addresses, and phone and fax numbers that, together with the web component, represent a genuine communication channel dedicated to consumer groups. In 2023, 612 cases were managed through this dedicated channel (compared to 529 in 2022), 100% of which were resolved successfully; average case resolution time was 4.3 business days.

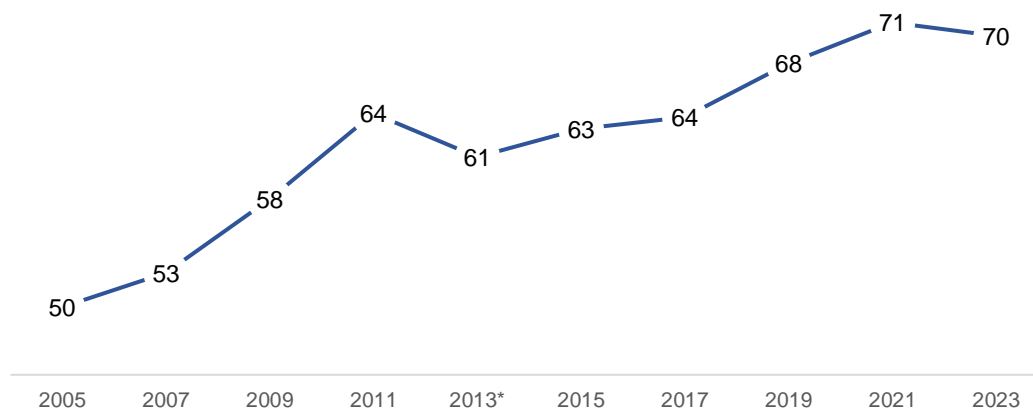
Furthermore, in order to build positive relationships and create an increasingly open dialogue, in 2023 Hera once again organised specific meetings with consumer group contact people. As in past years, periodic meetings were held dedicated to provincial and local association contact people: as in 2020, 2021 and 2022, these events were held online. A total of two meetings were held in the month of November involving a total of **22 representatives from the main consumer groups operating throughout the local areas**. During the meetings, topics of interest to the associations were addressed, including regulatory updates on the end of gas and electricity protection and transition to the free market, the performance of the leak fund, an update with respect to the bad weather emergency that hit Emilia-Romagna in May 2023, the protection system and, finally, the performance of the Channel dedicated to consumer groups.

In addition, throughout the year, ongoing discussions were held with the representatives of the main consumer groups at national and regional level. Indeed, two more meetings were held, again online, one on the bad weather emergency and the other on the District Heating bonus.

Internal climate survey and other dialogue initiatives

The first climate survey was conducted eighteen years ago, in 2005: today, with ten surveys now completed, we can confirm the soundness of the path taken by the Hera Group. The overall satisfaction score (ESI - Employee satisfaction index) **increased by more than twenty points**, and in general, the various areas investigated by the questionnaire (me, my team and manager, the company) received excellent scores.

ESI (EMPLOYEE SATISFACTION INDEX) TRENDS OVER THE YEARS



*The 2013 value was reconstructed using data from Hera, AcegasAps and Amga collected in 2013-2014. The decrease in 2013 and 2015 values is mainly due to the acquisition of AcegasApsAmga in 2014.

In particular, Hera Group's main investments have been focused on ensuring the following: sharing of purpose, mission and values, employee safety, renewal of facilities (work spaces, canteen, equipment and devices), improvement of corporate communication, development of HR levers (training, leadership, welfare, agility, performance management, etc.).

The path of **continuously listening** to employees has supported the Group, not only in addressing and accommodating changes, but also in its ability to incorporate the different populations that have become part of the Hera Group over time by aligning and developing a shared culture.

The 2023 survey involved all 9,237 people in the Group. **91% of the population** responded (8,399 people).

The ESI, the main employee satisfaction indicator, continued to show a positive score in all Group areas: **satisfaction**, in fact, **stood at 70/100**. This data is the result of employees' appreciation of the ability shown by the company, top management and its leadership to define processes, projects and activities that meet the changing needs of people and the market. Overall, employee satisfaction improved, reaching 72, though there was a slight decline in other areas. Younger employees (≤ 34 years old), as well as those over 50, had the highest satisfaction rates. Satisfaction with the managers and team area also increased. An action plan for improvement will be created and implemented in 2024.

The **percentage of satisfied employees** (employees who expressed a satisfaction rating of 7 or higher) was 71% in 2023 (it was 82% in 2021).

Internal communication

The **function of internal communication** is to keep Hera's people informed and involved with respect to the Company's projects and results, to promote meetings and initiatives for aggregation, to foster a positive working climate and to consolidate the corporate culture including topics such as inclusion.

The year 2023 was characterised by an unstable political-economic scenario and by the increasingly evident climate emergency, which in May produced extreme events such as the flooding in Emilia-Romagna, which had a huge impact on the areas served and on Hera. In this context, internal communication was particularly important to keep people connected, to support fundraising for the geographical areas and colleagues affected, and to valorise those who worked tirelessly to return to normality.

In addition, the end of Covid changed working habits and boosted digitalisation, increasing remote work and information needs based on increasingly widespread and timely digital communication. For this reason, in addition to news about inHera, numerous communication campaigns have been implemented to raise awareness and knowledge of corporate projects. These include: **“Together on the side of energy”**, featuring video interviews, answers to frequently asked questions and articles on the topic of “expensive energy”, with the aim of creating greater awareness; **“Good working”**, a video miniseries to accompany colleagues and colleagues towards good practices on online meetings and digital workplace tools; a new edition of **Hera Solidale**, which aims at stimulating solidarity towards volunteer organisations; **ecoHera** and **Her@futura**, two projects intended to update the skills of the company’s workforce; **Hextra** and the conversion of the award made with a video miniseries.

The need to communicate with and inform the corporate population in a timely manner also prompted the strengthening of digital tools, enhancing the **inHera internal portal**, which, two years after its go-live and thanks to suggestions sent in by colleagues, has been updated with new features that have made the intranet an increasingly interactive, participatory, and engaging tool. In addition, the **inHera News app** has been activated for the **“Buongiorno” newsletter**, which allows news to be received directly on Teams. Unlike e-mail, for the app it is also possible to measure how much it is being read, showing that an average of 4,000 employees read the post every day.

The Group’s audio newsletter was inaugurated in 2023, in podcast format: two weekly podcasts, released on Friday mornings, to talk about the week’s main internal news (HO in 3 minutes) and to take stock of the weekly press review related to the scenario of our businesses (The Press in 3 minutes).

Once again concerning the enhancement of digital tools, 2023 saw the birth and consolidation of several communities on **Viva Engage**, such as the one dedicated to aggregation events.

2023 was also the year of a change in top management, with Executive Chairman Tommasi, who had been at Hera since the company’s establishment, leaving the helm to Cristian Fabbri, previously the Central Market Director. For this reason, a series of “Let’s take stock” meetings were organised, aimed intended for the entire company population, to update coworkers on the company, bid farewell to the Chairman and review Hera’s 20 years of history with him.

As far as events are concerned, the thank-you meeting for the people at Hera who worked to return to normality after the floods must be mentioned. The meeting, which took place on 10 July, involved about 300 people and, for the occasion, a video was shown on what happened during and immediately after the flood, as well as 8 video interviews (featuring 13 people who recounted their contribution during the emergency), to valorise the people involved.

The issues championed by **Diversity management** were also emphasized through articles, videos, and the implementation of in-person events targeting employees. In particular, 2023 saw the birth of the project on inclusive language: a two-year project to review internal communication tools and produce guidelines on the use of inclusive language. About 100 people were involved in 2023, with focus groups and interviews, to enhance the company’s sensitivity on these issues.

At the same time, all the routine internal communication activities continued:

- **210** paper HO articles;
- **387** digital HO articles;
- **105** morning “Buongiorno” communications;
- **15** communication campaigns (Digital workplace, smart working, development process, Hextra, cybersecurity, “insieme dalla parte dell’energia”, 20-year anniversary celebrations, etc.);
- **80** videos;
- **45** Group audio newsletters;
- **11 events**.

Relations with the local community

HeraLAB, a tool for listening to local communities
[413-1]

HeraLABs are multi-stakeholder boards that the Hera Group set up in 2013, in seven areas of Emilia-Romagna. The primary objective of these participatory processes is to provide a structured channel for listening and dialogue with local communities in the areas where Hera provides its services.

The 2023 HeraLABs focused on the topic of **carbon neutrality**. This choice of topic was shared with the Departments most impacted by the work of the LAB before the start of the third edition.

Modena and **Imola** were chosen as the two areas to launch the laboratories in, since they are the Group’s energy capitals in Emilia-Romagna.

After the appointment of the 28 participants of the multi-stakeholder boards of Modena and Imola, which took place during the Board of Directors meeting in December 2022, preparatory meetings were held in preparation for the planning of the meetings aimed at exploring the most relevant topics for the two LABs,

in the fields of **energy efficiency, renewable energy and renewable energy communities (CER)**.

At the **first meeting** (3 April in Modena; 20 April in Imola), the participants exchanged ideas thanks to a productive and constructive dialogue which some Hera managers and heads also took part in. Hera's skills and activities in each of the three areas of carbon neutrality were described.

The **second meeting** (22 June in Modena and 26 June in Imola) was organised into three theme-based round tables. Under the guidance of some Hera managers and with the help of facilitators, areas of potential collaboration between the company and its stakeholders were identified. Participants selected one or two areas of potential collaboration or of particular interest to stakeholders and produced a SWOT analysis. The justification behind these analyses and the subjects for debate that emerged formed the starting point for the next phase of the work, i.e. Hera's evaluation of the interest, opportunities and actual feasibility of some of these projects and potential collaborations. The study and analysis of these aspects have the potential to allow us to identify areas of work that can be brought to life with actual future projects.

During the LAB meetings, **eight areas of potential collaboration** were shared:

- Energy efficiency incentives and opportunities for businesses;
- Network enhancement plans to support electrification (LAB Modena only);
- Photovoltaic self-consumption, an opportunity for businesses (LAB Modena only);
- Off-site photovoltaic opportunities (PPA – LAB Modena only);
- Energy Park;
- CER applied to condominiums;
- Cooperative model applied to CERS (LAB Modena only);
- CER in production area/similar (LAB Imola only).

In addition, some projects continued in 2023 for the implementation of the initiatives of the 2021 edition of the HeraLAB Modena and Forlì Cesena, and in some cases were completed.

With regard to the initiatives promoted by the **Modena LAB**:

- **Environmental transition in the agri-food supply chain.** The project is aimed at facilitating an investigation of the agri-food supply chain to identify the main processes into which environmental transition initiatives can be most effectively inserted. The results of the study should encourage the application of virtuous measures throughout the supply chain (industrial production, distribution and sales, catering). Thanks to the coordination of the University of Modena and Reggio Emilia's Department of Economics and in collaboration with the area's economic associations, a questionnaire was developed and was sent to approximately 100 Modena companies in the sector from June 2023 onwards. The results of the study will be released by the first half of 2024. The project is complete (2023).
- **"Le vie dell'acqua".** This initiative aims to complement the historical-naturalistic trails in the Modena area ("la via Romea/Nonantolana" pilot project) by telling the "story" of the water that flows under them. Public drinking fountains will be installed along the route, which will function as strategic points for anchoring various communicational initiatives, supported by the Aquologo app as well. A memorandum of understanding has been signed by 15 municipalities in the Modena area and the fountains will be installed by Hera by May 2024.
- **"Il tutor energetico".** This initiative is aimed at setting up structured channels dedicated to training staff at third-sector help desks to raise awareness about the possibility of accessing bonuses and all the benefits implemented by Hera and others to curb energy poverty and payment delinquency. The project started with the signing of the first two protocols with the "social stores" run by the "terre estensi" voluntary services centre (seven from Modena and two from Ferrara) and Caritas of Pavullo, and the first 40 volunteers were trained. Activities are underway to renew the protocol in 2024, and it will also be extended to other entities operating in the Third Sector.

The local initiatives plan for **Forlì-Cesena** includes the following:

- **"Green" hotels.** With this project we aim to identify the most effective ways (trademark, brand or protocol) to bring together and characterise the hotel facilities in Cesenatico using a green/environmentally friendly approach. The project was publicly presented on 26 January 2023 in Cesenatico where a memorandum of understanding was signed among the Municipality of Cesenatico, Federalberghi ADAC and the Hera Group to begin presenting the project. The Green Hotels project was rolled out experimentally in summer 2023 with the involvement of a first group of 22 structures. The project will also continue in 2024.
- **Ecological transition in the San Mauro Pascoli footwear district.** In collaboration with public administrations, companies, trade associations and universities, a study will be sponsored in the San Mauro Pascoli (FC) district to learn about the various types of production waste in the footwear supply chain and understand how companies manage them. This study is designed to identify potential processes where circularity initiatives can be applied. In 2022, a scientific

research grant was funded at CIRI FRAME (Interdepartmental Centre for Industrial Research on Renewable Sources, the Environment, Sea and Energy) - Rimini Polo Technopole aimed at collaborating to study the possible use of circular economy initiatives in the footwear district. This initiative is part of already ongoing activities and aims to broaden and further explore the research areas involved. The project was completed and the results were presented in December 2023 during a public conference organised by CERCAL (International Footwear School and Research Centre).

At 31 December 2023, a total of **126 meetings (equal to around 3,000 hours of listening)** had been organised as part of the HeraLAB project. The community involved in HeraLAB over the years consists of **144 members**, and the total number of projects approved during the workshops' activities stands at 78, 60 of which have already been implemented. In addition to providing continuity in listening to and engaging stakeholders on the topic of carbon neutrality, the Group aims to launch HeraLABs in two additional territories in 2024.

Nine years after the start of the HeraLAB project and before implementing the third edition, an assessment was conducted, following which, the **guidelines for the new edition of the LABoratory** were developed in 2022.

As set forth in the HeraLAB regulations, appointment as LAB member and attendance to the LABs are **free of charge**.

Hera has chosen to provide an attendance allocation for each meeting, set at 100 euro per participant for the first edition of the project and since increased to 200 euro. The accumulated attendance allocations go into an annual fund that the LAB uses every year to support sustainability initiatives and projects promoted by local public bodies or non-profit organisations identified by the LAB. Since the start of the HeraLAB project at the end of December 2023, 134,200 euro in attendance allocations have been donated to 26 public and non-profit organizations in the areas where HeraLAB operates.

Associations in which Hera participates

[2-28]

The Hera Group is active in the highest levels of the organisations representing the **system of local public services**, first and foremost Utilitalia. Hera participates actively in the association's activities and supports its institutional communication through the identification of its representative in the various round tables set up with regulators by the associations. At the local level, Hera takes an active part in Confservizi Emilia-Romagna and Confservizi Tuscany and Confservizi Veneto (the regional association for the companies, firms and public and private bodies managing local public services in their reference area), as well as Confindustria, Unindustria and Apindustria in many of the local areas it serves.

In the **energy field**, the Group is also a member of AIRU (Italian Urban Heating Association), RENAEL (National Network of Local Energy Agencies), FIRE (Italian Federations for the Rational Use of Energy), OPG (Open Power Grid Association), Assorisorse (Natural Resources and Sustainable Energy Association) APCE (Association for the Protection of Electrolytic Corrosion); UNI (Italian Standards Body); CTI (Italian Thermotechnical Committee) and participates in the work of CIG (Italian Gas Council). In the European arena, it participates in the ECC (European Cooperation Council), particularly on issues related to energy transition.

In the **waste management sector**, the Group also participates in the national association Fise Assoambiente and Eurits, the European association for hazardous waste. Also in Europe, it participates in the Rdf Industry Group, which brings together organizations from across the waste-derived fuel supply chain. It also participates in the CONIP and CIC supply chain consortia, as well as in Unichim (the Association for Unification in the Chemical Industry).

The Group also contributes to **research activities** in the utilities sector carried out by leading institutions, either as a commissioning party for specific research or by participating in the scientific debates fostered by such research projects with contributions published in the proceedings: Agici Corporate Finance, Fitchner, Ref Ricerche and e Ambrosetti Club.

With reference to **corporate social responsibility and sustainability**, Hera is also a member of the Asphi Foundation (promotion and integration of disabled people through the use of Information and Communication Technology), Impronta Etica (business association for the promotion of social responsibility); it has also joined the Ellen MacArthur Foundation and the Circular Economy Network (to support and promote the development of the circular economy), the CSR Manager Network (for sustainability issues), the Aspen Institute (an international non-profit organisation aiming to internationalise entrepreneurial leadership and the discussion on major contemporary issues), the Association of Modena Companies for Corporate Social Responsibility, the Rubes Triva Foundation (for training and promotion of workplace safety in environmental hygiene companies) and finally the Global Compact Network Foundation (for the promotion of the culture of corporate citizenship).

[415-1] In 2023 as well, consistent with the provisions defined in its Code of Ethics and Group Protocol 231, the Hera Group **did not make contributions of any kind to political parties or politicians.**

CONTRIBUTIONS TO POLITICAL PARTIES AND TRADE ASSOCIATIONS

thousand euro	2021	2022	2023
Politicians and political parties	0	0	0
Trade associations	1,284	1,276	1,522
Other associations/organizations (promotion and dissemination of sustainability, industry/sector-specific research and studies)	178	176	286
Other contributions	0	0	0
Total	1,462	1,452	1,808

The main contributions made in 2023 included around 1.6 euro to sector associations and over 286 thousand euro to associations involved in sustainability and research. The first category mainly includes Utilitalia (686,879 euro) and Confservizi Emilia-Romagna (184,500 euro), while the largest single contribution given to the second category was to the Ellen MacArthur Foundation (40,919 euro).

Pending legal proceedings

[2-27] In addition to the disputes involving customers and suppliers which are discussed in the corresponding sections of this report, at the end of 2023, an additional **626 disputes** were pending, mainly concerning disconnections of gas supplies to late-paying end customers who, having signed contracts with salespeople for the redelivery points on the distribution network managed by Inrete, were subject to administrative termination as governed by ARERA legislation (specifically the Consolidated Law on gas delinquency). The remaining disputes refer to highly varied types of issues regarding claims for damages associated with the management of the services performed by Hera or Group companies. During 2023, 1,027 disputes were settled, of which: 264 were with energy customers, 25 with water service customers, 19 with environmental services customers, six with suppliers, and the remaining 708 disputes were with other types of stakeholders of the company.

In 2023, **69 warnings** were received which mainly concerned disputes detected by the monitoring bodies and refer to violations of the provisions of Legislative Decree no. 152/2006 (Consolidated Environmental Act) mainly relating to the integrated water service and in particular the failure to comply with the provisions contained in the relevant authorisation documents. After receiving these communications, Hera complied with all the obligations prescribed by the controlling bodies.

With regard to the networks and plants managed by the Group, the following litigation proceedings brought by associations, residents and/or other parties/authorities are to be noted:

Odorous and noisy emissions

Of note is the notification in July 2017 of the decree that ordered the committal to trial of two Herambiente Spa managers, who the Rimini Public Prosecutor's Office charged, in particular, with odorous and noisy emissions from the Rimini recovery and storage plant that allegedly caused a disturbance to neighbouring property owners. At the first hearing scheduled for 28 November 2017, a local committee was set up as plaintiff for damages. On 30 November 2021, the Rimini Court declared that one of the two employees was not to be prosecuted and ordered the other to pay damages to the plaintiff as well as a fine. The relevant ruling was appealed before the Court of Cassation. Following the appeal, the first instance ruling was set aside and the offences were declared dismissed.

Economic and financial plan appeals

All the appeals proposed by the Municipalities in past years regarding economic and financial plans have been rejected by the Regional Administrative Court of Emilia-Romagna or settled out of court, with the exception of:

- appeal brought by the City of Imola for the Economic and Financial Plans through the year 2022;
- appeal lodged by the Municipality of Castelguelfo against ATERSIR, relating to the 2019-2022 economic and financial plans.

Both appeals were partially accepted by the Regional Administrative Court of Emilia-Romagna. ATERSIR challenged both measures before the Council of State, which suspended their enforcement as a precaution. Appeal proceedings are ongoing.

Finale Emilia (MO) landfill

On 10 December 2019, the Judge of Preliminary Investigations of Modena placed under preventive seizure a segment of the special and urban waste landfill in Finale Emilia. Two former officials of Feronia Srl are under investigation for aiding and abetting in the approval of the Integrated Environmental Permit renewal for the landfill despite its having exceeded the maximum capacity under the Permit and despite CTC (Contamination Threshold Concentration) parameters having been exceeded at the same landfill, as well as for environmental pollution, while the company is charged with an administrative infraction in connection with the same offences. The Court of Cassation rejected the appeal filed by Feronia Srl against the order confirming the preventive seizure issued by the Court of Appeals. The company subsequently filed a petition to revoke the preventive seizure of the landfill, which was rejected by the Modena Preliminary Hearing Judge. Against this latest denial order, in May 2022, the company appealed before the Modena Court of Appeals. In an order dated 26 September 2022, the latter ordered the revocation of the preventive seizure of the landfill in light of the outcomes of the local authorities planning conference, which concluded that the exceedance of CSC levels in the landfill complex were not related to contamination from the landfill. The order was challenged by the Public Prosecutor before the Court of Cassation which declared the Public Ministry's appeal inadmissible. The release order is therefore final.

On the merits of the case, at the hearing held on 29 April 2022, the defendants were remanded for trial. The proceedings are currently at pleading phase.

Serravalle Pistoiese landfill

Herambiente Spa (as the successor entity to Pistoia Ambiente Srl as of March 2020) and two former officials of Pistoia Ambiente were served subpoenas in connection with the fire that occurred at the "Cassero" landfill on 4 July 2016. The proceedings are currently in the hearing stage.

In 2023, the following new litigation initiated against the Group should be noted:

- Some residents near the Tremonti landfill appealed to the President of the Republic against the Emilia-Romagna Region, ARPAE and against Herambiente to strike out (after suspending enforceability) resolution no.1100 of 26 June 2023 of the Regional Council of Emilia-Romagna with which the EIA (environmental impact assessment) measure was adopted containing the reasoned decision to conclude the local authorities planning conference which includes the qualifications required for the performance and operation of the "Expansion of the Tre Monti landfill: raising of the 3rd lot in the Municipality of Imola (BO)" submitted by CON.AMI and Herambiente S.p.A. Herambiente opposed the appeal.
- The Municipality of Finale Emilia filed an appeal before the Regional Administrative Court of Emilia-Romagna against ARAPE and against Feronia S.r.l. to set aside ARPAE's managerial decision no. DET-AMB-2023-2553 of 18 May 2023 concerning "Art. 240,244 and 245 of Legislative Decree no. 152/06, Remediation of Contaminated Sites. Company "Feronia S.r.l." – Landfill plant for non-hazardous special waste located in the municipality of Finale Emilia (MO), via Canaletto Via Rovere 18/A." whereby ARPAE assumed, for certain parameters, the new contamination threshold concentrations (CSC), which were equal to the background values. The hearing is scheduled for 05 June 2024.

Relations with public administrations

Relations with Local Authorities

The Central Strategy, Regulation and Local Authorities Department continuously and effectively oversees **the relationship with shareholder municipalities and local authorities** through the role of Area Managers, with particular reference to the Emilia-Romagna region, ensuring the right level of attention to the local area for a Group who operations bring it to interact with local areas and communities, with a view to continuous industrial and organizational growth. All the Local Authorities served are thus provided with a direct and constantly accessible contact person from whom to obtain answers to questions and problems related to the services provided by the Group, guaranteeing that they are always in contact with the right people and can obtain the necessary feedback within a reasonable timeframe.

The effects of the energy crisis on local communities were given more focus in 2023, since it has also led to an acceleration of the transition process at a local level thanks to production from renewable energy and an increase in energy efficiency initiatives. As a result, specific monitoring of the actions underway in the areas requiring progressive decarbonisation has been initiated. Furthermore, area managers have also continued to support the development of HeraLABs, fostering the necessary coordination between relations with Local Authorities and with other stakeholders in the area.

It should be noted that, in relations with Local Authorities as well, 2023 was marked by the emergency experienced in Romagna. In fact, throughout the year and specifically at the time of the flood, the Area Managers oversaw a series of one-off dialogue activities with the area with the aim of facilitating institutional and operational relations with the local areas most affected. This activity mainly involved: environmental services, engaged to clear waste from flooded areas; water and energy network services, to restore functionality; but it also involved more institutional areas of dialogue to encourage, together with Local Authorities, the correct implementation by users of the government provisions to support recovery which were conveyed through public service concessionaire, including the Hera Group.

In terms of quantity, **around four thousand relationships were monitored with local stakeholders in 2023**. In terms of quality, in 2023 the relationships mainly concerned environmental services (33%), which, due to the launch of the new concessions, continued to require a large number of one-time meetings with individual municipal administrations. These were followed by the integrated water service (32%), other network services (9%), the market area (10%) and business topics of general interest (9%).

Relations with the Italian regulatory and supervisory authorities

[2-27]
[417-2]
[417-3]

The Italian regulatory authorities that mainly impact the Group's management and activities are the **Regulatory Authority for Energy, Networks and the Environment (ARERA)**, and the Italian Antitrust Authority (AGCM).

With reference to Arera, the Group companies did not receive any significant fines in 2023.

On 13 December 2022, **AGCM** launched seven investigations with the adoption of seven precautionary measures against major operators, including Hera Comm Spa, for **alleged unlawful unilateral changes** in the supply price of electricity and natural gas.

The preliminary investigation and precautionary measure originated from AGCM's interpretation of Art. 3 of Legislative Decree 115/2022 (known as Aiuti bis), according to which even renewals of expired economic conditions would be prohibited from 1 September 2022 to 30 April 2023 (a period later extended to 30 June 2023).

Hera Comm Spa has not communicated or applied to customers (households, micro-enterprises) any unilateral changes in the economic conditions in force, or proposals for the renegotiation of economic conditions; nor has Hera Comm Spa terminated or threatened to terminate contracts with its customers (households, micro-enterprises) due to excessive unforeseen costs.

Hera Comm Spa only proceeded to renew the economic conditions as they expired. More precisely, in the case of economic conditions with contractually predetermined validity, Hera Comm Spa has provided for a renewal mechanism that involves notifying the customer of the new economic conditions (to be applied upon the expiration of the previous ones) under the same economic conditions as before, with the customer remaining free to accept or reject the new conditions.

Hera Comm Spa appealed AGCM's precautionary measure before the **Lazio Regional Administrative Court** with a request for suspension.

Prior to the hearing set for 11 January 2023, the Council of State intervened to uphold the appeal brought by another operator. The Council of State noted, consistent with the interpretation of the rule made by Hera Comm Spa, that the "Aiuti bis" Decree "refers only to the ius variandi for contracts that have not expired and not to contract renewals resulting from expiration dates agreed upon by the parties...".

On the basis of the statements made by Hera Comm Spa in the defense briefs submitted as part of the proceedings and the intervening order by the Council of State, on 30 December 2022 the AGCM ordered the revocation of the measure challenged by Hera Comm Spa, while for other operators the precautionary measures were partially confirmed.

Therefore, with regard to the interlocutory appeal brought by Hera Comm, the matter in dispute has been dropped.

Note that the so-called "Decreto Proroghe" (Legislative Decree 29 December 2022 no. 198) confirmed the interpretation made by Hera Comm Spa with reference to Art. 3 of the "Aiuti bis" Decree, expressly stipulating in paragraph 8 of Art. 11 that the prohibition on unilateral contract amendments does not apply to contract clauses "that allow the supplier company... to update the contract terms upon the expiry of the contract terms".

With its measure passed on 12 September 2023, the AGCM then accepted the obligations submitted by Hera Comm Spa in May 2023, closing the main preliminary investigation proceedings without finding any infringement.

**Penalties
imposed on
the Group**
[2-27]
[417-2]
[417-3]

With regard to the most significant penalties imposed in recent years, note that:

- With reference to the penalty of approximately 1.9 million euro imposed by the Italian Antitrust Authority (hereinafter AGCM) on Hera and Herambiente for allegedly **abusing their dominant position** by directly granting to the Akron Group company (later merged into Herambiente) the cellulosic waste from urban sorted waste collection service that had been withdrawn from the “Comieco Consortium system” in the years 2011, 2012 and 2013, the Lazio Regional Administrative Court upheld Hera and Herambiente’s appeal and consequently annulled the penalty imposed by AGCM. Essentially, the Lazio Regional Administrative Court stated that AGCM “did not carry out the required preliminary ‘contextualisation’ of the market and potential competition applicable at the time of the events, from the point of view of the actual distortions of competition”. This is because “at the time there was not a fully liberalised and competitive market for the recovery of cellulosic waste from municipal sorted waste collection, since sector legislation at that time outlined an area of public service over which a monopoly could be granted following a tendering procedure for the market which could include the recovery phase, but this was not compulsory”, reads the ruling. Hera, therefore, as operator for the relevant public service, had to ensure - for reasons of public sanitation, health and environmental protection - the continuity, safety and efficiency of the entire waste cycle, including the final recovery phase. In the case in question, as pointed out by the Regional Administrative Court, AGCM did not examine Hera S.p.A.’s position as a public service operator but, taking the local reference market for granted, simply asserted that the contested lack of competition had taken place because Hera had failed to implement any competitive procedures to select a party entrusted with the recovery phase and thus to put the intra-group operator Akron in competition with third parties. According to the Regional Administrative Court of Lazio, Hera S.p.A. and Herambiente S.p.A. provided solid evidence that entrusting the intra-group company with the recovery phase - yet exercising a higher-level control (of order, direction, planning, monitoring, etc.), which would be unthinkable with a third-party operator - was the only way to ensure service quality, for the benefit of the public interest in greater environmental sustainability of the waste cycle and, therefore, also for the benefit of users/consumers. The AGCM has lodged an appeal against the aforementioned rulings of the Regional Administrative Court of Lazio.

The Council of State, Section. VI in ruling no. 2114/2023 only partially accepted the AGCM’s appeal and significantly reduced the fine to approximately 300,000 euro.

- In November 2015, the **Italian Antitrust Authority (AGCM)** imposed a sanction of 366,000 thousand euro on Hera Comm for violation of the Consumer Code with regard to customer contracts. According to the opinion of the Authority, Hera Comm and other companies in the sector signed a number of supply contracts without the consumer’s explicit consent and using methods that altered the consumer’s freedom of choice because insufficient information had been given regarding the offers and nature of the contracts. Specifically, certain methods used for signing contracts through phone and sales agent channels were criticised, accused of putting pressure on customers and preventing them from making free and informed choices. During the proceedings, the companies submitted proposals for improving the procedures: for example, making the contractual documentation available to customers before binding them to the contract and making a second phone call to confirm the customer’s consent. Moreover, Hera Comm challenged the sanctioning measure before the Lazio Regional Administrative Court. The Authority Board decided “to invest the Court of Justice of the European Union with the question related to the interpretation of Art. 27, paragraph 1 bis, of the Consumer Code in relation to the Euro-unitary measures applicable to the electricity and natural gas supply sector, as already implemented by the State Council for the telecommunications sector”. The Court of Justice joined Hera Comm’s prejudicial case with other similar cases and, by order dated 14 May 2019, confirmed AGCM’s competence (instead of ARERA’s) in sanctioning the conduct covered by the proceedings pending before the Lazio Regional Administrative Court. Following an application by Hera Comm for continuation of the proceedings, the Lazio Regional Administrative Court rejected the appeal with ruling no. 9764. Hera Comm appealed against this ruling to the State Council.

With a ruling published on 1 March 2024, the State Council rejected Hera Comm’s appeal. Hera Comm had already implemented a number of operational measures to strengthen consumer protection in the proceedings opened by the AGCM.

- With reference to the sanction of December 2016 imposed by the Italian **Antitrust Authority (AGCM)** against Hera Spa for an alleged abuse of **economic dependence** consisting of the violation of the provisions set forth in Italian Legislative Decree no. 231/2002, as amended and supplemented, regarding payment terms for the supply of latest-generation meters, Hera Spa paid a total amount of 800 thousand euro. An appeal against this decision was lodged with the Regional Administrative Court of Lazio. At the date of drafting of this report, the hearing is yet to

be scheduled. An appeal was lodged against this ruling before the Council of State. At the time this report was drafted, the date of the hearing had yet to be set.

- In September 2021, due to the increase in commodity prices (both electricity and gas), **EstEnergy** launched an informational campaign aimed at customers with fixed-price contracts. The campaign aimed to reassure customers that the financial conditions would not be affected by rising prices. The Company's initiative was therefore driven by good intentions, i.e. to send direct communication to customers who, at that time, held fixed-price contracts, in order to reassure them there would be no changes to the financial conditions under their contracts. Due to an IT problem, however, the messages were also mistakenly sent to customers who had variable price contracts in place. In 2021, when it emerged that a customer who had already switched to a variable price contract had received the communication at the end of September, EstEnergy immediately stopped sending communications, as a precautionary measure. At the same time, it launched an investigation process aimed at understanding the causes of the unexpected event, defining the exact scope of customers mistakenly affected by the aforementioned communications, as well as identifying any corrective interventions to be carried out. Once the aforementioned processes were completed and the customers that mistakenly received the communication were identified, the Company immediately took action by sending specific communication to the customers in order to clarify their contractual position. Despite the fact that the incorrect communication was caused by an obvious IT problem and that EstEnergy acted promptly to stop the campaign and inform customers, the AGCM decided to impose a fine, albeit reduced, of one million euro; EstEnergy is planning to challenge the fine before the administrative court. In May 2023, 2023 EstEnergy filed an appeal at the Lazio TAR against the sanctions and the date for the respective hearing has yet to be set.

[2-27]

With regard to minor sanctions reported in 2023, administrative sanctions were imposed in an amount of approximately 154 thousand euro, mainly relating to waste management issues. These disputes, identified by the monitoring bodies, mainly refer to violations of the requirements laid down in Legislative Decree 152/2006 (Consolidated Environmental Act) and mainly concern the integrated water service with regard to plant operation, and the exceeding of the limits set out in the discharge tables. The infringements charged are of an administrative nature and usually require the filing of defence briefs by the complainant requesting withdrawal of the measures and, alternatively, the payment of a fine in accordance with the minimum amounts established by sector regulations.

Litigation proceedings brought by the Group

Details are given below on some of the litigation proceedings brought by the Group against the public administrations:

- By means of an appeal filed in 2014 before the Regional Administrative Court of Emilia-Romagna against the Emilia-Romagna Regional Authority and Atersir, Herambiente requested the cancellation of Resolution 380 of the Regional Council of the Emilia-Romagna Regional Authority dated 24 March 2014, containing "Amendments to the Regional Authority Resolution 135/13 - Provisions concerning the definition, and handling of the increase limit, of the fee for the disposal of municipal waste". Resolution 380/2014 was challenged with regard to the part where it has the effect of laying down the full deduction, from the waste disposal fee, of the revenues from incentives to generate electricity from renewable sources. The Regional Administrative Court of Emilia-Romagna rejected this appeal as well as the subsequent one (2015) filed by Herambiente, and the latter challenged the ruling before the Council of State. The Council of State, in an order issued in July 2021, combined the two proceedings, given their objective and subjective connection, partially rejected Herambiente's claims, and partially referred the case to the Constitutional Court, raising a question of constitutional legitimacy. The matter was remanded for decision by the Constitutional Court and was deemed unfounded and consequently rejected. The Council of State, in a ruling dated 8 September 2023, rejected Herambiente's appeals.
- By means of an appeal filed in 2015 before the Regional Administrative Court of Emilia-Romagna against the Emilia-Romagna Regional Authority and against Atersir, Herambiente requested the cancellation of the Emilia-Romagna Regional Authority resolution dated 27 April 2015 no. 467, concerning the criteria for determining the fee for the disposal of municipal and similar waste in accordance with Art. 16, paragraph 1, of Regional Law no. 23 of 2011. The filed appeal objected in particular to two aspects of resolution no. 467, considered illegitimate, namely:
 - the erroneous inclusion of revenue from incentives for renewable electricity generation among the amounts to deduct from expected payments;
 - the lack of specific mention of tax charges among the costs incurred by Herambiente, not recognised by the contested resolution.
 The Regional Administrative Court of Emilia-Romagna rejected this appeal as well as the previous one (2014) filed by Herambiente, and the latter challenged the ruling before the Council of State. The Council of State, in an order issued in July 2021, combined the two proceedings,

given their objective and subjective connection, partially rejected Herambiente's claims, and partially referred the case to the Constitutional Court, raising a question of constitutional legitimacy, which was deemed unfounded and therefore rejected.

The Council of State, in a ruling dated 8 September 2023, rejected Herambiente's appeals.

- With separate appeals, which were then united, Herambiente challenged the following acts before the Regional Administrative Court of Molise:
 - challenge of Regional Government Decree no. 231 of 19 May 2015 which identifies as substantial variations the introduction of the CER code 19.12.12, the adjustment of the authorisation for saturation of the thermal load and the introduction of a shredder.
 - challenge of EIA regarding the plant of Pozzilli and, for additional reasons, the Integrated Authorisation.
 - challenge of Regional Council resolution no. 341 of 28 December 2015 regarding the "Regional plan for waste management. Legislative Decree 152/2006. Conclusion of the Strategic Environmental Assessment procedure. Adoption of Plan proposal."









The Regional Administrative Court of Molise did not uphold Herambiente's appeals and the latter appealed the measure before the Council of State, which, in ruling no. 2245/2023, rejected the appeal.
- Herambiente Spa filed an appeal before the Regional Administrative Court of Emilia-Romagna in which it challenged and requested the cancellation of Managerial decision no. 17621 of 30 September 2019 by way of which the Regional Government of Emilia-Romagna annulled ex officio the previous 10 August 2018 decision regarding the extension of the Environmental Impact Assessment in relation to the expansion of the landfill located in Baricella.

In a ruling dated 6 July 2021, the Regional Administrative Court rejected the claims made by Herambiente Spa and the latter appealed to the Council of State. In a ruling issued on 11 May 2023, the Council of State accepted Herambiente's appeal, overruled the first instance ruling and ordered the counterparties to pay the legal costs jointly and severally.
- At the end of 2019, Hera Spa and AcegasApsAmga, as well as the other major operators, challenged before the Regional Administrative Court of Lazio the statement of the Chairman of ANAC dated 16 October 2019 containing "Instructions on the obligation to acquire the CIG (Contract Reference Number) and to pay the contribution to the Authority for cases excluded from the scope of application of the Public Contracting Code" and the statement of the President of the Authority dated 18 December 2019 containing "Instructions on the obligation to acquire the CIG, to submit the data and pay the contribution to the Authority for the special procurement regimes referred to in Part II, Title VI of the Public Contracting Code". In a ruling dated 1 December 2021, the Lazio Regional Administrative Court upheld the appeal brought by the companies and annulled the challenged measures. The same obligations were subsequently reintroduced by National Anti-Corruption Authority resolutions no. 214 of 27 April 2022 ("indication regarding the Cig acquisition obligation, payment of the contribution to the Authority for cases excluded from the scope of application of the Public Contracts Code") and no. 214 of 27 April 2022 ("indication regarding the Cig acquisition obligation, data transmission and payment of the contribution to the Authority for special procurement schemes under Part II, Title VI of the Public Contracts Code"). Against these resolutions and the measures implementing them, Hera Spa and AcegasApsAmga have again appealed to the Lazio Regional Administrative Court. The hearing is pending.

In February 2024, Hera Spa and AcegasApsAmga Spa submitted, as part of the aforementioned appeal, additional grounds for the annulment of ANAC resolution no. 584/2023 containing indications regarding the obligation to acquire the Cig and to pay the contribution in favour of the authority for the cases excluded from the scope of application of the Public Contracts Code.

6. CUSTOMERS

6.01 Objectives, performance and targets

What we said we would do	What we did	SDGs	Progress*
Service quality			
81% smart second-generation electricity meters (6% in 2022), of which 50% made of recycled plastic (4% in 2022), and 86% gas meters installed and remotely read by the end of 2026 (77% in 2022). About 100 thousand smart water meters installed by 2026 (5 thousand in 2022).	At the end of 2023, <ul style="list-style-type: none"> 41.8% of electricity meters ad second generation, of which 30.5% made of recycled plastic, 88% of gas meters are remotely read, about 6,700 smart water meters installed. (see p.235)	9, 12	
Guarantee compliance with commercial / contractual quality standards in the gas, electricity, water and district heating services, in line with 2022.	99.6 cases with contractual quality standards respected in 2023, in line with 2022. (see p.233)	-	
Safety and continuity of service			
Quick response in gas services: maintain a level significantly above Arera's requirements for the percentage of calls with arrival within 60 minutes.	96.5% arrivals on location of the call within 60 minutes (compared to service obligations set at 90%). (see p.236)	-	
About 300 thousand advanced NexMeter gas meters installed by the end of 2026 (18.3% of total meters), of which 100 thousand made of recycled plastic (180 thousand NexMeters installed in 2022).	At the end of 2023, 250 thousand gas NexMeters were installed (roughly 15% of total meters). Technical trials completed to study the resistance of recycled plastic under various environmental conditions. (see p.235)	9	
Customer relations			
10 minutes, average waiting time at help desks and 80 seconds, average waiting time at call centres.	12 minutes, average waiting time at help desks (due to a significant increase in contacts, higher than the number prior to the pandemic) and 59 seconds, average waiting time at call centres in 2023. (see p.245)	-	
*  Result achieved or in line with planning;  Result with slight variance compared to planning;  Result with significant variance compared to planning.			

What we will do	SDGs
Service quality	
91% smart second-generation electricity meters (about 449 thousand meters), of which 60% made of recycled plastic.	9,12
95% electronic gas meters installed and remotely read by the end of 2027.	
About 310 thousand smart water meters installed 2027.	
Improve by 2027 the respect for ARERA's quality standards in the gas and electricity services, to maximise bonuses and minimize customer reimbursements.	-
Safety and continuity of service	
Quick response in gas services: maintain until 2027 a level significantly higher than ARERA's requirements in the percentage of calls with arrival within 60 minutes.	-
310 thousand gas NexMeters installed by the end of 2027 (18% of total meters).	9
Customer relations	
10 minutes, average waiting time at help desks and 80 seconds, average waiting time at call centres in 2024.	-

6.02 Customers

ENERGY SERVICES CUSTOMERS

thousands	2021	2022	2023
Gas customers	2,072.7	2,094.1	2,112.1
Electricity customers	1,400.9	1,448.9	1,727.5
District heating customers	12.8	12.9	13.0

This data does not include AresGas and its subsidiaries in Bulgaria.

INTEGRATED WATER SERVICE CUSTOMERS

thousands	2021	2022	2023
Water customers	1,478.6	1,483.9	1,493.8

RESIDENTS URBAN WASTE MANAGEMENT SERVICE

	2021	2022	2023
Municipalities served (no.)	189	188	188
Residents served (thousands)	3,220.2	3,195.0	3,201.1

In 2023, the Hera Group also recorded **overall growth in its customer base**, particularly in electricity (+19%). This result confirms the effectiveness of our **growth strategy**, even in the face of the extraordinary events that occurred during the last period.

At the start of 2024, Hera Comm also won the Single Buyer's tender for the Gradual Protected Service for customers in 37 Italian provinces (seven lots in total), which was called in relation to the end of the protected electricity market effective 1 July 2024, thus gaining more than one million new residential customers overall.

We also observed an increase in the number of integrated water service customers following the entry of a new municipality in the Modena area.

Commercial policies

Hera Comm presents itself as an **“enabling” partner for its customers’ energy transition** based on several main lines of development:

- the evolution of **digital channels** as amplifiers of the customer's experience with their supply;
- a growing penetration of added value services including **energy efficiency products** and waste-reduction and **plant-maintenance** solutions;
- access to a range of offers for the supply of **gas with greenhouse gas offsetting** (for the first 12 months after activation of the offer) and **electricity from certified renewable sources**; note that all new offers intended for families are proposed as a default with these options.

Along the first line of development, in 2023, the “PiùControllo” [greater control] offers intended for households were created to help customers monitor their daily consumption in synergy with the Consumption Log, thanks to the use of the Hera 2G mobile app, allowing customers with a second-generation meter to monitor their daily consumption in detail, **even on an hourly basis**, and to know in advance in which time slot their energy will cost them less the following day.

The use of the Hera 2G app was further enhanced with the subsequent launch of the new “SM4RT” electricity offer, which harnesses the potential of the latest generation meters, allowing the offer to be customised at any time during the supply period and allowing greater customer engagement, thus promoting an evolution towards a **proactive approach to energy use**, changing lifestyles and consumption habits.

On the services side, in 2023, Hera Comm continued its policy of supporting customers with the sale and installation of **highly energy-efficient systems** (condensing boilers and heat pump air-conditioners) and for the **self-production of energy from renewable sources** (photovoltaic systems). In addition, the offer catalogue was enriched with the introduction of a new innovative range of hybrid condensing boilers, able to efficiently combine the use of the most appropriate energy carrier (gas or electricity). The portfolio of sustainable solutions was then expanded with the new Hera Led Smart offer and the upgrading of the Hera Fotovoltaico Kit Fai da Te [Hera Do-It-Yourself Photovoltaic Kit] offer: the former allows the smart management of home lighting via app; the latter offers the option of installing a photovoltaic micro-plant in “plug & play” mode including for customers with limited home space who cannot install one on their roof.

Last but not least, in 2023, the gamma of **electric-vehicle charger products** was completely overhauled, with the inclusion of connected and app-manageable devices to monitor consumption and schedule car charging.

PENETRATION OF VALUE-ADDED SERVICES AT YEAR-END

%	2021	2022	2023
Penetration of value-added services at year-end	10.9%	14.7%	17.9%

Considering the free market, 17.9% of customers use value-added services, with a predominance of insurance services relating to breakdowns in domestic installations (No problem gas and No problem acqua) and boiler maintenance (Caldaia sicura).

This indicator includes the following products and services: Led, Contawatt, Clima, Fotovoltaico and Fotovoltaico Kit Fai da te, No problem luce; Thermo, Caldaia and Caldaia ibrida in pompa di calore, Scaldacqua, No problem gas; No problem acqua, Caldaia sicura; Sanificaria.

Hera Comm's Sales Network and Commercial Conduct

The sales activity in 2023 recorded a **marked increase in acquisitions** compared to the previous year. This performance was due to the contribution of all sales channels, especially agencies and the inbound call centre, the two leading channels in terms of the number of customers acquired.

Furthermore, the new “master dealer” sales channel, launched at the end of 2022, was completed during the year. This channel involves parties (large structures) that create an affiliation among various types of shops (electrical appliances, telephony, tobacconists, for example) who sell products and services of which the master dealer is the distributor. The idea is to use these channels **to further strengthen the company's local presence**, even in small provincial towns and provide the current customer base (and potential future customers) with well-established commercial facilities in the local areas.

In the latter part of the year, informational letters sent to gas customers regarding the end of the protected gas market, illustrating the consequences and opportunities as regards offers on the free market. This resulted in a **greater influx** at the counters and an increase in the number of customers who switched to the free market for gas supplies.

Again in 2023, the **internal control system** for commercial conduct **was markedly enhanced** to guarantee the highest quality in acquisition through the implementation of advanced sales analysis tools.

In addition, in 2023 as well the Hera Group added **other safeguards** for customers to those already required by ARERA, such as afterthought management facilitated by email, regular mail, or fax (not just registered mail). **Obtaining the customer's consent clearly**, responsibly, and unequivocally is of fundamental importance for Hera. To do so, it implemented specific quality controls in line with Consumer Code requirements:

- for contracts offered over the phone, a second call must be made to verify that the customer has received the contract and actually wishes to sign it while monitoring the quality of the sales efforts carried out by our teleselling channel. If the customer cannot be contacted, the contract is blocked automatically. In addition, customers can retrieve the recording of their telephone conversation via the web portal or automated phone system;
- in the case of contracts signed at the customer's home, in addition to mailing the welcome letter, a phone call is made during which either the customer's desire to activate the signed agreements or the customer's intention to exercise their right of withdrawal is verified. In 2023,

more specific questions were also added to the call scripts in order to monitor the quality of the sales channel more effectively and, if necessary, take action against the agent or agency as stipulated in the signed sales mandate.

In 2023, the **active monitoring system was enhanced**, increasing the number of quality control parameters that trigger such monitoring and lowering the thresholds above which sales quality levels are deemed inadequate. This enhancement allowed us to close 2023 with nine times as many agents monitored compared to the previous year. The contracts signed by the monitored agents are not activated if the customer does not respond to the verification calls.

Once again, in 2023, the first part of which was characterised by high and extraordinary volatility in energy carrier costs, Hera Comm neither communicated nor applied unilateral changes in economic conditions caused by the excessive supervening costs to its customers (households, micro-businesses). In fact, Hera Comm only proposed renewal conditions to its customers upon the expiration of supply contracts, notifying them in advance according to the form and timing established by the Code of Business Conduct.

6.03 Cost of services

The Hera Group manages **services held under concession** (integrated water service, waste management, gas and electricity distribution) and **services managed according to free market criteria** (waste disposal, gas and electricity sales).

The **regulatory authorities** (ARERA and the local municipal sanitation authorities) set the tariffs Hera applied for the services under concession; at the same time, Hera freely determines the tariffs for free-market services. For the supply of energy to customers enjoying protected regimes, ARERA sets and updates quarterly (on a quarterly basis for electricity and monthly for gas, as of October 2022) the prices for sales tariffs to customers who have not subscribed to a free market offer. For the water service, on the other hand, ARERA updated the tariff method every three years in general since 2012.

The table below shows the average household expenditure in 2023 compared to the previous year for the four services Hera provided based on the average consumption of gas, electricity and water over the two years considered: 574 m³ for gas (-25% compared to 2022), 1,592 kWh of electricity (-9%) and 109 m³ of water (+3%). For the waste service, we considered a family of three people living in an 80 m² apartment.

The costs of Hera's services for an average customer (real consumption)

euro	2022	2023	Change 2023/2022 (%)	Change 2023/2022 (%)
Gas	1,101.75	611.40	-490.35	-45%
Electricity	878.90	553.37	-325.53	-37%
Water	260.60	272.31	+11.71 €	+4.5%
Waste	250.74	252.05	€ +1.31	+0.5%
Total	2,488.97	1,689.13	-802.86	-32%
<i>of which paid by Hera</i>	<i>743.77 (30%)</i>	<i>758.00 (45%)</i>	<i>+14.23</i>	<i>+2%</i>
<i>of which falling under raw materials and generation</i>	<i>1,433.80</i>	<i>645.35</i>	<i>-788.45</i>	<i>-55%</i>
<i>of which duties, taxes, system charges, and other charges</i>	<i>314.43</i>	<i>285.76</i>	<i>-28.67</i>	<i>-9%</i>

Bill of a residential customer with an average annual consumption of gas, electricity, and water and, for waste disposal, considering a three-person household in a house measuring 80 m².

In 2023, the average household spent a total of almost 1,690 euro on the services supplied by Hera, 32% less than in 2022, amounting to approximately 803 euro. Compared to 2022, the main impact was the decrease in the prices of the raw material component of the **gas and electricity bills** (788 euro less, 450 euro for gas and 338 euro for electricity). The water service recorded an increase of 12 euro compared to 2022. Lastly, the cost of waste bills remained essentially steady.

44.9% of overall spending, amounting to 758 euro, was attributable to the components of bills paid by Hera. This free increased by 14 euro in 2023, broken down as follows: -9 for gas, +8 euro for electricity, +10 euro for water and +5 euro for waste.

The costs of Hera's services for an average customer (constant consumption)

euro	2022	2023	Change 2023/2022 (%)	Change 2023/2022 (%)
Gas	1,714.46	1,207.67	-506.79	-30%
Electricity	1,308.92	860.71	-448.21	-34%
Water	305.41	305.58	+0.16 €	+0.1%
Waste	250.74	252.05	+1.31 €	+0.5%
Total	3,579.54	2,626.01	-953.53	-27%
<i>of which paid to Hera</i>	818.89 (23%)	838.86 (32%)	+19.97	+2%
<i>of which falling under raw materials and generation</i>	2,271.09	1,252.21	-1,018.88	-45%
<i>of which duties, taxes, system charges, and other charges</i>	489.56	534.94	+45.38	+9%

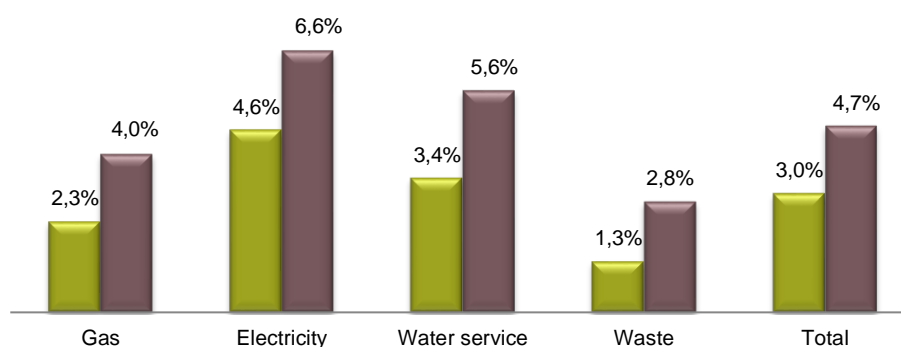
Bill of a residential customer with an annual consumption of 1,200 m³ of gas, 2,700 kWh of electricity, 130 m³ of water, and, for waste disposal, considering a three-person household in a house measuring 80 m². For the other conditions taken into account, see the following pages.

Based on an analysis considering equal volumes consumed by an average Hera customer in 2023, the overall cost of services was 27% lower than in 2022, i.e., approximately 954 euro. This decrease derived mainly from the lowering of the gas and electricity raw material costs (-1,019 euro) compared to the sharp increase characterising 2022; increasing, on the other hand, were:

- the bill components paid by Hera (+20 euro). This increase corresponded to +5 euro in the gas bill, +10 euro in the electricity bill and +5 euro in the waste bill;
- taxes, fees, system charges and other charges that are not incumbent on Hera (+45 euro), which had been reduced in 2022 thanks to government intervention to counter energy bill increases.

COMPARISON BETWEEN BILLS FROM 2006 TO 2023 AND INFLATION (ANNUAL AVERAGE INCREASE, CAGR)

- Average annual change (2006-2023) Hera services expenditure
- Average annual change (2006-2023) Italy services expenditure



The long-term analysis shows that, between 2006 and 2023, Hera bills in Emilia-Romagna had an average annual compound increase less than the Italian average (+3% vs. +4.7%) (Source: Eurostat).

Gas Bills

The Regulatory Authority for Energy, Networks and Environment (ARERA) sets out the information that must appear on the bill. There are four cost items outlined below.

The **expense for natural gas material** includes amounts related to the different commercial activities performed by the seller to supply natural gas to the end customer. Until September 2022, the purchase cost of raw materials was indexed according to the gas price at the Dutch hub TTF, which reflects the European market costs; as of October 2022, the raw material cost reflects the prices seen on the Italian Virtual Trading Point (PSV) hub. The **sales charge** (paid by Hera), based on the economic conditions of the supply for the protected service, is governed by the "Uniform Code Governing Retail Sales of Natural Gas" attached to ARG/gas resolution 64/2009. For customers served under the protected regime who receive their bill in electronic format and who have activated an automatic debit payment method, a discount for the electronic bill introduced by Resolution 610/2015/R/com is applied for this item.

The **expense for transporting and managing meters** includes the amounts related to the different activities performed by the sellers to supply natural gas to the end customers. It includes **distribution and metering tariffs** (paid by Hera), transportation and any municipal charges to cover the concession fees for the distribution service. The Authority updates it every year and tailors it for the seven macro-regional areas into which the country is subdivided. The fixed rates for the distribution and metering charges are structured by the metering unit class (meter class) installed at the point of supply. In contrast, the G4 metering class was taken as the reference for an average household with a consumption of 1,200 Sm³/year.

Another part of the bill comprises components to cover **system charges**, i.e., amounts intended to cover costs related to activities of general interest for the gas system (e.g. costs for promoting energy saving) and are paid by all end customers of the service. Distributors pay the relevant revenue to the fund for energy and waste management services.

Lastly, **taxes** include consumption taxes, additional regional taxes and VAT. Taxes are set by specific provisions by the Ministry of the Economy and Finance and the regional government authorities and vary according to use (whether for heating, cooking, or industrial uses). Consumption tax (excise duty) is applied to the quantity of gas consumed. In contrast, VAT is applied to the total amount of the bill, including excise duty. To cope with rising raw material costs, the government reduced the value of VAT charged on consumption to 5 % for the whole of 2022; this reduction was confirmed the following year. The regional additional tax applies to the quantity of gas consumed. It is established autonomously by each region within the limits set by law.

GAS BILLS

euro	2021	2022	2023
Natural gas expense	474.60	1,333.22	787.08
<i>of which: sales fee</i>	72.80	76.21	74.40
Meter management and transportation expense	184.82	245.13	325.87
<i>of which: distribution and measurement charge</i>	124.07	120.11	126.62
System charges	30.32	-173.39	-191.14
VAT	105.92	81.64	57.51
Other taxes	228.67	227.86	228.35
Total	1,024.32	1,714.46	1,207.67
<i>of which: fee paid by Hera</i>	196.87 (19%)	196.32 (11%)	201.02 (17%)

Bill of a residential customer with an annual consumption of 1,200 m³ of gas and with direct debit and e-billing. A customer under the protected market regime was considered based on the economic conditions set by the Regulatory Authorities: 24% of Hera's residential customers are included in this category. Municipalities considered: Bologna, Ferrara, Forlì, Imola, Modena, Padua, Pesaro, Ravenna and Trieste (weighted average of resident citizens). The grey areas show tariff components that were paid by Hera. The complete data on gas supply tariffs is available on the Group's website.

With consumption being equal, in 2023, the gas bill of a Hera household customer under the protected regime cost 507 euro less (-30%) than in the previous year. The expense for natural gas, which underwent a sudden since the end of 2021, started to decrease again (-41%), while the meter

transportation and management expense increased by 81 euro (+33%) for ARERA's update of the QTt tariff component. System charges resulted in a credit balance in 2023 also thanks to the intervention by the Authority, which cancelled the rates of the RE, GS and UG3 tariff components and applied the negative UG2 component (relating to compensation for the retail sales marketing costs to the benefit of gas consumption up to 5,000 cm³/year. VAT on gas was also confirmed to be 5% for 2023, thus decreasing by 24 euro (-30%). Hera's fee, which includes the marketing fee and the distribution and metering tariff, increased slightly (about 5 euro); its weight on the overall bill was 16.6%.

2023 was influenced not only by particularly mild winter weather but also by a new calculation method ARERA introduced in July: the gas price component covering procurement costs (CMEMm), applied to customers in the protected regime, was updated as a monthly average of the Italian wholesale market price (Virtual Trading Point (PSV) day-ahead) and published within the first two working days of the month following the reference month (applied starting in October 2022 and valid for the entire 2023 calendar year). During 2023, wholesale prices fluctuated from a maximum of 68.37 euro/MWh in January to a low of 31.42 euro/MWh in July, to a value of 36.31 euro/MWh in December.

Electricity bills

The Regulatory Authority for Energy, Networks and Environment (ARERA) sets out the information that must appear on the bill. There are four cost items outlined below.

The **electricity expense** includes amounts related to the different commercial activities the seller performed to supply electricity to the end customer. In addition to the energy generation fee, this item includes the dispatching and **marketing** tariffs (the latter, for which Hera is responsible, is regulated by the "Integrated text of the provisions of the regulatory authority for energy networks and the environment for the provision of electricity sales services of last resort" attached to Resolution 491/2020/R/eel). For customers served under the protected regime who receive their bill in electronic format and who have activated an automatic debit payment method, a discount for the electronic bill (Resolution 610/2015/R/com) is applied.

The **expense for transporting and managing meters** includes amounts related to the various activities the seller performed to supply electricity to the end customers. This item includes the **transportation, distribution and measurement fee** (paid by Hera).

System charges cover the costs of general-purpose activities for the electricity system (including, for example, the development of energy from renewable sources). They are paid by all end customers of the electricity service.

Lastly, **taxes** include a consumption tax (excise duty) and VAT. The excise duty was applied to the amount of energy consumed; household customers with a power output of up to 3 kW benefited from preferential rates for supply to their place of residence. VAT was applied to the total amount of the bill, including excise duty. For household users, it amounted to 10% and for non-household users to 22%; some productive activities enjoyed a reduced rate of 10%.

ELECTRICITY BILLS

euro	2021	2022	2023
Electricity expense	364.49	1,064.29	596.21
<i>of which: sales fee</i>	48.95	50.21	56.68
Meter management and transportation expense	108.24	103.85	107.66
<i>of which: transportation, distribution and measurement charge</i>	105.68	101.29	105.10
System charges	72.86	0.00	56.80
VAT	56.74	118.99	78.25
Other taxes	21.79	21.79	21.79
Total	624.13	1,308.92	860.71
<i>of which: fee paid by Hera</i>	154.63 (25%)	151.50 (12%)	161.78 (19%)

Bill for a residential customer with a 3 kW installed electrical capacity contract, whose yearly consumption totals 2,700 kWh, with direct debit and e-billing. A customer under the highest protected market conditions was considered based on the economic conditions set by the Regulatory Authorities: 5% of Hera's residential customers were in this category. The grey areas show tariff components that were paid by Hera.

For the same consumption, on average, the 2023 electric power bill of a Hera household customer under the protected market regime cost approximately 448 euro less (-34%) than the previous year. The electricity expense increased by 468 euro (-44%), while the expense for managing and transporting meters increased by 4 euro (+4%). System charges came to 57 euro, after being reduced to zero in 2022 thanks to government measures, while taxes decreased by 41 euro (-29%, proportionally to the total bill). Hera's fee, which includes the sales and distribution fees, increased by 10 euro; its weight on the overall bill was 19%.

Water Service Bills

The average expenditure for the integrated water service varies among the areas Hera serves: it depends on the specific supply sources of the various areas served, the availability of water resources and the distance from the withdrawal source.

Since 2012, ARERA has been responsible for regulating the water service. The 2022-2023 Tariffs were established by ATERSIR in December 2022. The tariffs also include the balances from previous years, determined in compliance with the tariff method rules.

WATER SERVICE BILLS

euro	2021	2022	2023
Aqueduct	113.11	117.92	123.88
Sewerage network	34.96	36.38	34.85
Purification	86.11	89.67	87.19
Fixed fee	17.95	18.70	16.77
Equalisation components	10.33	15.30	15.11
VAT (10%)	26.25	27.45	27.78
Total	288.71	305.42	305.58
<i>of which: fee paid by Hera</i>	<i>252.13 (87%)</i>	<i>262.67 (86%)</i>	<i>262.69 (86%)</i>

Bill of a residential customer (household of three) with a yearly consumption of 130 m³. Municipalities taken into account: Bologna, Ferrara, Forlì, Imola, Modena, Padua, Pesaro, Ravenna, Rimini, and Trieste (weighted average of residents). The grey areas show tariff components that were paid by Hera. The total for the previous year with respect to the reporting year was updated based on updates in the equalisation components introduced after the previous report was drafted.

In 2023, the average bill of a residential customer with consumption of 130 m³ per year totalled 306 euro, stable compared to 2022.

The equalisation components are tariffs established by the Authority that operators must apply to end users for the three services: water, sewage and purification. They are allocated to cover the tariff concessions granted to populations affected by seismic events, to promote the quality of aqueduct, sewerage and purification services, to cover the costs of the water bonus, and to cover the operating costs of the Guarantee Fund for Water Works.

The leak fund for hidden water leaks

In 2014, Hera Spa set up the "**Leakage Fund**", a mechanism to **protect water service users** who, as a result of **hidden water leaks** on the system they own, find themselves having to pay a bill with even very high amounts. Joining the Leakage Fund, which is voluntary and from which it is possible to withdraw at any time by means of a simple communication, entails the payment of an annual fee (15 euros, charged on the bill) to guarantee partial coverage of bills with consumption resulting from accidental and unknown leaks along the user's private network. All membership fees set aside in the Leakage Fund are at the total and exclusive disposal of the coverage of the higher charges of customers who have suffered a loss. In this way, a member customer who has detected a hidden leakage could be **reimbursed the amount billed** in respect of volumes exceeding 80% of the average customary consumption, up to a maximum of 10,000 euro.

As of July 2022, the national regulatory authority (ARERA) also intervened (**Resolution 609/2021**) to institute tariff protections to be guaranteed to all users in the event of hidden leakage downstream of the meter. The tariff protections instituted by Arera only partially cover the cost of the water bill for leakage consumption. In particular:

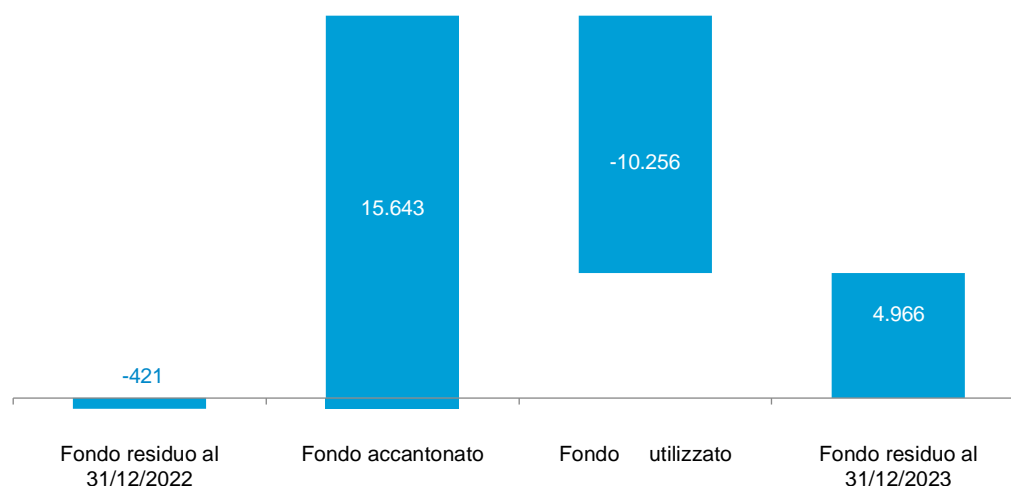
- for the aqueduct service, a tariff equal to half of the basic tariff was applied to the volume exceeding the average daily consumption, subject to an exemption on billable volumes equal to 30%;
- it is also possible to access the protection mechanism only if the leakage consumption is at least twice the average daily reference consumption and, in the case of close events, users will be able to access the minimum protection at the earliest three years after the last access.

Therefore, as of 1 July 2022, the Leakage Fund set up by Hera Spa in 2014 was in any case maintained, but is only used to supplement what is not covered by the protection mechanism set up by Arera.

The lower utilisation of the Leakage Fund as a result of ARERA's protections made it possible to revise from July 2022 the Regulation set up in 2014 to increase the coverage ceilings (from 10 to 20 thousand euro), as well as to reduce the fund membership fee applied to users, which, as of 01 July 2023, was redetermined as follows:

	Up to 30 June 2023	From 1 July 2023
Annual membership fee	10 euro per year + VAT as per contract (fixed fee) + 5 euro per year + VAT per real estate unit (variable fee)	6 euro per year + VAT as per contract (fixed fee) + 3 euro per year + VAT per real estate unit (variable fee)

WATER LEAK FUND (THOUSANDS OF EURO)



LEAK FUND AND BENEFICIARY CUSTOMERS

	2021	2022	2023
Funds disbursed (thousand euro)	19,901	14,303	10,256
Beneficiary customers	14,031	13,564	13,781
Average reimbursement (euro)	1,418	1,054	744

On 31 December 2023, the fund had a positive balance of 5.0 million euro. The balance, for 2023 alone, was positive by approximately - 5.4 million euro. Since its creation, the fund **has reimbursed more than 119 thousand users, paying them over 154 million euro**. During 2023, 13,781 users benefited from the fund with an average reimbursement of 744 euro. Less than 4% of Hera Spa customers were not covered by the "Leak fund" as a result of cancellations communicated by customers. In 2023, 301 customers withdrew from the fund.

Since the fund was intended exclusively for the benefit of its member customers, and considering that the monthly balances were still positive throughout 2023 (for the first time since 2017), interest of 167,000

euro was calculated in favour of the fund. In light of the fund's positive balance on 31 December 2023, the possibility of **a further reduction in the leak fund membership fee** will be assessed during the first half of 2024.

AcegasApsAmga also took out an insurance policy against hidden water leaks (integrating the ARERA protection) that covers all customers of this service at a cost of 5.20 euro per year for household users and 8.20 euro per year for non-household users. In 2023, 498 claims were settled, 166 in Trieste of which and 332 in Padua.

Waste Collection and Disposal Bills

The January 2014 Stability Law established two tariff regimes for waste management services in municipalities that had implemented systems for measuring the waste delivered to the public service: the **Waste Tax (TARI)**, which is in the form of a tax, and the **Spot Fee Tariff (TCP)**, which is in the form of a fee. These two tax regimes are meant to ensure full coverage of costs for the waste management service, which includes street sweeping and washing, waste collection and transportation, sorted waste collection, waste treatment and disposal, and administrative costs.

In the area served by Hera Spa, 114 municipalities applied TARI (two of which have chosen to entrust their collection to Hera); in comparison, 22 municipalities applied TCP (including a provincial capital, Ferrara). In the remaining 52 municipalities served by AcegasApsAmga and Marche Multiservizi, TARI was applied.

Since its launch in 2017 in a municipality in Emilia Romagna, the **TCP system** reached approximately **453 thousand inhabitants in 22 municipalities** in 2023, equal to 18.4% of the residents of Emilia-Romagna served by the Hera Group through the integrated management of municipal waste.

For these municipalities, the new quantity-based collection services were activated, and personal disposal equipment was distributed to all residents and companies. For an effective and consistent introduction of the new tariff model and the new services, special control rooms were set up jointly between Hera and the municipal administrations.

The necessary communication initiatives have also been launched to inform and engage users regarding how the new system will be introduced. In fact, it should be noted that any quantity-based changes to the collection service that may affect the calculation of tariffs are communicated to residents by publicising them widely, e.g. through bills, *ad-hoc* communications and on the website.

Hera manages the application of TCP thanks to the integrated management of systems and processes that have allowed all aspects and stages of the Groups model to be applied effectively and uniformly, from user management to the measurement of mixed waste disposed and up to final invoicing. The TCP is a **fairer and more transparent way to finance waste management services**. It can promote virtuous behaviour and participation in sorted waste collection.

In all of the municipalities using the TCP system except two, the sorted collection exceeds 75%, with peaks of more than 90% in five municipalities.

WASTE COLLECTION AND DISPOSAL BILLS

euro	2021	2022	2023
Fixed fee	102.92	102.38	105.69
Variable fee	102.37	106.02	107.68
Fixed and variable fees not paid by Hera	31.10	30.58	25.94
Additional provincial charges	13.00	11.76	12.74
Total	249.39	250.74	252.05
<i>of which: fee paid by Hera</i>	<i>205.29 (82%)</i>	<i>208.40 (83%)</i>	<i>213.37 (85%)</i>

Bill of a residential customer (three-person family in a house measuring 80 m²). Municipalities taken into account: Bologna, Ferrara, Forlì-Cesena, Imola, Modena, Padua, Pesaro, Ravenna, Rimini, and Trieste (weighted average of residents). For Ferrara (which as of 1 January 2018 uses the TCP system), 40 disposals of 30 litres each were also taken into account, and for Cesena (under the TCP as of 1 January 2023) 35 disposals of 40 litres. The grey areas show tariff components that were paid by Hera.

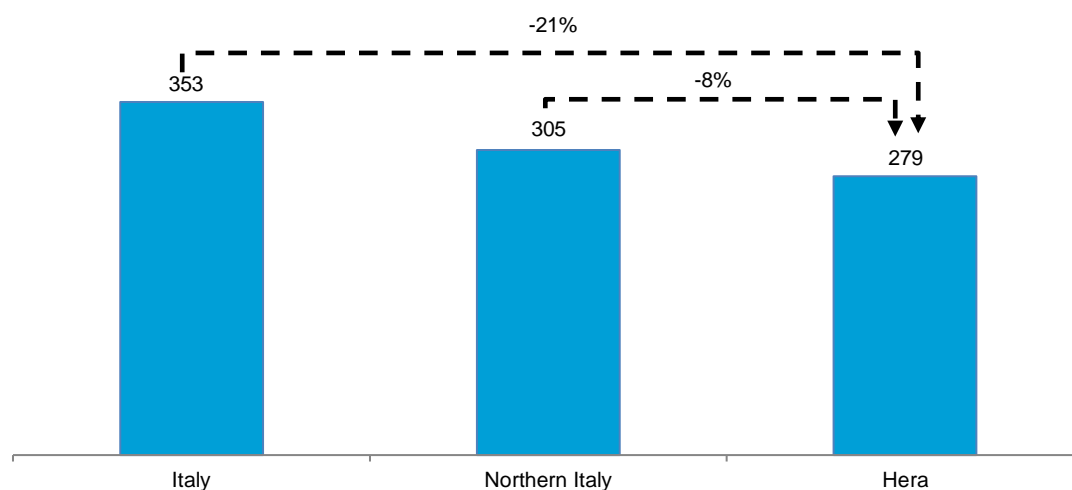
A three-person family living in an apartment measuring 80 m² paid approximately 252 euro for waste collection and disposal in 2023, a stable amount compared to the previous years (+1.3 euro). Increases

were recorded in Ravenna (+8 euro, +3%), Padua (+17 euro, +7%) and Pesaro-Urbino (+9 euro, +4%) due to certain initiatives that affected the service (the evolution of separate collection services and the quality of the material collected, the strengthening of controls in the local area). On the other hand, the bill decreased by 19 euro (-7%) in Ferrara. These variations, in TARI municipalities, are consistent with the resolutions of the municipalities, which, every year, re-evaluate the fixed and variable quotas useful for calculating household tariffs and in line with the variations recorded at the level of the approved Economic and Financial Plans.

The cost of waste management services for household and non-household customers

In 2023, Hera guaranteed its residential customers waste management service costs 21% below the Italian average and 8% below the Northern Italy average: these were the findings of the “Cittadinanzattiva” Price and tariff monitoring survey, which focused on 100 provincial capitals (municipalities in which the spot tariff was applied were not considered). The study based its findings on a standard customer consisting of a family of three living in a 100 m² apartment.

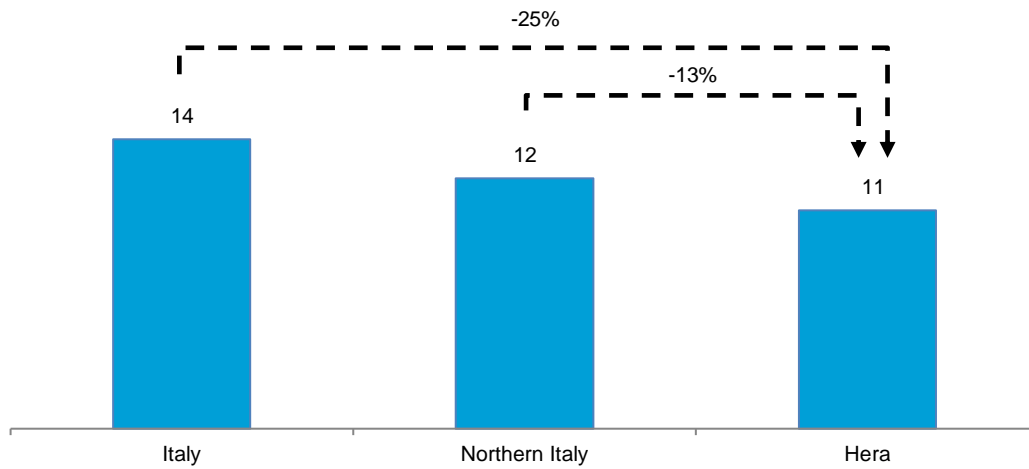
AVERAGE YEARLY EXPENSE FOR A HOUSEHOLD (EURO)



2023 Data, 3 people 100 m², Source: Cittadinanzattiva

Considering TARI for four types of non-household users in 101 provincial capitals served by Hera, hotels **spent 18% less than the Italian average**. The savings were 24% for restaurants, 44% for the food industry and 20% for supermarkets. For the non-household user types corresponding to restaurants, industrial activities and supermarkets in the areas served by Hera, they were 19%, 22% and 8% cheaper than the average for northern Italy, respectively; for hotels, the Hera figure was instead 12% higher than the average for northern Italy. The average of the four user categories considered by the research, therefore, showed that **Hera's area was more competitive**, with costs 25% below the Italian average and 13% below the average for Northern Italy.

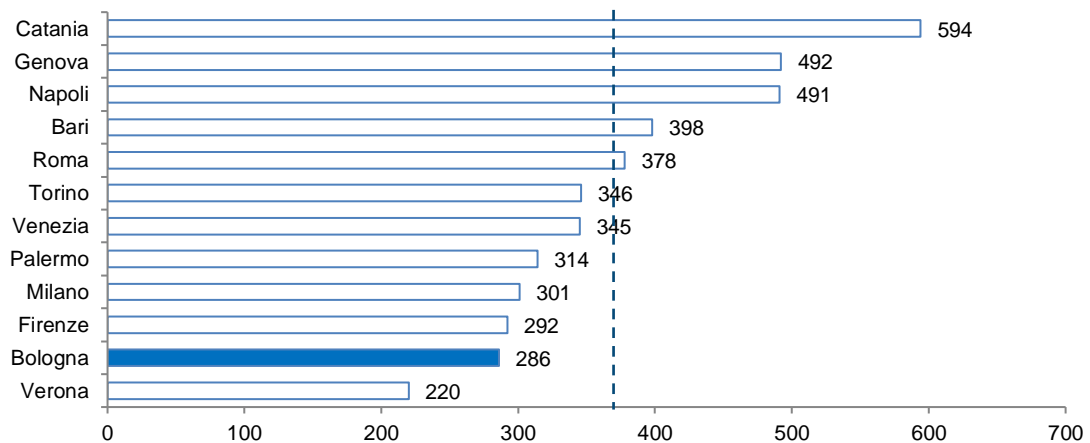
AVERAGE YEARLY EXPENSE FOR FOUR TYPES OF NON-HOUSEHOLD USERS (EURO/ M²)



2023 data processed by Hera on figures from municipality websites

Cittadinanzattiva's 2023 report also compared the cost of the municipal sanitation service in the Italian provincial capital cities. Concerning the 12 large municipalities (over 250 thousand inhabitants), Bologna, with a TARI waste tax of 286 euro ranked among the cities with the lowest cost, together with Florence and Verona, and a level 23% below the average of the 12 provincial capital cities.

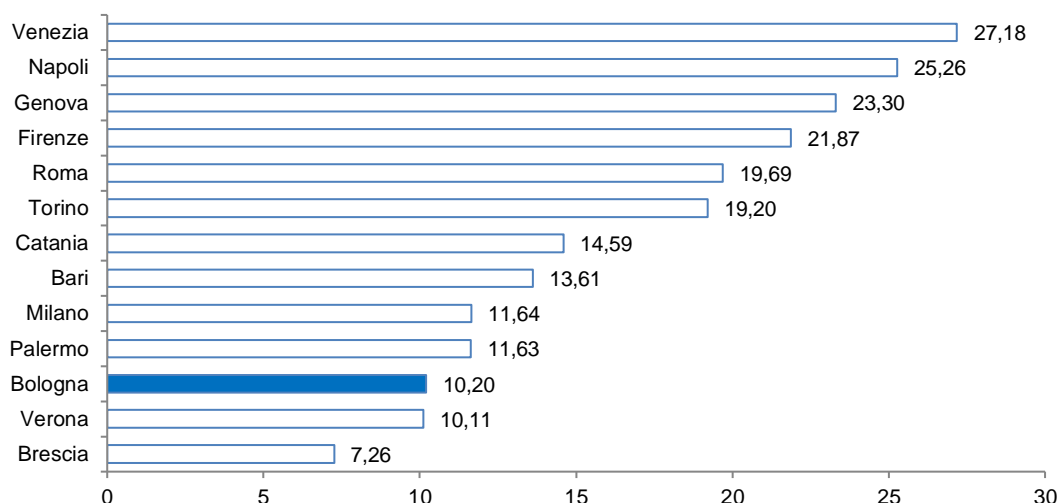
TOTAL COST PER USER IN CITIES WITH MORE THAN 250,000 INHABITANTS (3 OCCUPANTS 100 M², EURO)



2023 Data, 3 people 100 m², Source: Cittadinanzattiva

Comparing the cost of the municipal sanitation service for non-residential customers in Italian provincial capital cities with over 250 thousand inhabitants, Bologna, with 10.2 euro/m², ranked as one of the cities with the lowest average costs for the four types of non-residential users considered by the study (restaurants, hotels, industrial activities, and supermarkets).

COST OF WASTE MANAGEMENT FOR A NON-HOUSEHOLD USER IN CITIES WITH MORE THAN 250,000 INHABITANTS (EURO/M³)



Types of non-household users included in the study are hotels, restaurants, industrial activities and supermarkets. 2023 data. Source: Hera Group analyses

6.04 Service quality

Electricity and gas

The **electricity and gas distribution service** quality regulation divides the standards to be met into general and specific. Failure to comply with the standards for any cause attributable to the distributor leads to automatic compensation payments to the end customer (in most cases, through the sales company requesting services from the distributor on behalf of the end customer).

For **electricity**, the basic automatic compensation is variable (from 35 to 140 euro) depending on the supply voltage (low or medium) and the type of end customer (household or non-household), while for **gas**, the basic automatic compensation is variable (from 35 to 140 euro) depending on the metering group class. Basic automatic compensation may increase based on delays in the provision of service or fulfilment times.

The applicable resolutions of the Regulatory Authority in force in 2023 were resolution 569/2019/R/gas for the gas service and resolution 566/2019/R/eel for the electricity service.

District heating service

In July 2019, the ARERA commercial quality discipline came into force for the **district heating** market as well (resolution 661/2018 and resolution 526/2021). These resolutions also included the services previously monitored by Hera on a voluntary basis since 2008 and governed by the District Heating Service Quality Charter, which also required the payment of automatic compensation to customers in the event of non-compliance with the commitments concerning key services. ARERA's regulation defines the economic values of the automatic indemnities provided for the various customer categories in relation to specific quality standards such as, for example, the time taken to activate, terminate or reactivate or reactivation of the supply, or the minimum compliance levels for general standards such as the time for providing quotes or response to written requests for information.

Water services

In managing the **integrated water service**, the operator undertakes to respect the quality standards of the service set by the Service Charter, i.e., the characteristics of the main services provided by the operator and the timing within which they must be performed. This document is drawn up on the basis of a template prepared by the Regulatory Authorities and attached to the signed agreements, whose content is in line with current national regulations.

ARERA's resolution 655/2015 has governed the contractual quality of the water service since 1 July 2016, defining **minimum service levels** that operators must observe for activities related to the requests of users, including emergency services, billing, access to help desks and call centres, and complaints management. The resolution also introduced the payment of an automatic basic indemnity of 30 euro to be paid if the operator fails to comply with the specific quality standards; this amount, with the exception of certain specific services, increases in relation to the delay in performing the service, up to a maximum of 90 euro in cases in which the time is more than three times the standard.

ARERA's deliberation (attached to Resolution 664/2015) also envisaged the possibility for operators to access **local incentive mechanisms** for their commitment to pursuing quality levels that **improve on the minimum levels required** by Resolution 655/2015. Hera Spa achieved the incentive for the Bologna and Modena areas, applying the improved levels set by Atesir for 32 standards. The most significant standard parameters include the execution time for contract transfers (improved from five to three days), the time to provide quotes for works involving inspections (improved from 20 to 12 days), and the response time for meter checks (improved from ten to seven days). For the Ferrara, Ravenna, Forlì-Cesena and Rimini areas, help desks are now open to customers on Saturday mornings as an added convenience for users. The requirements of the contractual quality objectives must also be adequately monitored and reported to the Italian regulatory authority, Atersir and users by publishing them in the bills. The service charters were published with the update of resolution 655/2015.

ARERA resolution 547/2019 was issued at the end of 2019 (coming into force beginning in 2020) to partly enlarge current regulations governing the regulation of the contractual quality of the integrated water service (Resolution 655/2015) and to replace the previous incentive system defined by Resolution 664/2015, introducing a new **national incentive mechanism** consisting of incentive and penalty factors to be applied on the basis of the yearly targets achieved by individual operational entities. Due to the 2020 health emergency, the regulation granted an exemption by providing for a two-year assessment of contract quality performance for the period 2020-2021 (Resolution 235/2020) and for the two-year period 2022-2023 (Resolution 639/2021), subsequently confirmed permanently (Resolution 637/2023). The assessment was carried out considering the **objectives achieved** related to two macro-indicators (MC1 - "Beginning and end of the contractual relation", made up of 18 indicators, and MC2 - "Management of the contractual relation and service accessibility", made up of 24 indicators), weighted by the number of services delivered: in a nutshell, the calculation involves assessing the services provided in the reference period that meet the respective minimum standard specified by ARERA (compliant) with respect to the totality of the services provided (compliant and non-compliant). For 2023, the Hera Group was found to be in compliance with the objectives set by the regulation in all areas, ranking in class "A" for both macro-indicators (i.e., at least 98% for MC1 and at least 95% for MC2).

With reference to the standards actually applied, Hera continues to maintain the commitments it has undertaken with the individual local areas, formalised in the service charters, in terms of improved performance times in the Modena and Bologna areas already enjoyed by these areas since 2016. Furthermore, on 1 January 2022, following the commencement of the new water service concession in the Rimini area, 28 new, improved standards came into force for this area as well, replacing the minimum levels established by ARERA that were in place until that date.

The water service charter is also in force published and applied, with its own reference quality standards, in the Group areas served by AcegasApsAmga (in the localities assigned to Ato Bacchiglione-Padua and Ato Orientale Triestino) and by Marche Multiservizi.

Waste management services

Since 1 January 2019, the **Service Charter for the municipal and similar-to-municipal waste management service** has been applied in all municipalities where Hera Spa and AcegasApsAmga provide sanitation services. At the end of 2023, the Charter was also approved in the area served by Marche Multiservizi.

The Service Charter is a means to protect residents, as it sets the service quality standards, i.e., the characteristics of the main services provided by the operator and the timeframe within which they must be performed.

Discussions were held with Atersir throughout 2023 in order to publish the updated Quality Charters with contractual and technical quality obligations in the various local areas, as foreseen by national regulations, replacing the current Quality Charters, but they have not yet been defined. Atersir is expected to deliberate upon this in 2024.

COMPLIANCE WITH QUALITY STANDARDS

	%	2022	2023	No. services provided (2023)
Gas sales		95.9%	92.8%	21,178
Gas distribution (end customers and sales companies)		99.7%	99.7%	6,598,418
Electricity sales		96.3%	93.6%	19,819

	%	2022	2023	No. services provided (2023)
Electricity distribution (end customers and sales companies)		96.9%	97.0%	46,471
Integrated water service		99.3%	98.9%	186,235
District heating		96.6%	92.9%	719
Total		99.6%	99.6%	6,872,840

This includes the services for which customers must be automatically compensated if the company does not comply with the standard. The 2022 data also includes Hera Comm Marche, EstEnergy, Amgas Blu, Ascotrade, Ascopiave Energia, Blue Meta, and Etra Energia. The 2002 data does not include Eco Gas and Con Energia.

The overall figures are in line with previous years: **in 99.6% of cases in 2023, the Group provided the service requested by the customer within the timeframe set by ARERA**. Quality standards are close to full compliance for the gas distribution service of Inrete Distribuzione Energia and AcegasApsAmga (99.8% and 99.4% respectively) and in the water service of AcegasApsAmga and Marche Multiservizi (99.4% and 99.6%).

Excellent results regarding individual gas performances were confirmed. In particular, a strengthening of the high volume services was recorded: frequency of meter reading collection for billing purposes (99.7%), punctuality range for appointments (99.4%) and activation of the supply (99.8%).

For the electricity supply service, some of the most popular services (activation of electricity supply and punctuality range for appointments) remained high at 98.7%.

As regards **sales quality** standards (in gas, electricity and district heating), the decrease in this indicator was due to the energy price crisis, which, starting in the fourth quarter of 2022, generated an increase in admissions compared to the same period in previous years, a phenomenon that in the first quarter of 2023 resulted in a high volume of complaints being handled, with a consequent increase in response times, some of which were non-standard. The trend has gradually returned to normal since the end of the second quarter of 2023.

For the **water service**, the high standard was confirmed for the most commonly provided services: transferring (99.8%), compliance with the punctuality range for appointments (99.1%), deactivation of supply (99.5%) and activation of supply (96.9%).

Electronic meters

In 2023, critical challenges in the world markets caused by difficulties acquiring electronic devices continued, coupled with cost increases for transportation and raw energy materials resulting from international tensions. Although electronic meters consist of a significant portion of foreign-produced components, careful activity planning allowed us to manage this situation and **exceed the targets set for 2023**.




In the area of **gas**, the massive replacement of meters is almost complete. By 2023, **88.4% of the gas meter stock** featured gas meters equipped with **remote reading** (the figure was 76.8% in 2022). The goal for 2027 is to reach 95% of electronic gas meters remotely read.

The **NexMeter** project is progressing as planned (250 thousand of these meters have been installed, 14.9% of the total).

NexMeter is the **gas meter 4.0** designed by the Hera Group that offers **advanced safety functions**: special monitoring and warning tools with which it is equipped (algorithms, sensors and ultrasounds) enable it to prevent accidents in many conditions, providing greater protection for buildings and residents, similar to the operation of electrical “lifesaving” devices. It can **monitor** the pressure and flow conditions of the supply system and the network **in real-time, immediately signalling any anomalies and irregularities** (small latent leaks, large and immediate leaks) and interrupting the supply, immediately securing the system. Once corrective action has been taken, a test can be conducted to check that the user system works properly and to promptly resume the service. Moreover, it is able to detect earthquakes in real-time and stop the gas supply, taking action to ensure greater safety. It is already set up for **biomethane** and the so-called **blended gases**, i.e., methane and hydrogen blends. Over the last few years, technical tests and analyses have been carried out to study the resistance of NexMeter gas made of recycled plastic (NexMeter green) under different environmental stresses (exposure to sun, cold, salt, etc.) analysing the compatibility of these materials with methane gas and assessing the

possibility of installing them at the utilities. The goal by 2027 is to reach 310,000 NexMeter gas installations, 18% of the total.

How does this initiative contribute to responsible digital transformation? Benefits obtained in the Corporate digital responsibility realm (see the Dedicated Paragraph Entitled “Corporate Digital Responsibility”)

Social		Greater level of safety for residents in the gas system, thanks to advanced meter functions capable of detecting anomalies immediately and securing the system.
Environmental		Reduction of greenhouse gas emissions thanks to real-time monitoring technology that enables the detection of leaks and micro-leaks and rapid intervention. The use of recycled plastic in manufacturing the meter incorporates circularity into the creation of the product.
Technological		The 4.0 meter advanced technology supports the proper and enhanced safety performance of the gas service, contributing to the robustness of the Group's service area.

In the **electricity** sector, the massive replacement of new generation meters is also well underway, and 41.8% of those managed have already been replaced with the **new 2G systems**, expecting to install about 449 thousand by the end of 2027 (91% of the total). Furthermore, over 149,000 meters are made of **recycled plastic** (30.5% of the total).

Overall, by 2023, the Hera Group had over 1.5 million electronic gas meters (90.4% of the total) and over 482 thousand electronic electricity meters (97.9% of the total). Overall, **electronic meters in energy services** accounted for 92.1% of the total.

As regards the **water sector**, a project to **remotely read the meters** of the most water-demanding users was developed in 2023. A remote reading dashboard has also been developed that offers value-added services, such as near real-time data (daily or even hourly frequency) on consumption trends and receiving applicable alerts, including suspected leaks in the internal system, that make it possible to take timely action and reduce wasted volumes.

The total number of **electronic water meters** in 2023 was 6,692, representing 0.4% of the Group total (+25% over 2022). At the end of the year, remote reading volume corresponded to about 8% of the water sold. The Business Plan goals include the installation of remote reading devices on about 310 thousand Group users by 2027 (or approximately 20.5% of users and 25% of the volume of water sold), extending remote meter reading services not only to high-consumption users but also to residential customers, beginning in the Forlì, Padova, Pesaro-Urbino, Ravenna and Trieste areas.

6.05 Safety and continuity of service

Gas distribution service safety and continuity

The Hera Group manages the gas distribution service with the objective of ensuring high safety and service continuity levels.

Resolution 569/2019 defined the safety standards applicable to the current regulatory period (2020-2025), which, although more stringent than those of the previous period, have proven to be substantially **in line with the standards Hera previously adopted** and with the company's medium- and long-term objectives. The changes to the regulations did not, therefore, have any particular impact on Hera or any significant negative impact on the continuity of its objectives and activities.

In particular, the main gas distribution service safety indicators provided by ARERA are as follows:

- emergency services arrival time at the call location;
- annual percentage of the high and medium-pressure network subject to inspection;
- annual percentage of the low-pressure network subject to inspection;
- annual number of leaks located per kilometre of network inspected;
- annual number of leaks located based on reports by third parties per kilometre of network inspected;
- conventional annual number of gas odour measurements per thousand end customers.

New platforms (dashboards) were created to continuously monitor the emergency and dispersion indicators and to identify, **as early as possible**, any critical issues concerning compliance with ARERA indicators in order to promptly implement any feasible corrective actions. Further evolutions of the dashboards are being considered to implement new capabilities.

Since 2010, gas distribution companies have been required to participate in a system of safety improvement incentives for the service defined by ARERA, which assesses four aspects:

- compliance with **service obligations, absence of gas incidents** for which the operator is responsible, **no instances of non-compliance** with relevant ARERA controls or inspections;
- the number of **gas odouring level** measurements compared to the required minimum;
- the number of conventional **leaks** reported by third parties compared to the objective set by ARERA for the period;
- the number of upgraded **odouring plants** (flow-proportional, remote-controlled injection-type odouring plants).

As a result of ARERA's Resolution 40/2014/R/gas, when a request is made to activate a gas supply and, in some cases, to reactivate a gas supply, the safety of the gas system must be ascertained. The inspection's scope of application applies only to user systems involving non-technological gas use (e.g., household use, boilers for heating, etc.).

For 2023, **Inrete Distribuzione Energia** is estimated to have a positive balance of **approximately 1.5 million euro** between awards and penalties relating to the recovery of continuity in the gas distribution service for the districts it manages. The company earned awards for both the component relating to leaks reported by third parties (1,000 euro) and the component relating to gas odourisation (500 thousand euro).

For AcegasApsAmga, awards totalling 851 thousand euro are expected both from the leak component (639 thousand euro) and the odourisation component (212 thousand euro). The company succeeded in earning awards in almost all of the distribution plants it operates.

For **Marche Multiservizi**, ARERA did not issue any resolutions granting awards or applying penalties in 2023.

ARERA resolution 569/2019, the "Consolidated Law for the regulation of the quality and rates of gas distribution and metering services for the regulatory period 2020 - 2025," establishes that the distribution company must comply with the minimum annual percentage service requirement that for 90% of calls, the emergency services arrival time at the call location must be no more than 60 minutes.

GAS EMERGENCY SERVICE

	2021	2022	2023
Average arrival time at the call location (min)	35.7	36.2	36.7
Calls with arrival time at the call location within 60 minutes (%) (service requirement 90%)	97.8%	97.3%	96.5%

The data do not include AresGas, which distributes 3% of the total gas distributed at the Group level.

The monitoring of gas emergency response times confirms **full compliance with the regulatory requirements**, as 96.5% of all calls arrived on site within 60 minutes (compared to ARERA's service requirement of 90%). For this indicator, Inrete Distribuzione Energia reported 95.9%, AcegasApsAmga reported 99.4%, and Marche Multiservizi reported 95.6%.

INSPECTIONS AND LEAKS IN THE GAS NETWORK

	2021	2022	2023
Percentage of the total high and medium-pressure network inspected (service requirement: 100% in three years)	61.7%	63.7%	53.1%
Percentage of the total low-pressure network inspected (service requirement: 100% in four years)	78.1%	79.1%	70.5%

	2021	2022	2023
Number of leaks on distribution network located upon inspection, per 1,000 km of network	91.9	88.6	92.6
Number of leaks on distribution network located upon notification by third parties, per 1,000 km of network	36.4	32.0	30.5

The data do not include AresGas, which distributes 3.1% of the total gas distributed at the Group level.

In 2023, also, the percentage of **the network that was inspected was significantly above the minimum** required by ARERA (100% of the high- and medium-pressure network in three years and 100% of the low-pressure network in four years). In fact, at the Group level in 2023 alone, more than 53.1% of the high- and medium-pressure network and 70.5% of the low-pressure network were inspected.

The network, classified as having a high probability of leakage, is defined as the sum of:

- the high-pressure network;
- the network made of non-compliant materials as defined by the ARERA resolution;
- the network laid in areas subject to hydro-geological instability.

For the networks made of non-compliant materials, 100% of the network must be inspected annually, as required by ARERA. Hera conducts an annual inspection of 100% of the network, including two other types of networks. **ARERA resolution 569/2019** of December 2019 requires all gas distribution service operators to replace gas network components built with **non-compliant materials** by 2025. In 2019, Inrete Distribuzione Energia managed approximately **160 km** of non-compliant networks, consisting of asbestos cement pipelines, located in the municipalities of Forlì (121 km), Ravenna (21 km), and Codigoro (18 km). The work of dismantling these portions of the network must be completely finished **by 2025**, in accordance with the provisions of the resolution, except for the networks in the Forlì area for which a formal waiver has been requested to extend the deadline to the end of 2029, with various intermediate result targets monitored by the Authority. In particular, with Resolution 624/2022 of November 2022, **ARERA granted the request for a waiver** of the deadline for the Forlì area, aiming to reach 100% by 31 December 2029.

In order to operationally enable the implementation of the currently ongoing **multi-year work plan**, specific multi-year contracts for the “**replacement of gas networks and connections made of non-compliant material**” were signed with specialised companies. The rules underlying the work plan, with its ongoing updates concerning the likelihood of breakage calculated for each individual pipeline, as well as the numerous boundary conditions that must necessarily be taken into consideration when working in densely inhabited settings (road networks, the presence of schools, hospitals and sensitive users, areas subject to constraints, and the feasibility of construction) remain unchanged. In 2023, Inrete **dismantled a further 18 km** of pipeline made of non-compliant material, with the related connections being updated or relocated onto the newly constructed pipelines, thereby increasing the dismantled network to **more than 68 km**. To ensure the fulfilment of ARERA’s service obligations, an additional 18 km of gas network made of non-compliant material is due to be dismantled in 2024. Inrete is already planning activities for next year as well to fulfil the 2025 targets.

The agreements with the technicians of the municipalities involved in streamlining the authorisation procedures, which are necessary for planning and carrying out the work required to comply with the obligations imposed by the Authority, are well consolidated, in continuous evolution, and constantly monitored.

The planning and performance of inspection campaigns for **underground and overhead connections** continued in 2023, including the planned search for gas leaks extended to above-ground components of the system. In particular:

- **systematic checks to ensure there are no leaks** on network elements (valves, vents, crossings, etc.) are carried out during scheduled periodic operating/maintenance activities;
- concurrent with routine operations on meters (e.g., activations, closures, checks on metering assemblies), **a tool-aided check is carried out on the above-ground connection** and the **meter being worked on to ensure that there are no leaks**.

In addition, Inrete Distribuzione Energia’s new system for planning and managing the **scheduled search for leaks in the gas network** has been in operation since 2019. The system involves planning activities through an **artificial intelligence platform with machine-learning algorithms** aimed at optimising the effectiveness of the daily checks (maximising the number of leaks found) and minimising inspection

procedures. This aims not only to pursue industrial efficiency goals but also to ensure an ever-increasing level of safety and quality of the distribution service.

The work is carried out entirely by internal staff. At the same time, the scheduling is defined by algorithms that dispatch schedules to the teams with mapping support, such as optimised road routes to minimise mileage and inspection times and, therefore, increase effectiveness and reduce the environmental impact of the operations.

The actual figures at the start of the new scheduled gas network leakage detection system show that these data are in line with the scheduling tool’s objectives. In fact, the number of leaks detected in relation to the inspected network has been **higher than in the years before the new leak detection planning system was adopted**. The increased efficacy of the new scheduled leak detection system influences the ratio of leaks reported by third parties to total leaks detected (both reported by third parties and detected as a result of inspections). The number of leaks reported by third parties in Emilia-Romagna in 2023 dropped further and amounted to 31.2% of the total number of leaks; in fact, this ratio was lower than in 2022 and 2021 (32.2% and 36.0%, respectively).




In addition to pursuing industrial efficiency objectives, this performance aims to constantly improve the company’s safety standards, which are already better than the reference values stated in the sector’s technical regulations.

An update of the machine learning algorithm is in progress with the aim of making progress on a new step to improve process performance.

In 2023, in the Group’s entire gas distribution network, **30.5 leaks were reported by third parties** per thousand kilometres of network, compared to 32.0 in 2022. On the other hand, 92.6 leaks were identified by means of inspections on the Group’s distribution network per thousand kilometres of network, compared to 88.6 in 2022.

Leaks in the gas distribution network can be estimated using a calculation method based on quantifying the gas flow rates dispersed by the leaks detected in the distribution network and estimating the period between the time of the break and the time when the break was secured. In 2023, the percentage of leaks in the gas distribution network calculated using this method was 0.035% of the total volume of gas injected into the network across the Group.

How does this initiative contribute to responsible digital transformation? Benefits obtained in the Corporate digital responsibility realm (see the Dedicated Paragraph Entitled “Corporate Digital Responsibility”)

Social		The activity is aimed at pursuing increasingly advanced levels of safety and quality of service as well as increased safety for residents and workers.
Environmental		Preserving air quality thanks to more efficient leak detection and the consequential reduction in the number of trips required by operators. The decrease in fugitive methane emissions from the grid translates into a lower concentration of greenhouse gas emissions into the atmosphere.
Economic		The efficiency of leak detection operations, supported by the use of artificial intelligence algorithms, reduces operating costs and consequentially increases the effectiveness of the work done.

Electric distribution service safety and continuity

[416-1]

In 2023, the distribution networks operated by Inrete Distribuzione Energia distributed approximately 2,026 GWh of electricity to approximately 264 thousand users in 24 municipalities of the provinces of Bologna, Modena, and Ravenna in Emilia-Romagna. In addition to this, about 719 GWh of electricity was distributed to more than 164 thousand users served by AcegasApsAmga in the municipalities of Gorizia and Trieste.

The electricity grids operated by Inrete in 2023 were 10,570 kilometres long; 73.7% of them carry low voltage, 26.0% medium voltage, and the rest high voltage. Of this, 41.2% of the lines were underground. In the **Triveneto area**, instead, AcegasApsAmga operated 2,313 kilometres of network, with 70.6% of it carrying low voltage, 29.3% medium voltage, and the remaining portion high voltage. Of this, 71.1% of the lines were underground.

In total, the 13 thousand km of electricity distribution network managed by the Group distributed 2,745 GWh to 428 thousand users.

ARERA's provisions regarding the service quality of distribution, metering and electricity sales (resolution ARG/elt 566/19) govern the **continuity of the electricity distribution service** for the 2016-2023 regulatory period. The resolution also identifies the indicators to use to measure power cuts, the monitoring systems, and the reference standards.

The indicators related to power cuts originating in the medium- and low-voltage grid express:

- the total annual duration of long power cuts without advance notice for low-voltage customers;
- the total annual number of long and short power cuts without advance notice for low-voltage customers.

For the regulatory period 2016 - 2023 and for their respective areas, Inrete Distribuzione Energia and AcegasApsAmga adhered to the reduction of interruptions originating on the medium- and low-voltage network attributable to external causes; therefore, the above-mentioned indicators were also calculated considering external causes. For these indicators, ARERA set the target levels and trend levels for the districts managed.

For 2022, **Inrete Distribuzione Energia** was awarded approximately 650 thousand euro overall as incentives for electricity distribution service continuity recoveries following the investigation conducted as part of the proceedings deliberated upon by ARERA to formulate the service continuity measure. **AcegasApsAmga** also took part in the incentive/penalty system concerning continuity recoveries for the electricity distribution service, set out in resolution A566/2019: based on the quantity and duration of outages without advance notice in 2022 as a benchmark, it was entitled to two incentives for the two areas totalling approximately 265 thousand euro.

CONTINUITY OF THE ELECTRICITY SERVICE

	2022	2023	Average 2022-2023	2023 trend
Average number of power cuts per customer in high-concentration areas	0.84	0.97	0.91	1.20
Power cut minutes per customer in high-concentration areas	12.51	10.78	11.65	10.78
Average number of power cuts per customer in medium-concentration areas	2.19	1.92	3.92	2.26
Power cut minutes per customer in medium-concentration areas	24.87	30.84	27.86	30.84
Average number of power cuts per customer in low-concentration areas	3.71	3.70	3.71	4.30
Power cut minutes per customer in low-concentration areas	37.67	43.06	40.37	43.06

The average figure applies to power cuts of the low voltage service without advance notice and due to causes for which the operator is responsible. The power-cut duration minutes apply to power cuts that last more than three minutes.

The 2023 figure confirmed the high level of continuity of the electricity distribution service, which, for all the reference indicators, was below the trend and/or target levels set by ARERA. Note that there were some service disruptions as a result of the May 2023 flood in Emilia-Romagna, which impacted certain areas where Inrete Distribuzione manages service. In addition, in Gorizia, several failures of the sole primary substation disconnected all users in the city, albeit for a short time.

The **System average interruption duration index (SAIDI)**, calculated as the sum of all customer interruption durations divided by the total number of customers served, was 0.32 hours in 2023 (vs 0.31 in 2022 and 0.35 in 2021).

The technical call centre

Receiving and diagnosing the telephone calls made to the toll-free emergency services operated by the technical call centre service is of key importance since the calls can be used as actual findings of disruptions to the service provided.

The Hera Group's **technical call centre service**, which is always active 24/7, has 15 toll-free numbers broken down by service (gas, integrated water service, district heating, waste services, public lighting and traffic lights, electric mobility) and by geographical area (Emilia-Romagna, Triveneto and Marche), including two toll-free numbers for the entire Group dedicated to public bodies (fire departments,

municipalities, provinces, prefectures, police headquarters, Hospitals, ARPAE [the Regional Agency for Prevention, Environment, and Energy of Emilia-Romagna], police forces, port authorities, etc.).

A total of 504,950 calls were received in 2023 (3% less than in 2022).

Beginning in 2020, the technical call centre was **completely reorganised** with various measures (logistical decentralisation, new customer relationship management infrastructure, etc.) characterised by the priority aim of ensuring service continuity while guaranteeing the safety of operators and complying with regulatory provisions. A fundamental element for safe organization was the upgrading of the system to create a more open and flexible architecture, allowing for remote working by adapting the technical call centre operations to remote locations (mobile or fixed). All processes are managed with the aid of IT support so that, in “on demand” mode and in real-time, they allow continuous support to the operators within the complex and extensive perimeter managed.

TECHNICAL CALL CENTRE: PERCENTAGE OF CALLS ANSWERED WITHIN 120 SECONDS

%	2021	2022	2023
Emergency gas services (minimum percentage required by ARERA: 90%)	96.4%	96.2%	96.7%
Emergency water services (general level: 90%)	92.8%	93.8%	95.2%

The percentage of calls for emergency services for gas and water was calculated according to criteria defined by ARERA, considering the calls answered and the calls abandoned within 120 seconds, and with all calls received as the denominator.

AVERAGE TECHNICAL CALL CENTRE WAIT TIME

Seconds	2021	2022	2023
Average waiting time for emergency gas service	51.8	50.0	51.0
Average waiting time for emergency water service	63.6	54.9	56.0
Number of calls for the emergency gas service	97,508	101,506	95,898
Number of calls for the integrated emergency water services	285,828	293,088	268,935

In 2023, the technical call centre in Forlì received more than 364 thousand calls for water and gas services. The percentage of calls answered by the technical call centre within 120 seconds improved both for the water service (from 93.8% to 95.2%) and to a lesser extent for the gas service (from 96.2% to 96.7%). Average wait times remained substantially stable for both services.

In 2023, the customer satisfaction survey, carried out at the end of the conversations with operators by means of an automatic post-call system, showed 5.4% participation and an overall satisfaction level at least equal to **“very satisfied” for 84% of those responding to the survey.**

The **development of the technical call centre** continued in 2023, aimed at improving the performance and quality of the services it provides. The “Technical wiki system for management/sharing knowledge” tool was further developed as the main tool to monitor the quality level. It contains all the information necessary to properly manage the services and ensures a continuous learning and knowledge sedimentation process. This tool allows for comprehensive, effective and dynamic training. It is always up-to-date, thanks to the implementation of the community model, which permits the continuous exchange of knowledge.

Other projects developed in 2023 include:

- integrating the Hera Luce emergency response service via the implementation of a service offering residents the option to use an additional channel to report service disruptions;
- activating the telephone answering service for deaf people using the Tellis platform with the recording of the report on the Integrated Water Service toll-free number for Hera Spa;
- deploying the Speech API and Text mining speech analysis tools for the purpose of monitoring operator behaviour, call quality and analysing answered calls without interaction or disturbed calls;
- developing the dynamic workflow tool to list the safety requirements binding on gas service customers;

- creating the online digital support “CCT_News” for the detailed *proceduralisation* of calls and the implementation of a specific document section with the training material covered by the internal growth courses;
- the “Uomo a terra” [Man Down] and “Black Box Mezzi” [Vehicle Black Box] apps: the **Uomo a terra** [Man Down] app automatically alerts the Forlì remote control centre in the event of a worker being in emergency conditions or falling ill: by monitoring the mobile phone’s sensors (accelerometer, GPS and gyroscope), an automatic alarm is sent to the remote control centre in the event of a fall, excessive inclination and a lack of movement for a given time. **Vehicle Black Boxes**, on the other hand, are electronic devices placed within the passenger compartments of cars to monitor them remotely and automatically transmit an alarm to the remote control room operator when an accident occurs or when the driver activates an SOS button located on the windscreen.

Forlì remote control technology hub

The **Forlì remote control centre** is multi-specialised, one of its kind in Italy and at the forefront in Europe: a **remote control, remote management and 24/7 technical emergency call centre room** of almost 400 m², with a giant 60 m² screen, a 3D system to represent the main systems, 160 monitors, 60 stations, a team of 80 operators, double fibre-optic communication lines, an independent fire-protection system, and a set of controls that make the whole context extremely resilient and reliable, guaranteeing the management thereof with business continuity under any conditions.

The Centre is divided into two functional areas that cooperate synergistically:

- **Telecontrol**: real-time remote controls, monitoring, automation and continuous control of the Hera Group’s **aqueduct, sewerage, gas distribution and district heating** networks, which extend across **all the managed areas** of Emilia-Romagna, three Tuscan municipalities, Marche, and Triveneto.
- **Technical call centre**: handling all emergency calls across the local area. In addition to services in the water, gas, and district heating sectors, the centre handles calls for public lighting and traffic light service, environmental services, and electric mobility service.

FACILITIES CONNECTED TO THE FORLÌ REMOTE CONTROL HUB

Number	2021	2022	2023
Total connected facilities	7,932	8,949	9,707

The hub is constantly growing both in terms of quality and size. By 2023, a total of **9,707 connected plants** had been reached (+758 compared to 2022), with **28 million pieces of information acquired per day** so as to feed a set of decision-support tools for the operating structures’ activities. The goal for 2027 is to reach 12.3 thousand plants connected to remote control, or approximately 96% of the Group’s plants (previous and new). The Centre assists the various Group structures with this continuous growth by providing them with tools to help them make decisions. For example, for Hera Trading, the hub carries out the energy balancing management service, integrated with the Terna site for the energy dispatching service market; for Hera Comm, it manages the electric mobility service for customer charging; for Uniflotte, it manages the development of the remote control of waste collection containers.

The following activities stand out among the main innovative development and evolution projects implemented in 2023 in the area of remote control:

- **Integrating Marche Multiservizi’s remote control**: after the infrastructure work conducted in 2022, all the gas service plants and all the major integrated water service plants were integrated into the Group’s SCADA system; the entire plant has been taken under management so the Forlì Control Room could implement remote control and monitoring with shared procedures and rules of engagement.
- **Cybersecurity Operation Technology**: the platform to be used to remotely program field devices and secure computer access in the Operation Technology area was completed in 2023. This new tool effectively creates a protected area in the Remote Control domain under intrinsically safe conditions.
- **Smart control room containers**: the Uniflotte project continued in 2023 with further developments and software refinements to improve control room functions and also support the development of new electronics. The functions and innovations were also extended to the “casette intelligenti” [smart bins] project installed in the Ravenna area.
- **Sensor monitoring tool**: a tool that defines the priorities for sensor maintenance and identifies the sensors potentially impacted by malfunctioning. Using specific platforms (dashboards), it

will be possible to identify all sensors that transmit potentially incorrect information, displaying a fault status or erroneous alarm configurations. In this way, the operational Businesses can precisely their maintenance work on the field equipment. This tool is fundamental for both monitoring the quality of the data and reducing the number of alarms and false positives.

- **SCADA and Middleware Revamping:** this allows new features to be offered, a new, more intuitive and agile graphical interface, new tools to enhance the SCADA system's productivity, as well as a significant increase in functionality and performance and greater system reliability, thus better overall resilience.
- **Resilient dashboard:** This tool, integrated into the SCADA, conveys data from multiple water sources and special algorithms and allows strategic drought management by monitoring aquifer trends and medium to long-term forecasts. See the section "Resilient management of aqueduct and water sources" for more information on this project.
- **Implementation of the AWS data exchange platform:** this is part of the Operation technology framework's data management activity to optimise the use of data. The data itself is integrated by various technologies and platforms to make it available for the purposes of distributed monitoring and control applications, as well as the more general context of data utilisation within the Group's data strategy.
- **Monitoring regulatory compliance for cathodic protection:** developing protocols and equipment to technically manage the data flows required for the new UNI CIG-specific regulatory rules.
- **Introducing QR codes on plant equipment:** a feature was introduced via Cloud TLCF to connect to the portal directly in real-time so that information regarding the operation of the various devices at the plants (including documents, manuals, plant and authorisation sheets, etc.) can be accessed.

How does this initiative contribute to responsible digital transformation? Benefits obtained in the Corporate digital responsibility realm (see the Dedicated Paragraph Entitled "Corporate Digital Responsibility")

Social		<p>Increasing the level of safety for customers and workers thanks to the constant monitoring of the Group's network systems, achieved through the integrated remote-control structure and emergency response support.</p> <p>The further development of the "smart control room containers" tool allows the waste collection service offered to residents to be improved by preventing disservice (full bins) and also optimising management.</p>
Environmental		<p>The "Resilient dashboard" tool allows the consequences of external phenomena, especially of meteorological-climatic origin, to be prevented by directing managerial and strategic choices.</p> <p>The "Sensor Monitoring Tool" allows the time taken to detect system faults that may have repercussions on the environment, both in the aqueduct network and plants and in the sewerage and purification system, to be minimised.</p> <p>The push towards the complete automation of processes (particularly in the integrated water service) leads to an ever-greater emphasis on the efficiency of the processes themselves. The further evolution of automation with AI algorithms entails further benefits in terms of energy efficiency but also of asset working life.</p> <p>The implementation of tools such as the "AWS data exchange platform" represents data-driven opportunities to identify a broader framework of perspectives of the managed environment, including those in the direction of environmental sustainability.</p>
Technological		<p>Developing cybersecurity systems with the introduction of dedicated figures and specific systems for monitoring the matter and coordinating with the corporate structures involved. The technological remote-control solutions are used responsibly to ensure the safety of the area in which the Group operates.</p> <p>The extraordinary "SCADA and Middleware Revamping" operation offers greater security with regard to business continuity and resilience of the managed system, as well as making the technological environment more suitable for new challenges.</p> <p>The continuous increase in remote-controlled systems makes it possible to exploit all the enabling conditions of technology: use of data, development of new forms of man-machine interaction, availability of analytics and business intelligence solutions, and solutions capable of reducing the distance between the physical and digital worlds at the production process level. A <i>de facto</i> innovation ecosystem that fosters the digital transition and technological innovation of Operations.</p>

The Continuity of the Water Service

The **water network control activity index** is expressed as a percentage of the network inspected for leaks.

In **Emilia-Romagna**, leak research in 2023 involved a large portion, about 35%, of the network, where the effectiveness of traditional technologies was enhanced by applying **new experimental technologies**. The path to containing leakage volumes will be consolidated with this strategic vision, identifying the most effective technologies and making room for new innovative applications that prove to be worth using.

In the **Padua and Trieste areas**, 100% of the water network was inspected in 2023. The inspections were carried out with both systematic searches (via the use of geophones) and cutting-edge instrumentation such as transit time flow and pressure meters in the districts and remote monitoring; in particular, a technology involving the detection of leaks **with cosmic rays** was tested for part of the Padua area.

In Marche, leaks were localised with various instruments. Dedicated in-house personnel were employed to analyse the network from identified points, e.g., by means of geophones, or “noise loggers”, which are special devices for assessing the water network under pressure.

THE CONTINUITY OF THE WATER SERVICE

%	2021	2022	2023
Network subject to active leak detection	42.1%	39.7%	38.5%

In 2023, the Group inspected a total of 13,558 kilometres of network, corresponding to **38.5% of the total** (35.6% in Emilia-Romagna, 100% in Triveneto, and 17.7% in Marche).

6.06 Customer relations

Call centres

2023 saw an additional increase in contacts with the Hera Group’s call centres, as in 2022 mainly due to the **turbulence in the energy markets** and its repercussions on bills in the first part of the year. This prompted many customers to ask for explanations and explore alternative offers to reduce their household expenses. Furthermore, in the latter part of the year, the **end of the protected gas tariff** regime led many residents to seek clarifications on the effects of the new regulations and assistance in choosing the most convenient offer. The **flooding in Emilia-Romagna** also affected call centres, due to the requests related to payment suspensions and instalments.

Also note that the expansion of **Estenergy**’s customer perimeter was consolidated in 2023, with all the North-Eastern customers recently acquired, which also increased the number of contacts compared to the previous year.

QUALITY OF THE CALL CENTRE FOR RESIDENTIAL CUSTOMERS

	2021	2022	2023
Average waiting time at the call centre for residential customers (s)	32	93	59
Calls with satisfactory outcomes for residential customers (%)	95.1%	91.1%	94.0%
Number of residential customer contacts at the call centre (thousands)	7,013	8,741	10,007

The average waiting time, based on a telephone call by a customer wishing to speak to an operator, is the time between the moment a request is made to talk with an operator and the beginning of the conversation. It does not take into account the initial information provided by the automatic answering system. The data includes the company AresGas.

Although 2023 witnessed an **increase in the number of contacts** with the Group companies’ call centre (+15%, approximately 1.3 million more calls), the **service quality was not impacted**. On the contrary, waiting times and the percentage of successful calls (i.e., calls answered by the operator within 120 seconds) improved. This was also due to the fact that the previous year’s performance levels were negatively affected by other factors, such as the entry of new service providers on all lots, with a now

stabilised initial run-in period. The goal for 2024 is no more than 80 seconds of average waiting time at the call centre.

In **AcegasApsAmga**, a new knowledge tool was introduced in 2023, i.e. a chat room that, thanks to artificial intelligence, enabled operators to handle contact requests more easily, quickly and interactively with a view to improving customer experience.

Nevertheless, the substantial growth in contacts and the critical nature of the topics addressed allowed **satisfaction** to increase, reaching **78/100**. This is due to the constant training of operators and the continuous monitoring of the suppliers' service quality.

QUALITY OF THE BUSINESS CALL CENTRE

	2021	2022	2023
Average waiting time at the call centre for business customers (seconds)	34	112	72
Calls with satisfactory outcomes for business customers (%)	95.6%	91.4%	94.3%
Number of business-customer contacts at the call centre (thousands)	432	579	639

The average waiting time, based on a telephone call by a customer wishing to speak to an operator, is the time between the moment a request is made to talk with an operator and the beginning of the conversation. It does not take into account the initial information provided by the automatic answering system. The data refers to the Hera Comm call centre.

For the **corporate segment**, the number of calls also increased in 2023 (+10%). The service level (94.3%) and the average waiting time (72 seconds) also **improved** in this case.

Despite heavy pressure on the channel, **customer satisfaction** in the business market remained high, increasing by two points.

As regards Hera Group's call centres, calls are handled by both Hera Group employees and the staff of specialised companies that are both **registered and operating in Italy**. Our sales promotion activities are carried out by outsourced companies: these are Italian-based and Italian-owned sales agencies that make use of operating units located in Italy. Their staff is employed directly by these sales organisations, who have signed a standard agency mandate with Hera Comm.

The help desks

2023 witnessed a massive return of customers and residents to the Hera Group's help desk, reaching and at times exceeding the influx levels prior to the health emergency in 2020-2021.

Contacts with customers during 2023 focused on the consequences of the **energy scenario**, still very critical and accompanied by high and volatile prices in the first months of the year, as well as the **flooding in Emilia-Romagna**, with the management of payment suspensions and instalment plans. These events naturally generated contacts and requests from customers. **Waste services** were also a focus of the help desks' work, with the gradual expansion of the equipment distribution service in the Bologna and Modena areas, as well as the launch of the Spot Fee Tariff in Cesena and other municipalities in the area. Finally, with the announcements concerning the end of the **protected gas tariff regime** in the last months of the year, many customers turned to the help desks for guidance on choosing offers and seeking clarifications on the transition process for the changes triggered by the relevant national legislation.

It should be noted that residents approached the help desk operators not only to discuss contracts and tariffs or to process paperwork but also for advice on good practices for the **more conscious use of energy**.

In 2023, a great deal was also invested in **training** front office **operators**, e.g., with targeted sessions focusing on energy efficiency: the course, called "Sales evolution", involved more than 100 people, ten lecturers and experts from within the Group.

Work also continued on the **integration of new entities in the local areas** (e.g., the integration of the company Con Energia) and the investment strategy concerning a **new, more functional and**

welcoming layout for help desks to ensure an increasing visibility and widespread presence in the local area.

Consistent with the Group's sustainability strategies to reduce environmental impacts, **innovative services aimed at reducing consumption and material use** were also offered through the help desks. Paper-saving technologies for contracting and payments were used, and efficient behaviour was promoted, with particular reference to electronic billing; this was also for the purpose of ensuring a more effective bill-delivery system.

AVERAGE WAITING TIMES AT HELP DESKS

Min	2021	2022	2023
Hera	5.6	8.9	12.5
AcegasApsAmga	2.3	6.5	10.6
Marche Multiservizi	11.0	13.0	11.1
Weighted average on contacts	5.7	8.9	12.3
Number of contacts (thousands)	773	903	1,114

The data applies to help desks equipped with a queue detection system. The data do not include the companies Etra Energia (for which approximately 4.6 thousand contacts were recorded, 0. 4% of the total) and AresGas.

In 2023, Hera Group help desks handled influxes that increased by 23% for the reasons described above. As a result, average waiting times increased (from 9 minutes to approximately 12 minutes). However, **satisfaction surveys** showed that customers recognised the quality of the service (**80/100**). The goal for 2024 is no more than 10 minutes of average waiting time at the help desk.

Overall, there are **192 help desks throughout Italy**, 68 of which are equipped with a queue detection system.

Complaints management

In 2023, the Hera Group handled 59,386 files, 11% more than in 2022. Complaints relating to energy services increased by 17% (+5% for gas, +33% for electricity and -34% for district heating), understandably linked to the turbulence in the energy markets, which also affected the first part of 2023. Complaints also increased in the waste management service (+32%) but decreased in the water service (-14%).

Handling a higher volume of complaints had repercussions on response times (18.4 days in 2023 compared to 13.2 in 2022) and compliance with quality standards relating to response times (92.2% in 2023, -1.5 percentage points compared to 93.7% in 2022).

COMPLAINTS ANSWERED

	2021	2022	2023
Average complaint response time (days)	9.8	14.6	20.8
Complaints that were dealt with within the standard timeframe (%)	99.7%	96.6%	90.5%
<i>of which complaints relating to sales of electricity and gas</i>	99.5%	95.9%	89.5%
Complaints answered (number)	31,368	41,541	43,950

The complaint response time is specified in calendar days, with a reference standard of 40 days. The 2022 data were aligned by excluding the services of last resort, for which there were no obligations to monitor commercial quality. The data refer to Hera Comm and as of 2022 to Estenergy as well.

As a result of the factors described above, and the effects of the merger of some commercial companies into the scope of operations at the end of 2022, the average response time increased to 20.8 days, compared to 14.6 days in 2022. Despite the changes in the general environment, the ratio of complaints to managed contracts remained constant at 1.2%.

AcegasApsAmga guaranteed an average complaint response time of 10.5 calendar days, up slightly from 12.5 days last year; the percentage of complaints responded to within the standard timeframe was 100%, the same as in 2022 and 2021.

Finally, for **Marche Multiservizi**, the complaint response time was 1.8 calendar days (2.5 in 2022) and 100% of complaints were answered within the standard time.

Arbitration

Alternative dispute resolution (ADR) arbitration is increasingly used to solve problems without resorting to ordinary courts. This method is not costly for customers, who can participate in the resolution of disputes either in person or by delegating a representative. Most of the meetings take place by computer on IT platforms, thus avoiding the need to travel. The high percentage of positive solutions demonstrates the success of this procedure, which is developing year by year and has proven to be a tool that satisfies the vast majority of those who have tried it.

Since January 2017, sector regulations have made it compulsory for the gas and electricity sectors to turn to arbitration in an attempt to resolve disputes. The attempt at arbitration is a prerequisite for any subsequent court action. The arbitration bodies must meet the requisites set out in the Code of Commerce and be registered in the Register kept by ARERA. Since July 2018, arbitration was extended to the integrated water service, and the operator's participation became mandatory on 1 July 2019; on 1 July 2023, it also became a prerequisite for subsequent court action on a par with gas and electricity.

Also, in 2023, **ADR arbitration was further consolidated** as a tool for out-of-court dispute settlement, which more and more customers turned to with confidence to settle unresolved problems at the complaint stage. In fact, this past year also witnessed a marked increase in requests for **ADR arbitration**. From 709 requests in 2021, the figure rose to 1,028 in 2022 (+45%) and 1,480 in 2023 (+44%). The increase was practically entirely confined to the **energy sector** (94.1% of requests). At the same time, the water service was essentially stable (+13 requests for arbitration). This can be attributed to this dispute method's increasing popularity (which, moreover, indicates a maturing and growing awareness on the part of Italian consumers) but also to the effects of the surge in energy prices that began at the end of 2021.

Of the 1,294 arbitration requests closed during the year, 929 concluded with a settlement, 341 without a settlement, 13 were terminated due to withdrawal of the request and 11 due to inadmissibility.

The **success rate in the energy free market** (i.e. cases concluded with a record of the agreement for gas and electricity) was around 74.8%, lower than in 2022 (76.3%) yet **higher than the national Italian average** published by ARERA (68.7%). Completion times tended to be stable, down from 65 days in 2022 to 64 in 2023.

ADR arbitration is complemented by **joint arbitration**, an instrument based on an agreement signed with the main consumer associations, which also aims to resolve disputes out of court. The number of requests for joint arbitration by consumer associations has **decreased year after year**, largely due to the more extensive use of ADR dispute resolution, which is now proven to be the tool of preference for resolving disputes over gas, electricity, district heating and water services. The need for face-to-face meetings and the required assistance of a Consumers' Association discouraged recourse to this method; the small number of requests, which in 2023 turned out to be of little significance, bore witness to this fact.

Litigation with customers

[2-27]

At the close of 2023, 730 disputes were pending with customers (311 of which were initiated during the year), mainly regarding the application of the Tariffs on services we provided and payment collection. 646 disputes concerned the gas, electricity, and district heating service, 40 the water service, and 34 the waste management service.

Litigation with customers concerned the energy sector, and in particular objections to the protective system to which customers are assigned by the competent distributor, cases arising from the opposition to injunctions served as part of the compulsory collection of receivables, further disputes concerning billing, and complaints requesting the reactivation of electricity or gas supplies that had been suspended due to overdue customer paying. Moreover, following the case law of the Court of Cassation, electricity utility customers initiated litigation for the restitution of provincial surcharges on excise taxes paid in 2010 and 2011.

In the water sector, instead, disputes mainly concern customers objecting to injunctions.

Information security and personal data privacy

Information security management is a well-established asset within the Hera Group, starting from the design stages, with a view to security by design, enabling increasingly effective protection of all business-relevant data and, in particular, the personal data of data subjects while synergistically pursuing privacy by design.

The governance of this topic has been consolidated by means of a complex, **constantly updated document management system** consisting of the "Information Security Policy Guideline", a "Policy for the protection of personal data", and a set of information security policies that establish the guiding principles for all information security activities, including the attribution of responsibilities, both general and specific, to clearly defined organisational roles. The standardisation of privacy strategies is also pursued through a **single data protection officer for the Group** and the publication on the website on the Company's overall commitment to data protection and the most relevant disclosures for customers and other stakeholders.

Top Management is involved in defining an acceptable level of risk through meetings of the Risk Committee focused on the results of annual information security risk assessment processes, which identify the most effective mitigation and security improvement initiatives in the face of an increasing level of external threats, the implementation of which is **constantly monitored**. Compliance with policies and the level of maturity of countermeasures is ensured by annual technology assessment programmes and periodic audits of the security vulnerabilities of systems and networks.

Group companies carry out **periodic audits** (including on **external parties** handling personal data on its behalf) to check that their operations comply with the organisational, technical and security measures concerning personal data processing provided for by the provisions in force. The outcomes of periodic review activities are formally documented.

For purposes of greater accountability within the Group, **monthly information bulletins** provide in-depth information on new national and European regulations and the analysis of the Data Protection Authority's sanctioning measures; in particular, with respect to the Data Protection Authority's main sanctioning measures, a privacy-side **compliance assessment** of business processes is carried out through dedicated working groups.

Hera implemented a number of measures to **strengthen the Group's cyber security**, including extending security monitoring probes to all potentially vulnerable systems, especially in managerial and industrial areas. Furthermore, the cyber security and privacy culture was also enhanced via targeted training courses and periodic ethical phishing exercises. See the "cyber security" section for more information on this topic.

The Group Data Protection Officer conducts **spot checks** on processes by means of annual audits, also with regard to the exercising of rights on the part of data subjects and average response times.

The Cyber security posture, an expression of the **Group's cyber security health status**, is periodically monitored by tracking monitoring indicators and participating in benchmarking activities through industry associations.

Finally, being aware that the current landscape is characterised by increasingly frequent cyber attacks, including at the supply chain level, the guarantee of personal data protection is also pursued through better supervision of the Group's **IT service providers** in the selection, contractualisation and control stages.

PROCEEDINGS INITIATED BY THE DATA PROTECTION AUTHORITY

Number	2021	2022	2023
Proceedings initiated by the Data Protection Authority	5	2	1

With regard to the Group companies that are obliged to appoint a Data Protection Officer, one of the two proceedings opened in 2022 was closed without the imposition of sanctions; a fine of 10,000 euro (later reduced to 5,000) was imposed for the second. In 2023, a proceeding that had not yet been finalised was brought against Hera Comm. Hera Spa received a request for information regarding the data processing involved in managing municipal waste, which was replied to in due time. Currently, the proceeding is still being assessed by the Data Protection Authority.

VIOLATION OF CUSTOMERS' PRIVACY: COMPLAINTS






Number	2021	2022	2023
Grounded complaints received from outside	44	12	107
The data do not include the AresGas company.			




The increase in the number of complaints relating to breaches of customer privacy received in 2023 mainly regards the handling of customer records from markets of last resort, which involved about 80 cases. Apart from this, the figure is in line with that of previous years.

The **secondary use** of customers' personal information is **also** monitored within the Group companies. By 2023, the percentage of customers who granted **privacy consent for marketing and commercial purposes** was 51%. Data refer only to households with at least one active contract on the free-market energy services of Hera Comm, Hera Comm Marche and EstEnergy (customers on the protected and last resort markets are excluded).

7. PEOPLE

7.01 Objectives, performance and targets

What we said we would do	What we did	SDGs	Progress*
Management of skills and training			
Continue the initiative launched in 2020, which allows all workers to devote a working day (one full or two half days) to their professional development with remote learning courses. 25 hours per capita of training (30.8 in 2022).	In 2023, we renewed the initiative that provides the option of devoting one working day to professional development with remote learning courses. Provided 31.5 hours per capita of training in 2023 (see p.256).	4, 8, 9	
Professional development			
Continue covering at least 50% of requirements through internal mobility (41% in 2022).	Covered 41% of requirements through internal mobility.(see p.291)	8	
Welfare			
Continue developing a corporate culture aimed at further strengthening the concept of individual well-being (physical, psychological and financial) as an element worth investing in to enable all people to express their full potential across the board and consequently contribute to their professional growth, as well as that of the company. Expand the range of wellness services offered.	Pursued the commitment towards employee well-being, also with new projects such as "The sense of well-being", a journey involving various stops through the Group's various local areas to raise awareness and stimulate action on these issues (see p.263).	4	
Launch the fifth edition of HeraSolidale (2023-2025), involving employees in identifying non-profit organisations and supporting the implementation of solidarity projects.	Launched the fifth edition of HeraSolidale in September 2023: 58,000 euro donated in 2023 to the five partner organisations of the project's fifth edition (see p.376).	17	
Health and safety			
Further reduce the accident frequency rate (10.5 by 2026 and <10 by 2030); (10.5 in 2022). Continue with training and awareness-raising initiatives on "Culture of Safety" and "Safety Leadership" for managers. Installation of the "Variable Message Panel" on 400 vehicles of the Central Network Department to improve safety on the road during the initial fault detection and settlement stages. Gradually extend the use of the "Man Down" app in business units with lone worker hazards.	The accident frequency rate obtained in 2023 was 10.2 (10.5 in 2022). Installed 50% of the 380 "Variable Message Panels" on the vehicles of the Central Network Department to improve the safety of road works. Completed planned health and safety awareness initiatives. Started testing the use of the "Man-down" app in the Central Market Department and kept refining it in the Central Network Department (see p. 264).	8	

*  Result achieved or in line with planning;  Result with slight variance compared to planning;  Result with significant variance compared to planning.

What we will do	SDGs
<p>Management of skills and training</p> <p>Pursue the ecoHERA change management process on how the network, energy and environmental sectors work and on the impact generated by the energy and environmental transition.</p> <p>Continue with the initiative, launched in 2020, that allows all workers to devote a working day (full or two half days) to their professional development with remote learning courses.</p> <p>At least 26 hours per capita of training in 2027.</p>	4,8,9
<p>Professional development</p> <p>Continue covering at least 40% of requirements through internal mobility.</p>	8
<p>Welfare</p> <p>Develop new welfare initiatives devoted to every aspect of personal well-being (psychological, financial, digital, and family-related matters).</p> <p>Continue promoting the fifth edition of HeraSolidale (2023-2026) to achieve the goals of the five partner organisations with donations from employees and the company.</p>	4 17
<p>Health and safety</p> <p>Further reduce the accident frequency rate (10.4 by 2027 and <10 by 2030).</p> <p>Continue with educational and awareness-raising initiatives on the "Culture of Safety" through the active involvement of the company's workforce in training and coaching activities.</p> <p>Complete the installation of the variable message panel on the vehicles of the Central Network Department.</p>	8

7.02 Strategic planning of desired and future skills and roles

The reference context poses new challenges and current trends are highly interconnected. This requires an integrated approach for our HR strategy that takes into account both macro-transitions and major emerging changes.

Said context, also referred to as a 'poly crisis', focuses on environmental issues, the search for meaning and community, and inclusion. There is a structural ageing of the workforce, rising unemployment rates and a growing NEET population, as well as an increasing focus on the gender gap and the protection of mental health and individual well-being. The ever-changing sociocultural ecosystem requires optimal management of generations (age management), diversity and multiculturalism to pursue greater perceived equity.

Energy, ecological and environmental transitions show an increasing impact in terms of investments and opportunities, resulting in increased efforts and skills required in STEM disciplines. The role of companies in implementing the necessary change management and reskilling programmes remains a priority, especially in view of the disruptive impact expected from generative AI. This is expected to produce great benefits and/or some risks, especially in administrative and creative domains.

Purpose both guides companies towards challenging goals and fosters corporate cohesion in view of a project that goes beyond customer satisfaction and shareholder remuneration. Now, more than ever, it is essential to ensure the purpose of the company and that of individuals go hand in hand. To have a competitive edge, a purpose needs to turn into meaning and tangible action to spur people's engagement and turn it into virtuous behaviour.

To stay competitive, companies need to be able to quickly respond to market changes by anticipating emerging trends and adapting their organisational models with a focus on the human capital of the entire reference ecosystem. Change concerns every aspect with a view of attracting talent and engaging, adopting new enabling practices for business agility. Regulatory and procedural agility also plays a crucial role in this domain. This is intended as the ability to adopt flexible and timely solutions with tools created for prescriptive purposes (e.g. employment contracts, corporate procedures, etc.).

In a context where the pace of innovation is slowly picking up, the working population's average age is gradually rising and there is a considerable need for professional retraining in a very short space of time, training is increasingly becoming a strategic asset, not least to offset the gap between sector needs and the education system.

Therefore, the Hera Group's employee value proposition in response to this context is to develop an agile organisation that fosters continuous learning where everyone is at the heart of growth and participates in the creation of shared value, as part of a purpose-driven strategy built into business development.

As a result, this is a strategy designed to recognise that people have a key role in personal and collective development. This is enabled and fostered by a strong cultural alignment and the creation of increasingly advanced, usable processes in line with expected objectives. The above context and the strategic direction defined with our employee value proposition have led to five priority actions:

- **evolution@work:** guide how our approach to work evolves by valuing development of every individual, fostering a culture inspired by trust, transparency, a sense of community and focused on widespread, authentic leadership;
- **people and transitions:** foster behaviour and strengthen skills that help people consciously and effectively face the opportunities and challenges related to energy, environmental and digital transitions;
- **human resource business accelerator:** develop the ability to rapidly redesign a strategy, business models, structure, processes, skills and technologies to support business;
- **inclusion and empowerment:** create a working environment that welcomes diversity and encourages everyone to be themselves and fully express their potential;
- **human resource technologies for people:** people's needs are placed at the centre of the evolution of HR process technologies to engage them, foster awareness and responsibility, helping them perform their role.

The Hera Group's workforce

[2-7]

At **31 December 2023**, the total number of workers with **open-ended contracts** in Group companies was 9,616, while there were 349 workers with **fixed-term contracts**.

STAFF FIGURES AT YEAR END

Number	2021	2022	2023
Managers	153	151	157
Middle managers	583	592	593
White-collar workers	5,074	5,129	5,396
Blue-collar workers	3,312	3,319	3,470
Open-ended contract employees	9,122	9,191	9,616
Fixed-term contract employees	162	172	292
Employment Agency Contracts	51	52	57
Total workers at year-end	9,335	9,415	9,965

Data at 31 December

The increase in six executive managers is due to 11 promotions from the role of middle manager to manager, the exit of nine managers in 2023, two external hires and two new entries owing to changes in the scope of operations. The number of middle managers increased by one, which is the result of seven new entries, 32 promotions from white-collar worker to middle manager, 13 new entries due to changes in the scope of operations and 51 exits (11 of which were promotions from middle manager to manager). The increase in white-collar workers is due to the entry of 574 new workers (204 of which due to changes in the scope of operations and 26 were promoted from blue-collar to white-collar worker) and 307 exits (32 of which were promotions from white-collar worker to middle manager). The number of blue-collar workers increased by 151 compared to 2022 owing to the entry of 305 blue-collar workers, 181 changes in the scope of the company's operations and the exit of 335 blue-collar workers (26 of which were promotions from blue-collar to white-collar worker). The entries also include workers from A.C.R., the company formerly known as Asco TLC and F.lli Franchini, which joined as part of the scope of consolidation, totalling 400 employees.

The 172 workers posted abroad refer to Aresgas, which distributes and sells natural gas in Bulgaria, and three Aliplast Group companies that run plastic selection and recycling plants in France, Poland and Spain (Aliplast France Recyclage, Aliplast Polska and Aliplast Iberia).

WORKFORCE BY WORKPLACE

Number	2021	2022	2023	2023 (%)
Emilia Romagna	5,774	5,798	6,261	63%
Triveneto	2,110	2,062	2,442	25%
Marche	604	612	645	6%
Other Italian regions	666	759	445	4%
Abroad	181	184	172	2%
Total	9,335	9,415	9,965	100%

Data at 31 December and total open-ended and fixed-term contract employees.

EMPLOYEES

	Number	2022	2023
Men		6,812	7,220
Women		2,603	2,745
Total		9,415	9,965
Open-ended – Men		6,654	6,967
Open-ended – Women		2,537	2,649
Open-ended – Total		9,191	9,616
Fixed-term and other – Men		158	253
Fixed-term and other – Women		66	96
Fixed-term and other – Total		224	349
Full time – Men		6,769	7,155
Full time – Women		2,256	2,395
Full time – Total		9,025	9,550
Part time – Men		43	65
Part time – Women		347	350
Part time – Total		390	415

Data at 31 December

The average age of our employees is 46.5 (lower than 2022 when the average age was 46.7). The average seniority is 15.1 years.

HOURS OF LEAVE AND HOURS WORKED PER CAPITA FOR EMPLOYEES WITH OPEN-ENDED CONTRACTS (BY TYPE)

	Hours	2021	2022	2023
Sick days		60.8	79.8	59.3
Maternity/paternity and parental leave		16.1	11.7	16.8
Work accident		3.7	3.5	3.3
Strikes		2.0	0.3	0.6
Labour union assembly		0.2	0.4	0.2
Labour union leave		4.6	5.1	5.0
Other		31.2	37.2	34.0
Total hours of leave		118.7	137.9	119.2
Ordinary working hours		1,581.3	1,534.4	1,546.8
Overtime hours		29.9	31.3	34.1
Total hours worked		1,611.2	1,565.7	1,580.9

These figures do not include the following companies: Aresgas, Biorg, Etra Energia, F.lli Franchini, Macero Maceratese, Recycla, Vallortigara Servizi Ambientali, Wolmann. A total of 3% of the Group's employees work in these firms. The hours worked are calculated net of overtime hours for recovery.

The **hours of leave per capita** dropped by 13.6% compared to 2022, mainly due to a decrease in sick leave in 2023. The amount of **leave due to injury** is in line with previous years. In 2023 the floods in May severely affected some areas of the Emilia-Romagna region where the Group operates. This is

clearly shown by the increased **use of leave** during the most critical days and the **greater use of overtime** to restore essential services and waste disposal facilities in the hardest-hit areas.

The “other” category shown in the table includes leave requested to provide assistance to family members with disabilities or illnesses, personal leave for medical appointments and treatments, and study leave.

The selection and onboarding process

Recruiting, selecting and effectively **onboarding** the best talent out there is a challenge Hera tackles with a **data-driven strategy** that is fully **integrated with its business** and constantly designed to **improve the overall experience** of the people involved.

The analysis of market trends and of main process indicators is now common practice. Well-established for years in the **strategic workforce planning** process, it guides employer branding and process actions, including the choice of tools to support the process managed.

The complexity and uncertainty of labour market trends, socio-demographic changes, the expectations of people seeking a greater match between individual and organisational purpose, the widening gap between the number of vacancies and the professionals qualified to fill those roles, along with the challenges in the energy, environmental and digital transition are the main elements that once again emerged in the reference context in 2023.

Several actions have been introduced as a response to the above:

- **digitalisation to facilitate the selection process:** in addition to the digitisation of interviews and assessments, a tool was implemented to support screening activities. This tool allows for faster identification of candidates most in line with vacancies and give them even more accurate feedback, thus improving the effectiveness and efficiency of the process;
- **employer branding:** the Ambassador Project continued in 2023, involving a group of about 30 employees from different companies and departments of the Group to talk about the company and share brand-related content. Part of the goal of this project is to value our employees' point of view and promote word-of-mouth, with benefits on the recruitment process as well.
- **partnerships to seek and select talent:** a project was launched in 2022 together with Manpower to acquire talent throughout the country, especially in relation to technical and operational profiles. The project came to an end in 2023 with the recruitment of eight engineers and 33 operational staff members, also thanks to the synergy with the Group's Corporate University (HerAcademy) and advanced facilities, such as the training centre at our headquarters in Ferrara.

The **new onboarding process** was launched in 2023 with the support of digital means to guide new employees in the days before joining the company and in the first stages of their career. We kept on involving and engaging new recruits in different ways and with various initiatives, including seven events with a specific focus on certain companies and departments (three within AcegasApsAmga, three within the Central Network Department, one within the Central Personnel and Organisation Department).

The onboarding process also includes the “Alphabetical - the ABC of the Code of Ethics” training course for all new permanent employees of the Group. Its aim is to help them become familiar with its Code of Ethics and promote behaviour in line with it.

A total of **778 people joined the Group** in 2023. With regard to recruitment areas, Operations made up the biggest selection segment (49%), particularly in waste services, followed by the water sector. Needs in the AcegasApsAmga (23%) and Market (12%) area were also significant.

Selections contributed to a significant generational change in terms of corporate workforce (the average age for new hires was 34), an increase in the number of women (41% of new hires with a permanent contract were women), and the percentage of graduates (71%, excluding operational profiles).

Remote working

After the launch of the first pilot programme in 2017 – which involved involving 370 workers – **more and more people** have been given remote working capabilities, reaching over 1,500 people in 2019.

The experience we gained since the launch of this programme gave us the resilience to face the healthcare emergency caused by the pandemic, further strengthening the available tools to make sure that people would feel supported and connected.

Since mid-2020, around **4,000** employees have taken part in the project on a permanent basis, bringing the percentage of workers involved to **77% of all permanent employees**, excluding blue-collar workers. The number of remote working days were increased as of June 2020: from one day/week to **two days per week of potential remote working**. At the same time, employees were asked to plan their remote working days for the following week, by entering the request in the system by Thursday of the previous week. This allowed managers to have an overview and better manage employee activities. During the healthcare emergency, these two days were further extended in cases provided for by law (e.g. at-risk people, need for distancing within the company).

Remote working, according to the Hera Group model, means working on four different aspects: **company culture, time and performance, space** and **technologies**. In this sense, it completely reshaped new ways of working right from the outset.

Along with our traditional training platform, during the healthcare emergency we created a specific section in the **dedicated sharepoint**, with training clips and useful information to better support all employees, including new hires who were working remotely.

We strongly focused on **listening** to remote workers: during lockdown, relevant surveys were carried out to find out how workers perceived their forced remote-work experience and to better shape actions and efforts to support them. In recent years, the various opportunities to listen to what employees have to say confirmed complete satisfaction both in terms of improved productivity (for the workers involved and for their managers) and in terms of greater satisfaction, both from the workers who were already in the project and those who joined during the emergency period.

The **#Conciliamo** remote working project was launched in 2023. It was designed to foster productive collaboration with guidelines and good practices on how we work (remotely or in the office) and virtuous behaviour. These were meant to favour a better work-life balance, further valuing everyone's time. To attain these goals, the project involved various engagement activities and communication initiatives. It was an opportunity to reflect on everyone's habits by collecting the necessary information to understand behaviour, also by employing questionnaires for those directly involved. The collected data was analysed and shared to subsequently help spread good habits and new behaviour. **#Conciliamo** for remote working is part of the "AcceleHERAzioni: inclusion, remote working and welfare" project that led Hera to win the **#Conciliamo** competition (Department for Family Policies – Presidency of the Council of Ministers).

We will continue to invest in training on the key skills needed to make remote working even more effective and to streamline increasingly hybrid ways of working. Indeed, an extensive training programme in partnership with Milan's Polytechnic is due to be held and is one of the activities approved as part of the **#Conciliamo** funding competition.

The aim will be to continue measuring collective and individual benefits, promoting new opportunities and creating the conditions to jointly increase productivity and well-being. As part of this process, the company's management is required to further develop people management skills in a context where performance, and hence achieving goals, is becoming more important than when and where we work. The Hera Group leadership model plays a leading and decisive role in ensuring this is done effectively.

As part of the above remote working model, in 2023 a special focus was also placed on 'space'. In line with the activity-based approach to work, we analysed the main activities of a pilot area and held specific sessions to listen to what employees had to say. Based on this insight, **spaces were redesigned** to better meet the professional needs of the teams involved. In this case, the entrance hall and corridor were used to provide areas where people could concentrate and share ideas. The project will continue in 2024 and will be expanded by examining other organisational areas as well.

7.03 Management of skills and training

The **Group's value proposition relating to learning** involves a process that starts by understanding the relevant context and trends (global macro-trends, business plan, personnel management strategy) and is implemented by reviewing the main features resulting from the company management's listening activities and by subsequently achieving the strategic training goals for the current year.

Training initiatives

[403-5] During 2023, classroom and digital learning accounted for 34% and 31%, respectively, of the total training hours provided.

[404-1] In 2023, we renewed the 2020 initiative that provides the option of devoting one working day to professional development with remote learning courses. This project will continue through 2024.

[404-2]

With reference to the various types of training initiatives provided in 2023, of particular note for the **institutional and managerial training axis** are the following: the training initiatives linked to the Leadership Model; the creation of the institutional middle-management programme to help the transition to the new role and the inclusion of 74 new middle managers within the Group; meetings with senior management in the various local areas of the Group (2023 Facciamo il Punto initiative); the 2023 Participation Groups project to launch corporate projects in the field of Diversity, Safety, Training and Sustainability based on participatory policies.

As part of the Her@futura programme, we launched the third edition of the **digital skills** assessment and implemented the two Digital Lab projects in the areas of engineering and innovation. We continued the Digital Workplace change management plan for effective use of Office 365 tools and provided the Mastering Community Management training course.

Furthermore, in 2023 we continued the ecoHERA programme to foster widespread knowledge and **skills** in business chains, **energy and environmental transition** by providing training content on energy and environmental transition.

With reference to **technical-professional training**, we continued the training and knowledge management initiatives implemented as part of the professional Academies.

Also worth mentioning are the following: we launched the meeting to illustrate the 2023-2026 Business Plan and the 2023 Budget to share the main features of the Group's business plan and budget; we implemented the change management plan of the Source to Contract project and provided technical-operational training on the new Procurement system (Hera_Pro); we provided training initiatives on the main changes introduced by the new Public Contracts Code; we launched training initiatives related to the proceeds project for the use of the bank transfer management system.

We also launched the change management plan linked to the Hera Nuova Balanced scorecard project and continued the change management programmes associated with the organisational evolution of the Central Network Department. As for the environment, we launched the "Acting on change" programme. It is intended for those in a coordinating and technical roles in the areas around Bologna and aims at strengthening partnership logics in Temporary Business Groupings.

With regard to the **market and customer management** axis, we provided the Sales Evolution training programme to front-end colleagues to start turning their role into that of an energy consultant.

With reference to the **quality, safety and environment** axis, recurring training activities on occupational health and safety issues continued and the workshop for safety managers was held as part of the Change Safety Leadership plan.

As for the **ethical values and corporate culture** axis, it is worth noting that we continued the "AlfabEthical - the ABC of the Code of Ethics" training course for all new permanent employees and new employees who joined the Group following corporate acquisitions. The course is designed to help them become familiar with the Group's Code of Ethics and promote behaviour in line with it.

[205-2]

In 2023, **5,058 people** across the Group (the figure also includes AcegasApsAmga and Marche Multiservizi) were involved in **training on anti-corruption content**, amounting to about 4,000 hours of training in total provided through the following initiatives: "AlfabEthical", in which we included concepts on the domain of corruption, "Corporate Social Responsibility and Code of Ethics" with a focus on supplier monitoring, e-learning on anti-corruption (ISO 37001) and training initiatives based on model 231, including a dedicated e-learning course.

TOTAL HOURS OF TRAINING PER AREA OF INTERVENTION

Hours	2021	2022	2023
Sales and markets	9,924	17,559	11,758
Managerial	31,101	30,572	31,152
Quality, safety and the environment	96,206	80,457	76,386
Information systems	26,582	33,794	33,114
Technical-operational	103,709	108,657	120,856
Ethical values and corporate culture	5,753	6,885	19,085

Total	273,274	277,924	292,351
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The figures do not include A.C.R., F.lli Franchini and Aliplast's foreign companies (Aliplast France, Aliplast Iberia, Aliplast Polska) employing 5% of the Group's employees.

Once again, technical-operational training recording the highest figures. The Ethical values and corporate culture axis is the area showing the largest increase. The higher result achieved in terms of hours provided was due to some non-recurring training initiatives, including the resumption of meetings with top management (Facciamo il Punto), as well as the launch of change management plans linked to relevant project-based initiatives throughout the Group (e.g. the ecoHERA programme).

AVERAGE TRAINING HOURS PER CAPITA BY CATEGORY

Hours	2021	2022	2023
Managers	29.2	36.3	50.2
Middle managers	42.8	39.4	50.2
White-collar workers	26.7	27.8	28.8
Blue-collar workers	33.8	33.8	31.7
Average	30.3	30.8	31.5

The figures do not include A.C.R., F.lli Franchini and Aliplast's foreign companies (Aliplast France, Aliplast Iberia, Aliplast Polska) employing 5% of the Group's employees.

AVERAGE HOURS OF TRAINING BY ROLE AND BY GENDER

Hours	2021	2022	2023
Men	32.3	32.2	32.4
Women	25.2	27.1	29.2
Average	30.3	30.8	31.5

The figures do not include A.C.R., F.lli Franchini and Aliplast's foreign companies (Aliplast France, Aliplast Iberia, Aliplast Polska) employing 5% of the Group's employees.

The total hours of training per capita for 2023 is the highest value in recent years and far above the 25-hour target. Training hours per capita amounted to 31.5 (32.4 for men and 29.2 for women). As of 2027, at least 26 hours per capita of training will continue to be provided.

The 2023 Sustainability Report prepared by the Utilitalis Foundation on behalf of **Utilitalia**, the Federation of water, environment and energy companies, discusses the sustainability performance of 89 utility companies. Considering training hours per capita in 2022, Hera's data was about 9 percentage points higher for executives, 8 for middle managers, 12 for white-collar workers and 19 for blue-collar workers, compared to the average value of companies examined. Overall, Hera's data was almost double the average of the firms evaluated, coming to 16.3 hours per capita.

Scuola dei mestieri and the knowledge management system

[404-2]

The **Scuola dei mestieri** is a well-established system that, for over ten years, has developed, strengthened and enhanced the technical and operational skills of the Hera Group, also with a view to knowledge management. Its purpose is to raise awareness about professional conduct and know-how transfer within the company.

Since its creation, the Hera Group has felt the need to arrange the distinctive skills of the various operational trades of the company (for example workers dealing with network services and workers dealing with remote control and management) in **trade handbooks**. Eighteen handbooks have been created to share and preserve the Group's distinctive know-how over time: in 2015, they became available in a digital format and are continually updated.

HerAcademy: the corporate university of the Hera Group

[404-2]

In 2023, we kept on strengthening **HerAcademy** as a **Stakeholder University**, capable of interacting with all partners in the national education system in order to set up public-private partnership projects and to create projects that support innovation within the ecosystem of reference.

Namely, on the 5th of December 2023, the HerAcademy **workshop** entitled “Intelligence in the future: new horizons to guide the relationship between human and artificial intelligence” took place in hybrid mode (in-person in Bologna and live streaming) with the aim of directing a multidisciplinary reflection on AI opportunities and the challenges organisations and individuals will have to face to fully grasp the potential of new technologies. Moreover, **university guidance** and **career guidance** events were held. These were specifically designed for the children of our employees to support them as they enrol at university and enter the job market.

Agreements with universities, business schools and research centres

Through its Corporate University (HerAcademy), the Hera Group has had **framework agreements with the main universities in the regions in which it operates** for several years, such as the University of Bologna, the University of Modena and Reggio Emilia, the University of Ferrara, the University of Padua, the University of Florence, the University of Milan Bicocca, the University of Pisa, the University of Trieste, the University of Udine and the Polytechnic University of Marche.

With particular reference to the **University of Bologna**, we continued the initiatives connected with the framework agreement renewed in 2019 continued during 2023. Said agreement further addresses the need to give continuity to a broad partnership aimed at promoting multidisciplinary activities and projects in the following areas: research, development and innovation; teaching, advanced and permanent training; career guidance and help entering the job market; internationalisation; technology transfer; development cooperation, sustainability and social innovation.

Scientific collaboration also continued with the **University of Milan Bicocca** and the **Inter-university research centre for public utility services** (Crisp), whose general objective is to support the development and implementation of activities envisaged within the HerAcademy.

In 2023, the Hera Group also continued its collaboration on the experimentation of the **Tred secondary school**, which, with the coordination of training non-profit organisation Elis offers a four-year training course focused on environmental and digital transition issues. Namely, during the first four months of the year, workshops on the circular economy were held for the students of the first Tred class, thanks to the speeches given by Hera’s expert staff. In summer, the Hera Group also co-designed and took part in an activity organised as part the Summer Camp of the Tred secondary school.

In 2023, a partnership was consolidated with Crif – through its training programme called “Boom” – for the joint planning and implementation of training courses for junior and middle managers in the energy sector.

The Group also actively collaborates with business schools and innovation centres, such as: Bologna Business School, Luiss Business School, the Mib School of Management Consortium of Trieste, the MIP Polytechnic of Milan, the Safe Study and Research Centre, Sda Bocconi, The European House Ambrosetti; the Group is also part of the scientific committee of Assoknowledge-Confindustria Innovative and Technological Services.

7.04 Professional development

The development process

People are the true asset to achieve differentiation and a competitive advantage. The quality and efficiency of both internal processes and results depend on people. Effective personnel management and human capital enhancement is therefore of strategic importance for the Group.

[404-3]

As part of this context, the development process pursues three main goals:

- assess performance and behaviour throughout the year in question, identifying the strengths and areas for improvement of each individual in relation to their position;
- make it clear what is expected of everyone in terms of results and behaviour;
- consider more targeted and effective actions for professional development.

Namely, the development process is based on an annual appraisal in two areas – performance and managerial skills – and it is consistently applied throughout the company: it currently involves over **5 thousand people**, including employees, management employees, middle managers and managers. The process that will assess 2024 will also include blue-collar workers to **cover the whole of the company**.

One distinguishing feature of the process is the **dialogue about performance**: a two-way exchange between manager and employee, where the duty to provide clarity and effectiveness by managers goes hand in hand with the commitment by each individual to use feedback as an ongoing learning tool.

Around **5 thousand workers** of the Group were assessed in 2023.

WORKERS WHO HAVE RECEIVED A PERIODIC PERFORMANCE APPRAISAL AND PROFESSIONAL GROWTH ASSESSMENT BY ROLE AND GENDER (2023)

Number	Men	Women	Total
Managers	121	33	154
Middle managers	359	184	543
Management employees	869	482	1,351
White-collar workers	1,854	1,554	3,408
Total	3,203	2,253	5,456

Data at 31 December and total open-ended and fixed-term contract employees.

Career progress

CAREER PROGRESS DURING THE YEAR (BREAKDOWN BY POSITION FOR WORKERS WITH AN OPEN-ENDED CONTRACT)

Number	2021	2022	2023
Managers	6	5	11
Middle managers	28	36	31
White-collar workers	335	505	468
Blue-collar workers	206	308	533
Total	575	854	1,043

A total of 1,043 people advanced in their career in 2023 (up by 22% compared to 2022). **Career progress involved 214 female staff members**, totalling 21% of all cases. Excluding blue-collar workers, where women are around 2.1%, career progress involving female personnel represented 40.8% of the total.

Internal mobility

The speed of change, accentuated by the digital transition, is significantly changing how we work. Many positions will change and it will become increasingly important for companies to encourage people to **update their skills** and, for workers, to step up their game and take their professional growth and employability into their hands.

Hera's multi-business nature is ideal to access a wide range of professional opportunities. Indeed, the broad spectrum of activities allows us to enhance our professional expertise in various domains and local areas.

This is why, 319 job changes took place in 2023 (up from 238 in 2022), covering **41% of the company's needs**, and 202 job announcements were published (up by 18% compared to 2022). Also for 2024, the goal is to continue to cover at least 40 % of needs through internal mobility.

The goal is to continue covering at least 40% of requirements through internal mobility.

Leadership model

The Group has had a **leadership model** since 2011: a beacon that shapes our behaviour and describes the skills we need to develop our corporate culture and values and achieve strategic results.

In 2016, through a shared and participatory process involving over **700 employees**, the model was reviewed and updated in order to address new challenges. The current model is based on two perspectives, a time-based one focusing on today/tomorrow and another line involving I/us. This led us to define four areas for our objectives, each containing two skills.

In 2023, the programme to spread and explore the content of the leadership model – which every year involves around 700 managers and middle managers – was conceived and designed in continuity with the previous year. It further discussed the topic of personal and professional development, the key role of individuals, their well-being and their energy activation.

Moreover, multimedia and interactive content on special e-learning platforms was made available to the entire workforce, **over 5 thousand employees, including white-collar workers, middle managers and managers.**

In 2023, as a response to the new competitive challenges, we worked on **developing the current leadership model** by involving the whole of the company. Said model was further updated by enhancing existing skills and identifying the new skills needed, also with the involvement of blue-collar works with the aim of covering the entire company.

Remuneration and bonuses

[2-20] The Hera Group defines and applies a **remuneration policy** aimed at attracting, **motivating and retaining people** with the professional traits required to achieve the Group's objectives.

The policy is designed to take into account the interest of various stakeholders and to achieve the priority objective of creating long-term value for its stakeholders by creating shared value and, in relation to its remuneration policy, by strengthening of link between pay and performance for both individuals and the Group.

[2-30] All Group employees are hired through **national collective labour agreements.**

[2-21] In 2023, the ratio within the Hera Group between the gross annual salary of the person with the highest salary (paid out in 2023) and the median value for workers was equal to 19:1.

For 2023, the performance bonus for middle management, white-collar and blue-collar employees is defined by the three-year supplementary Group contract signed on 20 September 2022. It is based on profitability, productivity and additional company-specific indicators, which may also include sustainability indicators such as occupational safety and energy efficiency.

Starting from 2018, as required by current legislation, employees have the opportunity, on a voluntary basis, to convert their performance bonus paid in cash into corporate benefits and services up to a maximum value of 50% of the yearly bonus, with significant tax advantages for workers.

Bonus system related to the short-term compensation variable

Since 2006, the bonus system of the Hera Group is linked to the balanced scorecard system. According to this system, the variable annual remuneration component of each manager and middle manager is calculated as a percentage value of gross annual salaries and is based on results relating to the objectives defined at the start of the year. The individual balanced scorecard features three parts:

- the first consists of specific **target projects** resulting from the operational outcome of the objectives in the Group's strategic map;
- the second contains the **economic objectives** outlined in the annual budget;
- the third involves an assessment of the **behaviour** set forth in the Group's **leadership model.**

The structure of the balanced individual scorecard – i.e. the significance assigned to the three areas – varies according to the seniority of the employee and the department they belong to.

The assignment of objectives to employees and the assessment of their achievement take place through a clearly defined process. This process is based on the decision of top management for the individual balanced scorecards of directors and managers, and the decision-making role of directors for the individual balanced scorecards of middle managers. The activity takes place under the coordination of the Balanced Scorecard System Management unit of the Shared Value and Sustainability Department.

In 2023, 50% of the variable remuneration for the Hera Group **managers** was linked to the completion of the target projects planned in the balanced scorecard system: 33% was linked to the achievement of the economic and financial budget objectives and the remaining 17% to compliance with the behaviour set forth in the leadership model. The balanced scorecard system involves 98.8% of the Group's middle managers and managers.

For **middle managers**, 70% of variable compensation was linked to the completion of the target projects planned in the balanced scorecard system and/or achievement of the economic and financial budget objectives, while the remaining 30% was linked to compliance with the behaviour set forth in the leadership model.

The **bonus policy for the Hera Group sales staff** was applied in 2023 as well to enhance the effectiveness the offer for customers. The purpose of these dedicated tools is to ensure competitive sales bonuses and to direct sales staff towards goal-oriented work.

Incentives also depend on sustainability

[2-19]

The bonus system is connected to the balanced scorecard and, ever since 2006, it involves associating part of the incentive to the achievement of sustainability targets as well.

In 2023, 40% of the variable compensation of Group managers and middle managers was linked to sustainability target projects (improvement of quality, environmental impact, image, personnel involvement, professional development and involvement of stakeholders), with target projects aimed at creating shared value accounting for 24%.

2022 BALANCED SCORECARD: BREAKDOWN OF VARIABLE REMUNERATION IN THE AREAS OF SUSTAINABILITY AND CREATION OF SHARED VALUE (CSV)

Area	% variable remuneration	No. of target projects	No. of managers/middle managers involved
Pursuing carbon neutrality	5%	16	100
Regenerating resources and closing the circle	7%	56	171
Enabling resilience and innovating	12%	37	306
Total CSV areas	24%	109	441
Other sustainability areas	16%	51	442
Total CSV and sustainability	40%	159	568

As the table shows, the managers and middle managers involved in CSV and sustainability target projects in 2023 amounted to 568, that is, 78% of the total. Restricting our analysis to CSV areas only, there were 441 managers and middle managers involved in target projects aimed at creating shared value, making up 60% of the total. This confirms the Group's widespread CSV approach in its strategy and short-term bonus system (balanced scorecard), which involved 710 workers in 2023, including managers and middle managers.

For the first **three top material topics** that emerged from the Hera Group's materiality analysis – energy transition, resilience and adaptation (especially with reference to climate change) and circular economy – the amount of variable remuneration share accounted for 5%, 5% and 2%, respectively.

The final payment of the bonus for all managers and middle managers depends on the achievement of the objectives stated in the individual balanced scorecards. However, it is also weighed against the results achieved for certain Group parameters: the company's economic-financial results (Ebitda, net profit and net debt), the customer satisfaction rate for residential customers and, since 2021, the **Shared-value Ebitda** as determined by the Management Compensation Committee in its meeting on 27 January 2021, thereby confirming the increasing relevance of the UN 2030 Agenda objectives in the Group's strategy.

Sustainability has also become part of the deferred **incentive plan** for management retention. The plan is reserved to a small number of managers selected according to the relevance of their position within the company, the evaluation of the results achieved in the development process and the 'market risk'. Shared-value Ebitda was indeed one of the three indicators used to quantify the bonus to be paid in 2022. The target to achieve is set out in the 2018-22 business plan for 2021. Shared-value Ebitda was

also confirmed for the 2022-24 three-year period as established by the Board of Directors in its meeting on 24 January 2022, again based on the proposal presented by the Compensation Committee. The target to reach is set out in the 2021-25 business plan.

Pension funds

The number of employees contributing to pension funds at December 2023 is 5,687, that is to say 57% of all Group employees. The main contractual pension funds are: Pegaso for employees under the gas-water and electricity national collective labour agreements; Previambiente for employees under the Federambiente national collective labour agreement; and Previndai for managers.

YIELD OF MAIN PENSION FUNDS (BALANCED SUB-FUND)

%	2021	2022	2023
Pegaso	11.1%	-18.1%	13.9
Previambiente	16.0%	-29.6%	20.7
Previndai	12.9%	-22.6%	12.1

7.05 Welfare

In 2023 we continued Hextra, the Hera Group welfare system created to accelerate the organisation's growth by investing in well-being and productivity.

As in previous years, in 2023 a **flexible welfare amount equal to 395 euro** was assigned to all workers to be spent on the whole of Hextra's range. They also had the option of converting part of **their 2022 performance bonus** paid out in 2023 into an additional welfare amount, with consequent tax and purchasing power advantages.

In 2023, Hextra recorded more than **9 thousand members** with more than **6 million euro** used by employees. This result was made possible by clear information and well-presented services regarded as useful. It is also the result of the positive impact on their work-life balance, as well as of the swift implementation of the regulatory changes resulting from recent amendments in the regulatory framework on fringe benefits and fuel vouchers to respond to current economic and social difficulties. Higher purchasing power, customisation and a quick, simple service are the features of the welfare system that also allows employees to have a fully digital experience and minimise the environmental impact.

In 2023, we launched "**The Sense of Well-Being**" project: a journey involving various stops in the Group's various local areas from September 2023 to June 2024. The journey focuses on positivity, well-being and promoting healthy choices whilst taking into account emotional, mental and physical aspects. We held events on specific issues and workshops led by various celebrities from the world of entertainment, music, art and sports endorsing them. Therefore, this is a project focusing on awareness and action as part of **Hextra for well-being**, the set of initiatives linked to the concept of individual mental, physical and financial well-being. These include: sessions with nutritionists, online yoga and Pilates classes, a platform to work out at home with a wellness professional or discounts for gym sessions with a dedicated trainer, free sessions with psychologists (4 for each applicant) and a podcast dedicated to emergency psychology to actively respond to the dramatic flood that hit the areas in Emilia-Romagna where the Group operates.

The commitment to health and prevention continued with the "**autumn of prevention**" project. In partnership with LILT (Lega Italiana Lotta Tumori), two free melanoma and head-neck screening tests were carried out, with more than 4,000 bookings, showcasing our constant focus on protecting our health.

Hextra's distinctive and traditional initiatives continued, including: the seventh edition of university **scholarships**, offering 51 scholarships worth 750 euro each; the seventh edition of language courses **abroad with Intercultura**, with eight scholarships worth 3,000 euro each for summer programmes; two scholarships worth 5,000 euro each for one term, and three scholarships worth 10,000 euro each for the entire academic year abroad. The continuation of the **summer programme** involved the following: an additional contribution of 175 euro per child to be used for the reimbursement of summer daycare/camps or, alternatively, for the reimbursement of babysitters or homework tutoring services with over 1,5 thousand requests.

Furthermore, in continuity with previous years, confirmation went to the allocation of an education sum for employees who have school-age children came to a total investment of over **1.1 million euro**. Namely, 3,2 thousand applications were received as part of all the projects set up to support the education of our employees' children. Of these, in 265 cases amounts were used by employees for **crèche** services. Fifteen applications to attend crèches with which the Group has agreements (in Bologna, Cesena and Imola) must be added, totalling 280 children.

As part of the activities managed by mobility management, it was once again possible this year to include the reimbursement of expenses incurred individually or by family members for **regional or interregional public transport services** as part of Hextra. Moreover, the supplementary mobility sum was confirmed with the aim of further promoting and supporting sustainable transportation related to home-work journeys for all Group employees using public transport, with 229 applications for a contribution of about 47,000 euro.

Once again in 2023, with "**At Hera, energy is worth more**", users had access to offers for free-market **gas and electricity, boilers and air conditioning and solar panels** to benefit directly from the value that all employees help create for increasingly shared and used welfare. We also continued the **An extraordinary connection** offer for internet access and calls in partnership with Acantho.

Lastly, a call to action for all employees to use available **voucher-based** services, and recommend services in the field of sports, wellness, shows, concerts, travel, holidays, water and theme parks.

Also for 2024, the goal is to develop new welfare initiatives dedicated to all-round individual well-being (psychological, financial, digital, and family).

[403-6]

In addition to the Hextra corporate welfare plan, the Hera Group offers several forms of supplementary healthcare for workers in compliance with the applicable collective bargaining agreement. In particular:

- employees to whom the gas/water national collective labour agreement applies: with effect from 1 January 2012, supplementary healthcare is provided by the FASIE fund;
- employees to whom the electricity national collective labour agreement applies: with effect from 9 July 1996, supplementary healthcare is provided by funds managed by corporate CRAEMs;
- employees to whom the waste management services national collective labour agreement applies: with effect from 1 October 2014, supplementary healthcare is provided by the FASDA fund;
- employees to whom the chemical industry national collective labour agreement applies: in line with the national agreement dated 29 July 2003, between FEDERCHIMICA and the sector trade unions, supplementary healthcare is provided by FASCHIM;
- employees to whom the national collective labour agreement for managers of public utility service providers applies: supplementary healthcare is provided through registration with FASI and Poste Assicura. The FASI Fund and FASI Supplementary Policy may be extended to the family members of managers.

In 2017, upon renewal of the national collective labour agreements, insurance policies were also set up in case of premature death (electricity national collective labour agreement) and of premature death and permanent disability (gas/water national collective labour agreement).

7.06 Health and safety

Ever since its establishment, prevention and safety at work have been among Hera's founding principles. Improving behaviour and enhancing corporate awareness about health and safety across the board is an ongoing target for the Group, as also stated in its Code of Ethics. **Preventing and minimising health and safety risks** is one of the commitments of the Hera Group's Quality and sustainability policy, which is inspired by the values for sustainable development expressed in the UN 2030 Agenda.

Working to make workplaces safer and healthier is essential to **improve quality and working conditions**, but also to promote the Group's sustainability and competitiveness.

Investing in health and safety contributes to the well-being of workers and is cost-effective. According to recent estimates, this type of investment can generate returns that are on average 2.2 times the value invested (source: International Social Security Association – ISSA, 2011).

Various occupational health and safety projects have been launched in recent years, especially with regard to the promotion of a culture of safety and risk awareness across the company. These initiatives – together with ongoing of staff training and coaching, specific actions to improve vehicles, plants, machines and equipment, and a timely analysis and investigation of injuries and near misses – have allowed us to achieve important results in terms of preventing accidents and occupational diseases.

The specific indicators reported and illustrated here below are a tangible sign of the improvements attained in this crucial area.

[403-2]

The process for identifying hazards and assessing health and safety risks is carried out in accordance with the requirements of articles 17 (non-delegable obligations of the employer), 18 (employers and managers' obligations), 28 (risk assessment purpose) and 29 (procedures for carrying out risk assessment) of Italian Legislative Decree no. 81/2008 **Consolidated Law on Occupational Safety**. More specifically, according to art. 17 of Italian Legislative Decree no. 81/2008, the employer has the non-delegable obligation to assess all occupational health and safety risks. To carry out this process, the employers of various companies or organisational units rely on the help of the **prevention and protection service** and the **company physician**, providing them with all necessary information about the kind of risks, how work is organised and a description of the production processes.

The prevention and protection service is used by the employer to develop the process for identifying hazards, assessing risks and identifying prevention and protection measures to mitigate risks and improve health and safety conditions at the workplace over time.

In the Hera Group, specific occupational health and safety management system procedures have been adopted to define the roles and responsibilities of the hazard identification and risk assessment process. The risk assessment objectives are as follows:

- **identify all sources of hazards** and **assess the potential impact on workers** in order to remove said sources or at least reduce them as much as possible;
- if the hazard cannot be removed, adopt suitable **prevention and protection measures**, prioritising, whenever possible, collective measures over individual ones;
- **plan and implement** the necessary risk information and training courses.

For an effective risk assessment process, it is necessary to estimate the **likelihood** an event may occur and the **severity** of its consequences. We have identified the criteria to estimate the likelihood and severity rates to limit any uncertainties when assigning the values and arranged them in the form of a table.

Prevention measures aim at reducing the **likelihood of an unfavourable event**, while **protection measures** reduce the severity of the consequences of the event.

The Hera Group is deeply committed to reinforcing workers' **awareness of the risks** associated with their workplace duties. This is why it has identified an increasingly larger amount of **training courses** that encourage people to develop **greater self-awareness** by changing their behaviour in relation to how they perceive risk and by setting a good example for their colleagues. One of the first projects carried out by the Hera Group, 'Safety in the Field', was aimed at achieving this objective. It was also useful to provide training on how to correctly applied the management procedure for accidents, near-misses and occupational diseases, which states that "any employee who becomes aware of a near-miss in the case of serious and immediate danger and who cannot contact the relevant line manager, must take measures to avoid the consequences of such danger". Everyone in the company, regardless of their position, is responsible for promoting and enforcing this rule.

Accidents and near-misses are recorded in the digital database via a user ID and a personal password. The **IT system** used by the main companies of the Hera Group is designed to manage relations with INAIL in a timely, fair and complete manner. After an accident, the prevention and protection service is quickly provided with the information included in the first medical certificate and an exhaustive description of the event, which is can be obtained with an automatic alert from the IT system. An initial analysis of the event is carried out just as quickly to identify the cause of the event. If necessary, a more detailed analysis is carried out to establish the necessary corrective actions. The system ensures that information is fully shared, tracks the entire process and stores its history. To gradually promote the active reporting of hazardous factors, Hera is seeking to develop a **reporting culture**: an integral part of a full-fledged system that excludes, due to its intrinsic value, the liability to punishment of whoever may have made a mistake and whoever has reported errors committed by third parties. The system instead makes sure that replies are given, adopts effective prevention and protection measures, provides information, and enhances the process.

The **people to whom staff members report** accidents are responsible for recording accidents. A manual on the use of the system is available on the company's intranet for all those involved. System updates are followed by revisions of the manual and training meetings. In order to ensure better tracking of safety issues, since 2023 it is possible to enter simple 'security notifications' as well. Moreover, accidents due to a 'behavioural factor' will be further analysed with an approach that considers the additional reasons for incorrect conduct (e.g. being in a hurry, overestimation or underestimation of one's capabilities, underestimated risks) to then be able to identify more effective improvement actions.

In 2023, a **document to assess the risk of harassment** at the workplace was produced. It was designed to provide an additional tool to safeguard the well-being and dignity of all employees in a working environment. The Hera Group believes this protection is essential to promote a healthy,

productive and respectful atmosphere at work. The workplace harassment risk assessment is a proactive and strategic process to identify, assess and mitigate the potential risks of harassing behaviour, discrimination and other forms of abuse within the company. This document aims to:

- identify potential sources of harassment at the workplace, including sexual harassment, bullying, discrimination and other harmful behaviour; assess the likelihood and impact of such risks on the well-being of employees and the health of the company;
- define preventive and corrective measures to effectively manage identified risks, thereby protecting employees and the company;
- promote a corporate culture that fosters mutual respect, inclusion and awareness of applicable regulations.

It is possible to identify work sectors and activities where the exposure to this risk is greater: contact with third parties (customers, suppliers, users) or activities involving frequent contact with users (trade fairs, conferences, call centres, etc.). It is also possible to identify a greater risk of being harassed for female workers, disabled workers or workers who work alone or in isolated or culturally backward settings. Harassment may occur between colleagues, between superiors and subordinate workers or may be carried out by third parties (e.g. users, suppliers, customers, etc.).

The risk can be significantly reduced by adopting a number of organisational and procedural prevention and protection measures. Effective measures to prevent harassment and violence at the workplace can result from the effective adoption of company codes, the use of an organisational model that employs appropriate tools to detect, monitor and manage adverse events, and the implementation of information and training programmes for workers.

A **criminal risk assessment** was carried out in 2023 in accordance with Italian Legislative Decree no. 81/2008. A 'criminal risk' refers to the world of 'man-made security risks' inherent to the broader working environment and not arising directly from the manufacturing process, nor strictly speaking from the company's business, but deriving from a third source.

These risks are classified according to the following macro-categories:

- terrorist attacks and/or acts of vandalism and sabotage (arson, explosions, attacks with heavy vehicles, etc.);
- predatory criminal attacks (theft, robbery, mugging, extortion);
- non-predatory assault on staff (threats and physical assault at the workplace by third parties and likely to endanger the health or safety of staff).

The outcomes of the assessment did not point to any particularly serious risks, but showed the need to consolidate countermeasures already in place and prepare some specific actions to limit consequences in the event of a criminal event occurring on our premises. In relation to the specific criminal threats examined, here below are the suitable prevention and protection measures to keep the risk under control and further reduce it. The guidance applies to all the site clusters where the assets of the companies/business units of Hera Spa and its subsidiary companies have been classified:

- set up and implement security at a corporate level (procedural/organisational measure);
- implement the actions envisaged in the Group Security Plan (centralised access control, intrusion detection and video surveillance systems in the Physical security control room, with 24/7 service coverage and trained personnel);
- implement organisational measures to control vehicles on site or those accessing it (e.g. digital notice board to manage the keys of heavy vehicles on site);
- set up the monitoring and investigation of physical security accidents by the security department;
- set up periodic internal security audits for the whole Group.

A **memorandum of understanding was signed in 2023 between the regional fire brigade headquarters and the Hera Group**. Both parties are aware that the following can have a positive impact on public safety and the safety of operators during emergency technical rescue operations and in all emergency situations: greater shared knowledge of the activity areas and tasks assigned to the regional fire brigade headquarters and of the providers of essential public services (gas distribution, integrated water cycle), an exchange of knowledge between operators of the respective operational rooms, a development of mutual training activities and joint simulations for various scenarios and the definition of shared operational procedures. This is intended to improve operating procedures in order to ensure not only greater protection for users, but also greater safety for its operators and to develop complex technical management standards.

Namely, the following have been identified as the main areas for discussion and collaboration:

- models to manage emergencies in the local area and accidents resulting from breakdowns or leaks on the gas distribution network, fires, floods, etc., with the aim of developing coordination methods between the bodies involved, also in terms of operational rooms;

- emergency management models for work in confined spaces or potentially polluting areas with the aim of sharing intervention approaches, as well as management and coordination procedures, namely to manage dangerous situations for people and the need for their rescue and recovery;
- emergency scenario simulations: evacuation drills following emergencies at Hera premises and plants in the local area with the aim of developing emergency drill models and to carry out integrated exercises.

An initial emergency drill will be carried out in 2024 with the involvement of the Italian Civil Protection Agency and the fire brigade. The drill will be held at one of the Hera Group's most important purification plants in the province of Bologna where there are hazardous substances (e.g. peracetic acid, liquid oxygen, biogas).

[403-9]

ACCIDENT RATES (ALL ACCIDENTS)

	2021	2022	2023
Occupational accident rate (frequency rate)	12.3	12.8	12.6
Number of accidents at work	185	189	189
Severity rate	0.3	1.3	0.3
Rate of occupational accidents with severe consequences (absence for more than six months)	0	0.07	0.07
Number of occupational accidents with severe consequences (absence for more than six months)	0	1	1
Rate of deaths as a result of occupational accidents	0	0.14	0
Number of deaths as a result of occupational accidents	0	2	0
Hours of work	15,085,277	14,749,649	15,015,103

The frequency rate (including commuting accidents and accidents with an absence of less than 3 days) is equal to the number of accidents divided by million hours worked. The severity rate (including commuting accidents and accidents with an absence of less than 3 days) is equal to the number of days of absence due to injury divided by thousand hours worked. The death rate is the number of deaths per million hours worked. For the supplier data, see the section on "[Monitoring accidents at suppliers' workplaces](#)".

After a steady improvement in recent years and particularly in 2021, the Group's accident frequency rate is substantial stable. After 2021, the severity rate with the lowest ever result for the Hera Group also showed substantial stability, as did the number of days of absence.

INJURY RATES (ONLY INJURIES WITH AN ABSENCE EXCEEDING OR EQUAL TO THREE DAYS)

	2021	2022	2023
Occupational accident rate (frequency rate)	10.3	10.5	10.2
<i>of which commuting accidents</i>	2.2	2.9	3.1
Number of accidents at work	155	155	153
<i>of which commuting accidents</i>	33	43	46
Severity rate	0.2	1.3	0.3
<i>of which commuting accidents</i>	0.1	1.1	0.1
Hours of work	15,085,277	14,749,649	15,015,103

The frequency rate is the number of accidents per million hours worked. The severity rate is the number of days of absence due to injury divided by the thousands of hours worked.

An analysis of only major accidents (a period of absence of more than three days) also confirms the above considerations, with a further reduction in the number of accidents and their frequency rate.

The behavioural factor was once again the leading reason for injuries and accounts for over 60% of the days spent on leave.

The healthcare emergency and resulting lockdown led to the introduction of significant organisational changes (extension of remote working and departure from home for operational staff), which had a positive impact on commuter road accidents. At a Group level, commuter road accidents dropped from 42 in 2019 to 23 in 2020 (a year with long lockdown periods) and these values subsequently went up again: 33 in 2021, 43 in 2022 and 46 in 2023. There were 12 road accidents during working hours in 2023, down from 15 in 2022 and far fewer than the 45 in 2019 and 31 in 2020.

In 2022, the Hera Group launched a partnership with the Rubes Triva Foundation, INAIL and the University of Siena to design a digital educational lab using augmented reality technology dedicated to road safety with the aim of reducing these accidents.

A major technological road safety project was launched In 2023, with a focus on operator activity on the road with vehicle traffic. This project involved the installation of illuminated panels with a variable text message on about 380 operating vehicles. In 2023, the panels were installed on about 50% of our fleet and the workers involved completed their training. In 2024, the installation of the panel on all vehicles of the Central Network Department will be completed.

The main goal remains avoiding increases in the occupational accident frequency rate (10.4 is the goal for 2027 and less than 10 by 2030).

ACCIDENT FREQUENCY RATE FOR BLUE-COLLAR WORKERS

	2021	2022	2023
Total	22.9	21.8	23.7
<i>of which network services</i>	<i>18.9</i>	<i>12.0</i>	<i>16.6</i>
<i>of which waste services</i>	<i>25.9</i>	<i>30.5</i>	<i>35.9</i>

The 2021 data refers to Hera Spa, AcegasApsAmga and Marche Multiservizi. Accidents resulting in injuries that caused a period of absence from work of more than three days were taken into account.

Lost time injury rates are higher for blue-collar workers, since they are more at risk of lost time injuries given the nature of the activities they perform. All worker frequency rated increase compared to 2022. In the blue-collar categories, environmental services have the highest frequency rate compared to the other services (35.9), as they feature a larger amount of operations.

For 2024, also with a view of reducing accidents, we are planning to enhance operational coaching for the Prevention and protection service for employees by operational staff and training increasingly focused on workers' participation. This will be done by using out training centre in Ferrara for shared training/coaching with business units on the most serious risks.

The 2023 Sustainability Report prepared by the Utilitatis Foundation on behalf of **Utilitalia**, the Federation of water, environment and energy companies, discusses the sustainability performance of the 164 business units of the 450 associated utility companies. Considering the frequency rate of accidents lasting more than one day, Hera's value (12.8) is 39% lower than the average of the companies analysed (20.4). As for the accident frequency rate of the environmental sector, Hera's value (30.5) is 95% lower than the average of the companies examined (59.5).

With regard to accidents in some of the companies within the Hera Group, compared to 2022 significant improvements in the frequency rate were recorded for Gruppo Marche Multiservizi (from 16.8 to 11.9), Uniflotte (from 16.1 to 11.8) and Herambiente (from 12.9 to 10.9). AcegasApsAmga's frequency rate increased slightly (from 9.4 to 10.0), while the frequency rate of the Hera Comm Group remained essentially stable (from 4.2 to 4.3).

All the events that occurred (injuries and near misses) were examined by corporate structures together with the Prevention and Protection Service. The most complex cases were analysed using the in-depth Systematic Cause Analysis Technique.

In the Group's core companies, 187 corrective actions were identified in 2023, compared to 1,179 investigations into accidents and near misses.

The 2023 results confirm the long-term positive trend in relation to accident statistics at the Hera Group and show that the many actions taken by the Group in recent years are proving to be effective in terms of health and safety. The interventions described above were chosen and implemented with a long-term vision, in order to further reduce the recurrence of accidents, injuries and near misses.

With regard to the accident that occurred in Padua on 14 October 2020, involving two AcegasApsAmga employees (one of whom died) while they were working on a water pipeline, the Padua Public Prosecutor's Office served a notice of investigation regarding three senior managers and three

employees of the company (as well as in relation to external parties). After carrying out the non-repeatable technical examinations, the proceedings are currently at the investigation stage.

As for the accident that occurred in Bologna on 24 July 2020 involving two Hera Spa employees (one of whom died) on board a bulky waste collection vehicle that collided with an underpass, note that the Bologna Public Prosecutor's Office served a notice of investigation relative to four company employees. In November 2022, all four were notified of the conclusion of the preliminary investigation. The Court of Bologna ordered the committal to trial for the defendants. The proceedings are currently in the hearing stage.

With regard to the fatal accident in 2009 that occurred at the waste-to-energy plant of Forlì, following the committal to trial of three Hera Spa employees and one Herambiente employee, the preliminary hearing was held on 3 April 2014. The witnesses and experts were examined at the hearings on 13 May and 30 May 2016. On 31 March 2017, the judge ordered the conviction of the defendants granting suspension of the sentence. On 28 June 2017, the convicted employees filed an appeal against the first instance ruling. In its ruling on 24 October 2023, the Court of Appeal of Bologna declared that the defendants will not be prosecuted.

[403-3] The **occupational health service** is provided within the Hera Group in accordance with the requirements of Section 5 (Health monitoring) of Italian Legislative Decree no. 81/2008. Namely, several **company physicians** working in the various geographical areas have been selected and appointed. They have drawn up a health protocol based on the information set out in the health and safety risk assessment document. This document establishes, for each organisational role, which health checks are necessary for monitoring workers' health status and for expressing an opinion on their fitness to carry out the specific task assigned to them.

Medical check-ups for the entire workforce are carried out periodically during working hours. The employer is responsible for planning and for bearing the costs of the check-ups and for any clinical examinations and biological tests considered necessary by the company physician. When provided for by applicable legislation, medical exams are also conducted to make sure that there is no alcohol dependence and that psychotropic substances and narcotic drugs are not used.

The Group's **health monitoring service**, with the exception of the company physician in a coordinating role (selected through fiduciary assignment), is entrusted to a provider by public tender. The selection is made using the criterion of the most economically advantageous offer, i.e. a technical-economic assessment of the proposals submitted in which the technical aspect accounts for at least 70%.

The Hera Group periodically assesses the quality of the service provided by the supplier via specific checklists and periodically organises special technical coordination meetings with the company physicians and with the coordinating physician specifically selected for this purpose. In 2023, all employees for whom a medical check-up had been scheduled were subject to regular health monitoring in accordance with the Group's health protocol.

The **development of electronic health records** for employees was completed in 2021. This makes it easier to manage the health surveillance process and discontinue paper-based document management, thereby streamlining the work of both employees and physicians. The new IT system went live in 2022 and old hard-copy paper health records for the current workforce were digitised.

During the 2020 healthcare emergency, the Group's prevention and protection service, together with the company physicians, coordinated the selection and implementation of the measures for preventing infections and for supporting at-risk workers. A Group protocol to prevent infection was thus developed and drafted, and then shared with the workers' representatives. The prevention protocol is based on an Enterprise Risk Management approach and was constantly updated as the healthcare emergency developed.

The **"Hera cardioprotetta"** project, which provides for the installation of semi-automatic defibrillators (AEDs), continues with the management of 35 semi-automatic defibrillators in place at the Group's main offices. All the AEDs installed have a remote control system to monitor correct operation and the need for preventive maintenance. Our Group has decided to have its employees trained by training centres under the IRC (Italian Resuscitation Council – Italian Group for Cardiopulmonary Resuscitation) and are accredited by the Ministry of Health. Defibrillator operators are all volunteers and once they obtain the certificate they become part of the IRC database. The certificate issued by IRC is valid throughout Europe.

We also kept developing **"Man on the ground"** app, a project launched in 2020 with the aim of developing an IT tool (a mobile app that can be installed on employees' mobile phones) to alert the remote control centre in Forlì, in the event that employees working alone find themselves in an emergency situation and/or they suddenly become ill and fall to the ground. After an initial trial at AcegasApsAmga to test the features of the app and set the parameters of the mobile phone's gyroscope,

in 2022 the app was developed for staff at Heratech laboratories. In 2023 the trial began in the Central Market Department and was further refined in the Central Network Department.

Another important IT project of the Group developed to help improve health and safety conditions for workers is the **EHS PPE solution**. Introduced in May 2020 for Hera and Herambiente, the app with the EHS PPE information system aims to digitise and make the management of personal protective equipment (PPE) and work clothing in the company more transparent. It is available on PCs, tablets, smartphones or free-standing panels at fixed points on the company's premises. So far, more than 1.19 million items of clothing and PPEs have been distributed thanks to the app and more than 17,000 checklists have been completed. Nearly 4,000 colleagues were also involved in training and awareness-raising events. In 2022, the app was also extended to AcegasApsAmga, with an additional 1.2 users having received specific training. It is expected to be rolled out to Marche Multiservizi in the coming years.

[403-4]

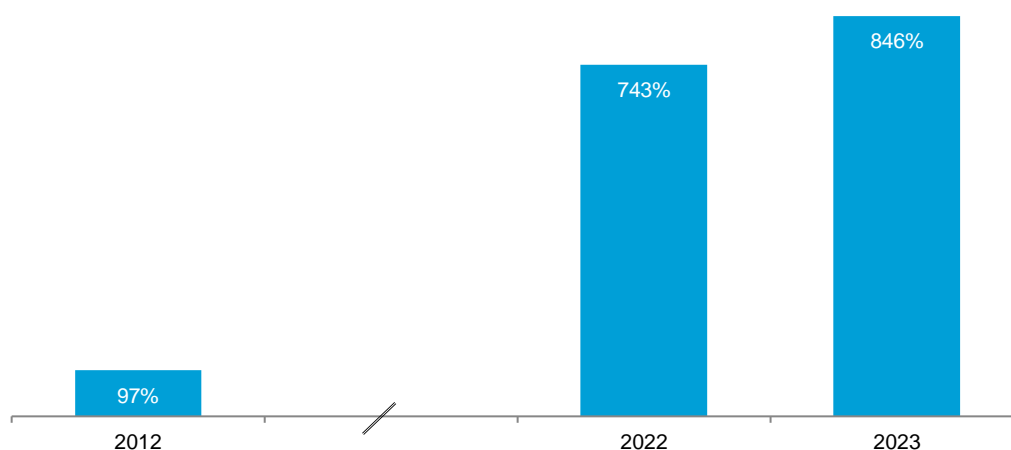
A safety management system is effective when it can count on the **support** and **commitment** of all participants in the company's activities. Employees know their job inside out and know how to make it safer. Worker health and safety representatives get staff involved, so that employees can constructively contribute to the implementation of effective safety management policies and to their continuous improvement, by providing suggestions and feedback. Indeed, consultation is regarded by the Hera Group as an opportunity for managers and supervisors to get feedback from workers and their safety representatives on occupational health and safety.

Workers in the Hera Group are involved in the hazard identification and risk assessment process **after consulting** their representatives (worker health and safety representatives) beforehand. The representatives are convened periodically when occupational health and safety information is shared (e.g. issues such as injury trends, safety improvement projects and health monitoring).

A key topic for the purpose of preventing injuries and improving workplace health and safety conditions is the ability to report, collect and analyse not only injuries but also **near-misses and safety reports**. Near misses are accidental events that could have potentially generated a lost time injury. Their correct analysis and examination prevent the occurrence of lost time injuries. The Hera Group places great emphasis on correctly reporting, analysing and examining near misses.

The trend of near misses is monitored on a monthly basis to check compliance with the specific objectives assigned to the various departments and business units.

CHANGES TO THE NEAR MISS-INJURY RATIO



In 2023, the ratio between near misses reported and lost time injuries that occurred for Hera Group's scope of reporting was 846%. The indicator presents a steadily growing trend, which shows that prevention is an increasingly topical matter at the workplace. Of note in the Group's overall result are the results achieved by Hera Spa (584%), AcegasApsAmga (571%) and by the companies of the Herambiente Group (1,703%). The level of lost time injuries reported in Marche Multiservizi reached 467%.

In 2023, almost 10 near misses were reported for every accident that occurred (1,294 near misses reported in 2023, 1,152 in 2022).

The main kind of near miss analysed by the prevention and protection service concerned behavioural factors (such as distraction), defects in vehicles or equipment and the workplace.

[403-5] A structured process within the Hera Group ensures that all workers receive adequate **health and safety training and coaching**. Namely, safety training focuses on:

- general risk, damage and prevention concepts;
- rights and duties of various corporate parties and supervisory bodies;
- specific risks related to the various tasks and to potential damage;
- the resulting prevention and protection measures to be adopted.

Training is specifically provided to newly-hired staff, after changes in job duties or following technical and organisational changes. It is also periodically repeated when the risks in place change or when there are organisational changes that impact safety requirements.

Training content and duration for workers, safety officers and managers are based on the timescales and methods set out in the State-Regions agreement of 21 December 2011. Training is planned and provided with the cooperation of the company's Personnel Department and the Prevention and Protection Service, as well as with the help of experienced contractors. The Prevention and Protection Service has developed a new format for safety courses for all workers.

The workers who receive periodic and repeated training are:

- Workers in charge of fire prevention and fighting, first aid and emergency management;
- worker safety representatives;
- workers, supervisors and managers.

The injury analysis clearly shows that 60% of accidents are caused by behavioural factors. After working extensively on the technological aspects of safety and on organisation, the human aspect is now key in preventing accidents and **The Culture of Safety** project at the Hera Group is based on this belief.

The project was launched in 2016 with the creation of an innovative training module for safety officers (intermediate-level managers) in the operations area. During this development process – where the focus was on individuals – participants were provided with elements to deal with behaviour, based on real working experience. This allowed all participants to learn more about how to deal with various situations and to understand the importance of being an example to others.

To increasingly encourage a corporate culture of safety, **the Group designed a training course** that involved more than 3,000 workers in the period from 2019 to 2022. This training method has been designed to stimulate the active participation of individuals and to create emotional involvement and interaction among participants also through the use of videos (one of them was made in-house in the Group). The aim is to develop **risk awareness and real leadership in health and safety** throughout the company. Over the next few years, the project will evolve again with the development of new training formats in accordance with the regulatory updates foreseen in the forthcoming Government-Regions agreement. Namely, a format was developed in the second half of 2023 for use from mid-2024. It envisages the use of the gamification approach to improve worker and supervisor involvement. New health and safety training material was also developed for use in e-learning on the MyAcademy corporate platform. Over the course of 2024, in partnership with the operational business units, we are planning to develop in-person training events at our training centre in Ferrara on high severity risks at the workplace: working at heights, working in confined spaces and working in vehicle traffic.

In 2022, we made the most of the regulatory discontinuity brought about by Italian Law 215/2021 (update of the Safety Consolidation Act relating to the role of the supervisor) and carried out an additional project to acknowledge and raise awareness about the role played by the person in charge (team leader, coordinator, shift leader). Indeed, supervisors were identified and targeted training courses were launched to strengthen their awareness of their role and responsibilities.

With these new tools, we intend to **foster change in the company culture** and to question deeply-held beliefs and habits in order to attain a new way approach to health and safety.

Another important building block in the creation of a culture of safety within the Group is the **safety leadership development project designed specifically for managers** launched in 2021 and continued in 2022-2023. The aim of this initiative is to further develop awareness about the role of safety managers, including aspects relating to supervision of the behaviour of the people the supervisor is responsible for.

The activities programmed as part of this project can be grouped into three lines of action:

- **quick individual surveys** on the factors that enable safe behaviours, with the aim of sparking employee interest, holding initial conversations and creating openness to dialogue;
- **interactive webinars** with all company management and focusing on the current state of safety culture within the company; managers were made more aware of the fact they are safety leaders with new habits;

- **safety mentoring stage** for a selected group of managers, including individual meetings with the prevention and protection service.

The project evolved further in 2022 and 2023, with a series of webinars attended by Group managers, followed by the publication of a Yammer channel to share materials and experiences. Throughout the year, as well as assessing the progress of the mentoring already carried out, new safety mentoring meetings were launched to adopt increasingly safer practices, starting with the people organising the work of the Group's people. Of particular note was the cultural event for all safety managers held in July 2023 with the presence of astronaut Maurizio Cheli, who addressed the issues of training and briefing and debriefing.

For 2024, the goal is to continue with educational and awareness-raising initiatives on "The Culture of Safety" through the active involvement of the corporate population in education-training activities. An awareness-raising event on the topic will also be held.

The Hera Group has taken its physical assets into consideration since its establishment, though the growing awareness acquired by considering the increase in malicious actions against wealth assets, the increased sensitivity of national and international institutions, as well as a potential negative impact on its image have led to the decision to implement and enforce a **physical security risk assessment model**. This is designed to ensure the proper identification, measurement, management and monitoring of risks including all measures necessary to prevent and mitigate threats and consequences caused by fires of various nature. This is also the result of an increasingly articulated and complex legal framework (e.g. legislation on strategic plants), as well as the growing activity of technical and regulatory standardisation bodies, which lead to a greater attention and professional approach in this regard.

The purpose of risk management is to preserve the effectiveness and profitability of the Group's businesses along the entire value chain, particularly with regard to occupational safety and environmental effects and risks related to the continuity and security of services and related information. As a result of the above and the results of the risk monitoring performed, an overall technical-management project was drawn up, including an investment plan shared with the business units/companies and approved by the Risk Committee that:

- guarantees a standard minimum level of protection throughout the Group through the application of uniform countermeasures;
 - applies advanced technological solutions in compliance with regulations, standards and good practices;
 - centrally manages contracts (infrastructure, maintenance and services), thereby guaranteeing proper standardisation and cost optimisation for interventions;
- makes the most of synergies, skills and resources within the Hera Group.

The project aims to mitigate the risks threatening Hera Group's assets with a central directorate that: ensures a uniform minimum level of protection through the application of uniform, technologically advanced countermeasures in compliance with regulations and standards; coordinates the activation of contracts (systems, infrastructure, maintenance and services) in order to standardise and optimise procurement costs.

Furthermore, the project harnesses synergies, skills and resources within the Hera Group such as:

- centralisation of the alarm reception point at Heratech-Telecontrol, creating a control room with a view of all alarms/alerts concerning assets to better manage events, as well as fiduciary services;
- the identification of Acantho, a Group company, as the provider of networks and systems and the global contractor for plant installation/maintenance and the activation of surveillance services.

In terms of innovation and digital transformation, the physical security project has identified important synergies with the Group's digital identity project, especially for access control process. This includes the creation of a central software platform to control access to all Group sites through the development of high-security virtual log-in details and the implementation of innovative mechatronic systems to ensure high security standards for access to premises and industrial plants.

7.07 Industrial relations

Numerous trade union meetings on the **organisational changes** initiated in various corporate areas of the Group were held in 2023. Moreover, several processes envisaged by the Group's integrative contract signed in 2022 (e.g. trade union digital notice board, part-time arrangement for parents with children under the age of six, etc.) were launched. Cooperation with employer associations was also very intense in the technical meetings for the **renewal of personnel classifications in the three main national collective labour agreements** of the Group, all of which expire in December 2024:

- national collective labour agreement of the environmental services sector;
- national collective labour agreement of the electrical sector;
- national collective labour agreement of the gas-water sector;

The **company protocol** regulating measures **to counter and limit the spread of the COVID-19 virus** at the workplace established on 15 May 2020 was updated three times throughout 2023, leading to three revisions of the technical document attached to the protocol. These changes became necessary as a result of the ever-evolving legislative framework on the matter. In 2023, the three local committees (Emilia-Romagna, Marche and Veneto-Friuli-Venezia Giulia) met nine times with the goal of implementing and verifying the rules of the protocol.

On 30 January 2023, the joint examination procedure concerning the **transfer from Heratech to Hera Spa of the business unit** responsible for quotes and the execution of large-scale works was concluded with the signing of the relevant minutes.

The minutes were signed on 14 February 2023 to implement the **change of working hours in the billing area**, which became necessary due to the significant increase in volumes to be handled.

On 10 March 2023, the **telephone on-call** service was launched in the **Warehouse Management** facility of the Purchasing and Procurement Department, and minutes to this effect were signed on 10 March.

In March 2023, three separate meetings were held, one for each area of the Group (Hera Spa, AcegasApsAmga and Marche Multiservizi), to illustrate the **2023 Learning Plan**, as envisaged in the Industrial Relations Protocol of the Group. The agreements for the **2023 Financed training plan** were signed on 4 April 2023 and the agreement for the Hera Group personnel on the calculation of the performance bonus indicators for the year 2023 was signed on the same day.

On 30 June 2023, the objectives of the **2023 performance bonus** were defined and a special agreement was signed for the Hera Group to this end.

As of December 2023, in order to **prevent and mitigate computer intrusions and attacks**, a special remote availability service was set up within the Central Innovation Department and the relevant minutes were signed on 22 November 2023.

In December 2023, the **unified trade union representatives** (including safety and environmental workers' representatives) of the gas-water and electricity sectors of the following Group companies were renewed: Hera Spa, Heratech, Inrete Distribuzione Energia, Hera Comm, Hera Comm Marche, Hera Trading, Estenergy, AcegasApsAmga and Marche Multiservizi.

In the course of 2023, nine agreements were signed for changes to nine **plants or new installations of video surveillance systems** across the Group's various sites (Ferrara, Via Caruso and Via Razzaboni a Modena, Pozzilli, Bellaria, Via del Frullo in Bologna, Loria, Forlì, Sassuolo).

Some **important agreements** were signed in the **environmental sector** in 2023:

- on 19 June, an agreement was signed for the transfer of a business unit from Hasi to Acr, with the transfer of 29 employees to the new company and the maintenance of the national collective labour agreement and second-level agreements;
- on 7 July, two important agreements were signed at Biorg, one concerning the gradual recognition of the 14th month's salary to staff with a national collective labour agreement for the chemical industry, and one to establish for the first time the performance bonus in this sector and start moving towards the Group's policies;
- on 12 July, an agreement was signed to pay, for the first time at Recycla, the welfare sum as it is designed for the whole Group;
- on 20 October and 13 November, agreements were signed to define all the working hours in Aliplast's two main plants (Treviso and Novara);
- on 31 October, the agreement on the revision of the reimbursement for driving licence renewal costs for staff with the environmental national collective labour agreement was signed;
- several meetings were held with regional trade unions on the subject of the temporary business group formed by Hera Spa, Consorzio Stabile Ecobi and Brodolini, as provided for by the national collective labour agreement and the protocols signed.

As for **AcegasApsAmga**, on 30 January 2023, with a view of further integrating processes and operating methods, an agreement was signed to start the single shift of the technical call centres of AcegasApsAmga and Inrete Distribuzione Energia. On 15 February 2023, an agreement was also signed with the trade unions of the environment sector concerning the use of the DST waste system on dedicated corporate waste collection vehicles in Padua and Trieste. On 13 April 2023, in order to complete the process of standardising the processing of meal vouchers with the other companies of the Hera Group, an agreement was signed to supplement the previous minutes on the agreement of 5 November 2020.

With reference to **Hera Servizi Energia**, following the merger by incorporation of Hera Servizi Energia Srl into AcegasApsAmga Servizi Energetici, a single agreement was signed on 24 July 2023 to define profitability and productivity indicators for 2023. At the same time, a process was undertaken to standardise various institutions and operating methods in order to achieve greater efficiency and productivity in the local areas and domain in which Hera Servizi Energia operates, as well as to improve consistency at an organisational level.

As for **Marche Multiservizi**, the following agreements were signed in 2023:

- 9 January, agreement to change the working hours of operational staff in the networks department;
- 15 March, agreement on company shutdowns in 2023.

With regard to **Acantho**, an agreement was signed on 14 April 2023 for the finalisation of the performance bonus indicators for 2022, and, in line with the agreements reached at a Group level, a supplementary company agreement was signed on 19 July 2023 to define the new productivity criteria for the 2023 performance bonus. On 4 September 2023, the joint examination procedure concerning the merger by incorporation of Asco TLC into Acantho was completed with the signing of the relevant minutes.

Networking activities between the industrial relations facility, third-party companies, associations and professional firms were strengthened throughout 2023, thereby ensuring continuous updates also with reference to developments outside the Group. As usual, internal awareness-raising and training on issues of common interest to the human resources professional family also continued, as well as consultancy and cooperation activities with other management offices on labour law issues.

On 28 November 2023, in advance in relation to the expiry of the Utilitalia national collective labour agreements applied within the Group and the expiry of the corporate supplementary agreement, national trade unions requested a negotiating table on various topics such as contractual limits and the industrial relations protocol, the procurement protocol, staff, professional development, remote working, vehicles at home with destination on the worksite, working hours, and health and safety. The company and trade unions subsequently scheduled a series of in-depth meetings starting in December 2023.

OPEN-ENDED CONTRACT WORKERS WHO ARE TRADE UNION MEMBERS (BREAKDOWN BY POSITION)

Number	2021	2022	2023
CGIL	2,008	1,895	1,836
CISL	665	648	691
UIL	547	555	582
FIADDEL	158	144	152
CISAL Federenergia	27	30	26
FISI	0	13	3
ADL	8	11	10
USB	12	11	4
UGL	8	9	6
FEDERMANAGER	8	7	6
Base union	7	4	3
Base confederation	4	3	4
SNALV	3	3	1
CONFIAL	1	2	1
Total	3,456	3,335	3,325
Percentage of workers at 31/12	38%	36%	35%

The figures do not include Aresgas, a company where 1% of the Group's employees work.

A total of 35% of the Group's workers with an open-ended contract are members of a union: the percentage is around 1% less compared to 2022.

OPEN-ENDED CONTRACT WORKERS THAT ARE MEMBERS OF UNIONS (BREAKDOWN BY POSITION)

%	2021	2022	2023
Middle managers	14%	14%	14%
White-collar workers	34%	32%	31%
Blue-collar workers	49%	48%	46%
Total	38%	36%	35%

The figures do not include Aresgas, a company where 1% of the Group's employees work.

With reference to the position held, the trade union membership rate decreased for white- and blue-collar workers. The percentage remains unvaried for middle managers.

HOURS OF STRIKE

Hours	2021	2022	2023
Total strike hours	16,356	2221	5501
Strike hours, per capita	2.0	0.3	0.6

These figures do not include the following companies: Aresgas, Biorg, Etra Energia, F.lli Franchini, Macero Maceratese, Recycla, Vallortigara Servizi Ambientali, Wolmann. A total of 3% of the Group's employees works in these firms.

Below is a summary of the main strike initiatives for 2023:

- national general strike called by USB, CUB and COBAS for all public and private categories, excluding the energy sector, for the whole day on Wednesday, 8 March 2023. The strike in question was proclaimed to protest against femicide and violence against women, against job insecurity and other grievances;
- a national strike declared by CUB, COBAS and FISL for the whole day on 26 May 2023 for all sectors except for transport. The strike was later called off by CUB and COBAS but maintained by FISL against vaccines and the government's Covid-19 policies;
- a national strike for all public and private sectors, called by SGB, SICOBAS and CUB, for the entire day on 20 October 2023 to defend public health, against war and the financing of war, against the abolition of the citizenship income, against job insecurity and for the minimum wage, and the high cost of rent;
- a national general strike in the environmental hygiene sector called by trade unions CGIL and UIL for 17 November 2023. The strike in question was called to protest against the government's economic policies also by trade unions CGIL and UIL of the Marche region for all sectors;
- a general strike for the whole of northern Italy called by CGIL and UIL for 24 November 2023 for all private and public sectors, excluding environmental services. The strike in question was held to protest against the government's economic policies. For the same day, a national strike in the environmental hygiene sector was called by COBAS and CUB because of organisational changes in environmental services within the national collective labour agreement.

[2-27]

LITIGATION WITH WORKERS

Number	2021	2022	2023
Litigation cases at the close of the year	18	22	18

There were 18 **cases pending** against workers in the Group at 31 December 2023, down by four cases compared to 2022.

The **disciplinary measures** taken against Group employees amounted to 243 in 2023, in compliance with applicable national labour agreements: they involved **oral or written reprimands** (68 cases), **salary deductions** and **temporary suspensions from work** (163 cases, 96 of which were disciplinary measures for fines without a penalty for more than four hours' work compensation) and 12 **dismissals**, one of which with notice and 11 without prior notice.

8. SUPPLIERS

8.01 Objectives, performance and targets

What we said we would do	What we did	SDGs	Progress*
Qualification, selection and evaluation of suppliers			
Supplier monitoring with multifunctional teams (corporate social responsibility and safety): in 2023, carry out more than 30 audits at supplier facilities (offices and construction sites) (47 in 2022).	Monitor suppliers' corporate social responsibility towards their employees: over 40 evaluation questionnaires collected and 41 supplier audits carried out (offices and work sites) in 2023. (see p.377)	8	●
Continue assigning a significant score to aspects of environmental and social sustainability in tenders using the criterion of the economically most advantageous bid.	39/100 average score given to aspects of sustainability in 2023 tenders using the criterion of the economically most advantageous bid. (see p.286) Selecting suppliers: tenders awarded adopting the most economically advantageous bid method)	8, 12	●
Begin monitoring suppliers' "ESG maturity" rate, by launching the new eProcurement portal, through a dedicated questionnaire during the phase of supplier qualification	Suppliers' "ESG maturity" rate monitoring begun, including through a dedicated questionnaire during the supplier qualification phase on Hera_Pro. During the second half of the year, a response rate of more than 50% with over 2,000 suppliers mapped: 20% showed a medium-high rate of maturity (over 40% among main suppliers). (see p.278)	8, 12	●
More than 10.5% of the value of procurements in 2023 with circularity criteria (10.4% in 2022), through the application of the Guidelines for Circular Procurement and the related Operational Instruction defined in 2020.	10.5%, the value of procurements in 2023 with circularity criteria. (see p.378)	8,12	●
Contract management			
Analyse all accident events reported by service and work providers of the Hera Group and report on the related accident rates.	All accident events reported by service and work providers analysed: 252 accidents communicated (vs 284 in 2022) and 22.3 frequency rate (vs 22.8 in 2022).(see p.325)	8	●

* ● Result achieved or in line with planning; ● Result with slight variance compared to planning; ● Result with significant variance compared to planning.

What we will do	SDGs
Qualification, selection and evaluation of suppliers	
Monitor suppliers' corporate social responsibility towards their employees: in 2024, continue to carry out systematic audits at the supplier facilities (offices and construction sites) held to be most critical.	12
Continue assigning a significant score to aspects of environmental and social sustainability in tenders using the criterion of the economically most advantageous bid.	8
Launch a "capacity building" programme to incentivise improvement in suppliers' "ESG maturity" and in technical-implementation and qualitative skills.	8,12
More than 10.5% of the value of procurements in 2024 with circularity criteria, through the application of the Guidelines for Circular Procurement and the related Operational Instruction defined in 2020.	8,12
Contract management	
Analyse all accident events reported by service and work providers of the Hera Group and report on the related accident rates.	8

8.02 Suppliers

[2-6]

At the end of 2023, the number of **companies supplying the Hera Group with goods, services, professional services and works** through orders or active contracts with consumption came to 4,871 (+21% compared to 2022). Of these suppliers, 57% were qualified to supply services.

SUPPLIERS ACTIVE DURING THE YEAR BY PRODUCT CATEGORY

Number	2021	2022	2023
Goods	1,522	1,478	1,435
Services	2,615	2,579	2,781
Works	435	471	704
Total	4,043	4,034	4,871

Some suppliers may belong to more than one class and, as a result, the sum of the individual items does not correspond to the total number of Suppliers. This data does not include the companies A.C.R., Aliplast, Aresgas, ASA, Biorg, Feronia, F.lli Franchini, Green Factory, Hera Comm Marche, Hera Trading, Horowatt, Macero Maceratese, Marche Multiservizi Falconara, Recycla, Tiepolo, Vallortigara, Wolmann.

The **main activities outsourced** by the Hera Group in the area of waste management services include mechanised waste collection, door-to-door waste collection, street sweeping and washing (manual or mechanised), street bin washing, and the management of sorted waste collection centres. As far as network services are concerned, Group companies mainly use external suppliers to perform highly specialised maintenance and plant engineering activities and metering service activities (readings, closings and openings, etc.). In addition, facility management (global service), commercial call centre and delivery activities are outsourced.

In terms of economic value, in 2023 the Hera Group commissioned purchases coming to **about 2 billion euro**, of which more than 33 million euro went towards purchases from other European countries and 4 million euro from non-European countries (Switzerland, Great Britain, San Marino, USA, and Canada).

The **impacts caused by the Hera Group's supply chain** mainly concern compliance with occupational health and safety standards, aspects of social sustainability and the environmental impact of outsourced activities.

Raw materials procurement

In 2023, the **natural gas** sold by the Group's sales companies was purchased entirely by Hera Trading, which in turn purchased spot gas on the main European hubs and at the virtual trading point (60% from foreign operators).

As far as the **electricity market** is concerned, 33% of sales to end customers on the free and protected markets were covered by bilateral purchases from other operators, and 67% by purchases on the exchange. The way in which electricity is traded, both in the case of exchange purchases and specifically in bilateral trading, does not allow the physical origin of the energy to be traced. For a breakdown of the **energy mix** used to generate the electricity sold by the Hera Comm group in 2023, see the paragraph "Energy transition and renewables sources".

8.03 Qualification, selection and assessment of suppliers

The **supplier qualification and evaluation system** allows for a verification of technical, economic and organisational quality requirements, as well as compliance with environmental, safety, anti-corruption and corporate social responsibility standards, and the application of the Group's Code of Ethics. From 2023, an **ESG questionnaire** was introduced to monitor the level of maturity of qualified suppliers, in order to enhance their awareness about adherence to the principles of sustainable growth oriented to respect for the environment, social sustainability and the adoption of a transparent and responsible organisation.

The vendor management and supplier qualification system

Since 2012, the **vendor management system** has provided a model for supplier self-registration and qualification. It is intended for all companies interested in freely applying to be included in the Hera Group's supplier list, for any product category. During 2023, the old **e-Procurement** vendor management system was replaced by the new supplier portal **Hera_Pro**. The supplier qualification and management model was therefore substantially overhauled to further enhance the technical implementation skills as well as the qualitative and sustainability capabilities of the supply chain.

The new Hera_Pro single supplier portal

Hera_Pro is a **transparent, equal and traceable** tool to qualify for and participate in tenders called by the Hera Group.

The portal is integrated and interoperable with the ANAC platforms, in order to ensure compliance with the requirements imposed by the Public Contracting Code.

Within the qualification area of the supplier portal, companies can access purchasing categories and take advantage of the following services:

- independently update the profiles in question and apply for new product groups within the accredited supplier system, if necessary;
- autonomously update their own register, as well as the schedule for qualification documents;
- check their qualification status and periodic evaluation;
- gain the opportunity to be contacted to submit economic offers;
- gain the opportunity to receive information on the assignment of a contract;
- be kept up-to-date on initiatives of economic interest to the Group

In 2023, the Hera Group negotiated **100% of its commercial transactions** on this platform, anticipating the regulatory obligations imposed on contracting authorities by the Public Contracting Code starting from 1 January 2024.

With a view to the continuous improvement and streamlining of relations with its supplier base, the new portal integrates, alongside the supplier qualification and tender management modules, a "contract management" module with the aim of further digitising interfaces with suppliers and simplify the management of information flows from the qualification phase to the executive phase of contract management. The new Hera_Pro portal makes it possible to manage also the execution phase of contracts, representing an integrated tool that ensures the progressive and complete digitalisation of the management of the entire relationship, thus providing benefits to both suppliers and corporate representatives of the Hera Group.

Indeed, through a single communication channel, the exchange of all the administrative documentation of the contracts outsourced to companies is guaranteed, including the documentation required for the authorisations of subcontracts and/or notification of subcontracts, the digital management of monitoring checklists and performance control, timely reporting and periodic reporting of events classified as accidents or near misses, as well as environmental incidents, referring to each individual contract signed with the Hera Group.

Qualified suppliers benefit from substantial documentation synergy between the different phases of the procedures (qualification, tender and contract execution) to avoid having to resubmit certificates or declarations already made in other phases of the process. Hera_Pro simplifies communications through the use of chats dedicated to the management of each contract and through an automatic notification system, warning suppliers of the approaching expiration of documents subject to a period of validity and requesting said documents to be updated.

Starting from the end of November 2023, the process was made operational solely to procurement contracts signed with individual suppliers, while during 2024 the contracts signed with multi-subject teams will also be managed in Hera_Pro, thereby also allowing the digitalisation of checklists related to the supplier surveillance process and the management of subcontracts.

The new Vendor management and supplier qualification model

With the replacement of the supplier portal, the Hera Group introduced a new Vendor management model in 2023 with the aim of managing the supplier qualification and evaluation process more effectively, while further enhancing the technical implementation skills, quality and sustainability capabilities of the supply chain.

The new model, drafted in line with specific procedures, provides for a graded qualification and monitoring process based on the criticality of the relevant product categories and the introduction of a qualification rating which takes into account criteria based on economic, financial and **ESG maturity**.

To this end, an in-depth **risk assessment** of the purchasing **categories** was conducted based on their **impact** on Hera's **business** and **end customers** as well as the principles of the Group's integrated management system, with a special focus on the relevance of **environment-safety-governance** and **corporate social responsibility**. Critical product groups were identified in order to streamline qualification and **performance monitoring processes** compared to less critical product categories.

With the aim of improving the level of reliability and quality of the supplier list, in addition to the administrative qualification, an evaluation of the technical implementation skills and reputation requirements of the economic operator was introduced, collecting information on certifications, financial soundness and ESG parameters, from which a **qualification rating arises which affects the frequency of invitations to privately negotiated tenders**.

The final result is the assignment of a predictive vendor rating through a score ranging from 0 to 100 which quantifies the possession of certain technical and economic factors, considered essential to determine the reliability of the company and therefore ensure the good performance and outcome of the contractual relationship.

The predictive vendor rating (100 points) takes into account 3 factors:

- 55 points assigned based on parameters aimed at measuring the supplier's ESG maturity level such as: possession of certifications (ISO 14001, ISO 50001, ISO 45001, SA 8000, ISO 37001, ISO 27001, and the legality rating), the preparation of the sustainability report, the possession of a governance system and a 231 supervisory body, the reduction of the accident rate, the percentage of permanent employees, and a synthetic ESG scoring;
- 40 points assigned based on an economic/financial KPI obtained from the balance sheet analysis provided by an external info-provider which measures the supplier's ability to continue its business in the short-medium term;
- 5 points assigned based on possession of ISO 9001 quality certification.

The concise ESG scoring mentioned above is developed on the basis of an optional questionnaire with a further 36 questions, which as a whole can offer a maximum of 4 predictive rating points, with particular reference to the following aspects:

- governance: possession of an ESG score, adoption and formalisation of sustainability policies/strategies, integration of ESG risks into the corporate risk management model, existence of a sustainability department, publication of sustainability results, supply chain monitoring and supplier selection also with reference to ESG issues, legality (anti-corruption, anti-fraud, anti-money laundering, conflict of interest, anti-competitive behaviour, IT security, adoption of a Code of Ethics).
- social: worker health and safety, responsible management of personnel and worker well-being (e.g. working conditions, hours and remuneration, human rights and child labour, diversity/inclusion/equal opportunities, welfare, smart working, listening channels, etc.), professional development and training, recruitment and retention of workers.
- environment: environmental impacts, pollution, climate change, energy saving, renewable energy sources, greenhouse gas emissions, circular economy, volumes of plastic used and waste produced, management of water resources.

In 2023, responses to the optional questionnaire were collected from over 2,000 suppliers (over 50% of qualified suppliers). Of these, **20% showed a medium-high total ESG Maturity Level** responding with at least 25% affirmative responses. As regards only the main 200 suppliers of the Group, also in this case the response rate was around 50% and over 40% of the respondents displayed a medium-high maturity.

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Among the numerous criteria identified for the qualification and selection of new suppliers, the following examples are finally confirmed for their relevance in the environmental and social areas:

- declaration of acknowledgment and acceptance of: Hera Group Code of Ethics, Model for the Prevention of Corruption; General Regulations for Quality-Safety-Environment-Energy and Social Responsibility for contracting companies and/or self-employed workers operating within the Hera Group; Quality and Sustainability Policy; Personal Data Protection Policy;
- adherence to workplace safety obligations established by Italian law;
- presence of **disadvantaged employees** in the company workforce vis-à-vis the total;
- registration in the regional register of social cooperatives;
- declaration of broad knowledge of the principles and **regulations concerning Corporate Social Responsibility standards**, and commitment to comply with the principles and requirements included therein and to participate in monitoring and verification activities carried out by the Hera Group, and to assess any corrective measures required;

- possession of the following **system certifications**: ISO 9001; ISO 14001 (or, alternatively, EMAS registration); ISO 45001; SA 8000; ISO 50001; ISO 37001 (as of 2021);
- compliance with current legislation with regard to the right to work of the people with disabilities;
- possession of a certificate of registration in the national register of environmental managers, related to the activity involved in the **product group**, where required;
- possession of registration in the list of suppliers not subject to mafia infiltration attempts (so-called white list) for suppliers belonging to the product groups falling within the scope of activities at particular risk of mafia infiltration; otherwise, presentation of a formal commitment to apply for this registration.

Moreover, supply contracts prepared by Group companies contain termination clauses in the event of non-compliance with the Code of Ethics shown by suppliers.

The Hera Group, as part of its corporate social responsibility, ensures the constant control of the **regularity of INPS/Inail contributions** at the appropriate Single Social Security Office and the Cassa Edile for all active suppliers found in the Hera Group's registry, including bodies grouped together in temporary business associations (mandatory and mandating companies), consortia and specific contractors and sub-subcontractors relating to the individual document for the purchase of services (order and/or contract).

Furthermore, after a contract is awarded, **the possession of the requirements declared in the tender** at the relevant bodies: judicial records, compliance with Law No. 68/1999 on the disabled, tax regularity, the Anti-Mafia Database and the ANAC Register are checked, involving a total of over 6,000 verifications per year.

In order to ensure company operations, and only in exceptional cases, the Group provides for the option of making exceptions to the qualification procedure.

The rotation system for suppliers invited to tenders

The qualification process of the Hera Group's suppliers, managed by the Purchasing and Procurement Department of Hera Spa, ensures that a **single list is established for trusted economic operators** qualified for the procurement of goods, services, professional services and work. Suppliers invited to negotiated procedures are periodically selected from this list.

The existence of a single record of qualified suppliers for the entire Group provides an opportunity in terms of growth for the suppliers themselves, since they are guaranteed the possibility of expanding their business relations across all the product groups for which they have requested and obtained qualification.

An automatic and traceable system based on rotation in inviting suppliers to negotiated tenders has been in place since 2017. Based on a series of parameters, including the number of invitations received, their distribution over time, their score in the performance rating and the new predictive qualification rating, this system provides further guarantees during the process of selecting and rotating suppliers, with the **utmost transparency** and in line with Hera Group guidelines.

The criterion for choosing the suppliers to invite to the tender is therefore based on three factors:

- **predictive qualification rating**: a high predictive vendor rating allows the supplier to move up the invitation ranking more quickly than a supplier with a low predictive vendor rating. A supplier will not be invited to tender if it does not reach the minimum threshold of 25 predictive rating points;
- **vendor performance rating**: suppliers in the critical range are excluded from sub-threshold invitations unless they fall within the qualified ranges, through adequate corrective actions and/or timely improvement plans. A high vendor performance rating allows the supplier to move up the invitation ranking more quickly than a supplier with an average rating;
- **rotation principle**: the rotation principle takes into account the number of invitations received from the i-th supplier in the last 5 years compared to the total number of invitations of the product category. The Invitation Index increases if the supplier has received few invitations and therefore the probability that the supplier will be invited (rotation) increases.

It should be noted that in privately negotiated tenders, in 2023 the Hera Group invited on average over **22 suppliers for each negotiation**, confirming the Group's approach based on open and transparent competition between suppliers in line with the principles of current legislation.

Management and mitigation of risks along the supply chain

At the beginning of 2023, the Hera Group, with the aim of monitoring and mitigating risk in the supply chain, such as service interruptions or a decrease in the quality of services provided by companies, implemented a tool aimed at **segmenting suppliers by risk level**. The main factors taken into account are:

- the **strategic positioning** of the supplier by outsourced volumes and criticality of the product category, impact on the business and end customer of Hera's service, principles of the Group's integrated management system (environment-safety-governance and corporate social responsibility),
- trend of **operating-financial** indicators from external info-provider,
- number, severity and type of open **non-compliances**,
- other information of an organisational/reputational nature that may adversely affect the supplier's performance (e.g.: press reports, communications from trade unions, etc.).

As a result of this analysis, a specific **Vendor Card** is periodically drawn up, which highlights the **level of reliability** and strategic positioning of each supplier, in order to identify the suppliers that are more critical than others and can influence the quality/continuity of the services provided, the operating/financial results, sustainability results, reputation and regulatory compliance of Hera Group companies.

Since April 2023, Vendor Cards relating to the **top 30 most critical suppliers** have been periodically distributed to purchasing managers and company contact persons impacted in the form of a summary report accompanied by a series of recommendations to better address the criticalities that have emerged and the actions necessary to mitigate potential risks (e.g. intensification of monitoring, specific audits, implementation of corrective actions, etc.).

A total of **roughly 250 company contact persons were involved** in 2023, who took charge of the recommendations and ensured the implementation of the suggested actions. In particular, the monitoring of aspects relating to employee management, safety and the environment was intensified, both through field visits on the quality of performance, and on a documental basis through greater control of the transmission and correctness of the required documents.

Finally, **further actions were implemented**, such as the recording of punctual non-conformities, the organisation of specific audits at the sites, or the call for specific actions to remedy the anomalies that emerged (corrective actions).

In 2023, there are about 400 suppliers with significant outsourced volumes, covering 75% of total volumes. Of these, there are **more than 200 suppliers with activities in critical product categories**, representing **more than 50% of total volumes**. Thanks to the tool described above, it is therefore possible to carry out a further segmentation that makes it possible to target risk mitigation actions and even more targeted controls on specific suppliers. There were more than 70 subcontractors that were critical in terms of volume (over 100 thousand euro) and worked on critical goods in 2023.

In the first half of 2023, in addition to the above, **more than 40 CSR assessment questionnaires** were collected from suppliers deemed critical by activity and contract amount. The documents were examined and, for the incomplete or missing parts, clarifications and additions were requested. On the basis of the documents collected, **ten audits were carried out with a focus on corporate social responsibility, all at the suppliers' premises**: in several cases, specific actions were necessary to verify the effective start of the agreed improvement path and the activation of corrective actions. These checks were carried out by employing certified and referenced **third-party auditors**, to guarantee the path of transparency and independence adopted by the Group.

Furthermore, note that in the second half of 2023, monitoring of the level of "**ESG maturity**" of suppliers was started, as foreseen by the new qualification system.

Lastly, **31 additional audits were carried out directly at Hera Group sites** by the Vendor Rating and Assurance structure, together with the Quality, Safety and Environment Department. These monitoring activities complement the periodic audits of the company's contract contact persons, also concerning the proper management of subcontracts/sub-contracts, if any. These audits were selected by focusing on the situations most frequently identified thanks to the **supplier segmentation tool by risk level** mentioned above.

Specific **on-the-job training** sessions were also carried out, aimed at the correct and consistent compilation of checklists at the worksite.

In summary, in 2023 the Hera Group strengthened its risk management along the supply chain, implementing an integrated system articulated on several levels:

- It starts first of all with a **risk assessment of the purchasing product categories** according to the associated level of criticality (high-medium-low), taking into consideration:
 - the impact on the business and on the end customer of Hera's service,

- the principles of the Group's integrated management system (environment-safety-governance and corporate social responsibility).
- Suppliers are included in the Hera Group's list of qualified suppliers:
 - following a **differentiated qualification** process based on the risk level of the merchandise categories (in addition to verification of standard qualification requirements identical for all merchandise categories, request for technical references for all the most critical merchandise groups and specific requirements on certain merchandise categories, such as the White List where necessary)
 - with the attribution of a **predictive qualification rating** that takes into consideration criteria based on
 - **operating and financial soundness**,
 - possession of **quality certifications** (ISO9001),
 - **ESG parameters** based on a **questionnaire** with 11 compulsory questions and a further 36 optional questions to monitor the level of "ESG maturity" of qualified suppliers, also with the intention of raising their awareness of the principles of **sustainable growth** oriented towards respect for the environment, social sustainability and the adoption of a transparent and responsible organisation.
- The **invitation rotation system**, systematically applied to negotiated tenders and taking into account the number of invitations received and their distribution over time, was enriched by the predictive qualification rating and the strengthening of the performance rating, guaranteeing a greater likelihood of invitations to suppliers with a better score.
- During the execution of contracts, continuous monitoring is carried out, consisting of
 - **supplier risk assessment**, identifying those with a higher risk rate due to the criticality of the commodity, volumes managed, non-compliance and other organisational/reputational information
 - **more frequent and targeted checks** on all suppliers engaged in commodities with a high level of criticality and on those with a higher specific risk rate,
 - management of detected non-conformities and related **corrective actions**,
 - **inspections** at company premises with the contribution of **certified third-party auditors**,
 - assignment of a **performance rating** with a decrease in score after the closure of any non-conformities detected, and an increase in the absence of non-conformities.

Suppliers by type of certification

The scope of **purchases from certified suppliers** is impacted by the effect of the requalification campaign launched following the launch of the new Hera_Pro portal and the related new Vendor Management Model. It should be noted that the requalification campaign was managed gradually, giving priority to suppliers with high strategic impact both in terms of the criticality level of the product category and of the volumes managed.

At the end of 2023, 4,001 suppliers were reclassified under the new model, while around 1,500 economic operators were still in the requalification phase, the majority of which were represented by suppliers employed by HSE under the requirements for Ecobonus deduction. Taking into account the consumption generated only by suppliers who completed the requalification (4,001), the amount of purchases from certified suppliers recorded an increase for all certifications: ISO 9001.

The significant proportion of certified suppliers was a consequence of both the **direct actions** undertaken by Group companies, which systematically included in the tenders or in the supplier qualification phase an indication of the **possession of certifications as a requisite** for participation and/or a highly beneficial requisite for the tender. They also reflected the increased sensitivity shown by companies in considering certifications as an element providing greater competitiveness.

PROCUREMENT FROM CERTIFIED SUPPLIERS - VALUE BREAKDOWN BY TYPE OF CERTIFICATION (% OF TOTAL SUPPLIES)

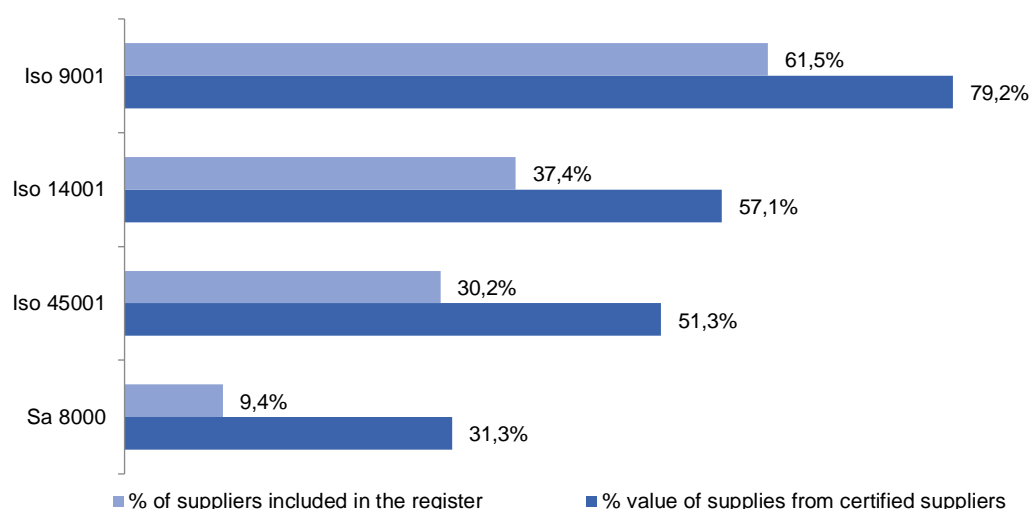
%	2021	2022	2023 pro forma	2023
Quality certification (ISO 9001)	86.8%	86.3%	87.6%	79.2%
Environmental certifications (ISO 14001 - EMAS)	67.2%	67.7%	74.0%	57.1%

%	2021	2022	2023 pro forma	2023
Occupational safety (ISO 45001)	59.4%	60.7%	65.4%	51.3%
Social certification (SA 8000)	38.2%	32.9%	40.6%	31.3%
Total supplies (mn€)	1,199.7	1,365.6	1,391.9	1,981.3

This data does not include the companies A.C.R., Aliplast, Aresgas, ASA, Biorg, Feronia, F.Ili Franchini, Green Factory, Hera Comm Marche, Hera Trading, Horowatt, Macero Maceratese, Marche Multiservizi Falconara, Recycla, Tiepolo, Vallortigara, Wolmann. Intercompany purchases are excluded.

The percentage in terms of the value of contracts awarded to certified suppliers is always higher than the percentage of qualified suppliers having certifications. This point of view also clarifies the effects of systematically requiring possession of certifications in the qualification and selection of suppliers.

PORTION OF SUPPLIES WITH RESPECT TO THE NUMBER OF POOL SUPPLIERS (2023)



Supplier vendor rating, evaluation and monitoring

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[308-2]
[414-2]

Monitoring suppliers, with a focus on respect for the environment, energy efficiency, and quality, safety, prevention of corruption and corporate social responsibility requirements by all parties involved, is carried out over the **entire supply chain**, including the main companies in Temporary Business Groupings (TBGs), consortia companies, subcontractors and sub-suppliers (in the structure of each contract/order). The system, aimed at ensuring greater consistency and fairness in the evaluations carried out Groupwide, is guaranteed by:

- a verification of the qualification requirements carried out by the vendor management system;
- ongoing checks by the corporate contact persons of the contract (who are in turn subjected to internal audits on compliance with procedures);
- inspections at the companies' premises by a third-party certified person, supported by the Vendor rating and assurance department;
- internal audits.

By overseeing the various **monitoring activities and a detailed analysis of the reports generated**, it is possible to improve procurement governance, as well as to extend to all companies involved in the execution of the contract the control mechanisms provided for by the Group's procedures, thereby supervising the entire chain of economic actors involved in the performance.

Detailed audits by contractual contact persons and/or construction managers, carried out directly or through their assistants, make it possible to monitor the contractual performance of suppliers in the key areas of quality, safety and the environment, energy saving, the prevention of corruption and corporate social responsibility, thus ensuring a proper **periodic evaluation** of qualified suppliers with active contracts. These audits take place for the **supply of goods** at the time when they are received, for services and works during the progressive performance of the services, by filling out and signing specific **monitoring checklists**, which are also related to the controls carried out on all subjects involved

(including principals, executing companies, subcontractors and sub-suppliers, if any). The **number of inspections** for services and works is defined on the basis of the contractual amount, the duration of the contract and the criticality in terms of quality, safety and the environment and corporate social responsibility of the services monitored.

With the development of the **new supplier qualification and monitoring model**, by the first half of 2024 the **minimum** number of checks recorded will be modified based on the criticality of each individual **product category**: more frequent for critical categories (quarterly) and then progressively lower (six-monthly) up to a minimum annual registration for non-critical product categories. If one or more anomalies occur, the contract manager or his assistant will always have the monitoring checklists available to complete.

Any “non-conformities” detected, always preceded by the checklist rapidly sent to the supplier, to record any applicable counter-findings, are classified on the basis of the major certifications obtained by the Hera Group: ISO 9001 (quality of performance), ISO 14001 (respect for the environment), ISO 45001 (respect for safety), ISO (respect for energy regulations), ISO 37001 (anti-corruption), in addition to guaranteeing corporate social responsibility, and thus make it possible to ensure a rapid and correct periodic assessment of qualified companies.

NON-CONFORMITIES IDENTIFIED BY TYPE

Number	2021	2022	2023
Observation	100	117	152
Relatively insignificant non-compliance	91	69	75
Serious non-compliance	271	238	225
Extremely serious non-compliance	269	195	213
Total	731	619	665

This data does not include the companies A.C.R., Aliplast, Aresgas, ASA, Biorg, Feronia, F.Ili Franchini, Green Factory, Hera Comm Marche, Hera Trading, Horowatt, Macero Maceratese, Marche Multiservizi Falconara, Recycla, Tiepolo, Vallortigara, Wolmann.

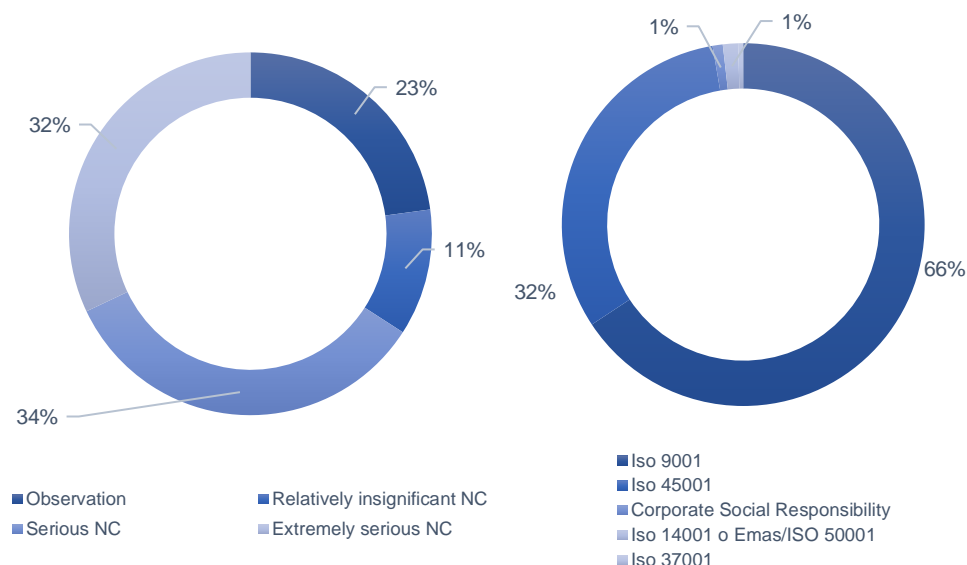
NON-CONFORMITIES IDENTIFIED BY CERTIFICATION

Number	2021	2022	2023
ISO 9001	443	397	437
ISO 45001	254	208	210
Corporate Social Responsibility	6	4	6
ISO 14001 o EMAS/ISO 50001	28	10	9
ISO 37001	0	0	3
Total	731	619	665

This data does not include the companies A.C.R., Aliplast, Aresgas, ASA, Biorg, Feronia, F.Ili Franchini, Green Factory, Hera Comm Marche, Hera Trading, Horowatt, Macero Maceratese, Marche Multiservizi Falconara, Recycla, Tiepolo, Vallortigara, Wolmann.

Across the Group, **665 non-conformities** were detected in 2023, up slightly from the previous year (+7%). Of the total, 528 non-compliances (roughly 79%) were concluded within 31 December 2023. 66% of the non-conformities turned out to be serious or extremely serious, down slightly from the previous year (70% in 2022). Each non-conformity that was recorded and concluded corresponded to a decrease in the supplier's score, in relation to the severity of the non-conformities detected.

NON-CONFOMITIES IDENTIFIED (2023)



In addition, in 2023, corporate social responsibility inspections continued to be carried out at suppliers' premises, as outlined in the case study "The supplier monitoring plan with a focus on social responsibility". In some cases, partially non-compliant behaviour was found and quickly noted, after which **corrective actions were rapidly introduced**.

On a quarterly basis, suppliers with active contracts received an **update of their score** in the vendor rating system for each qualifying product category, with an increase reflecting the absence or presence of anomalies during the period.

This updated evaluation can always be consulted and assessed independently by the supplier in its reserved area of the supplier portal. The scores are divided into **three categories** that contribute to the rotation, selection and invitation, by individual buyers, of suppliers qualified for a specific class of merchandise concerned by the tenders under private negotiation carried out by the Hera Group. Suppliers in the critical category are **excluded from invitations** unless they subsequently fall, thanks to corrective actions and/or rapid improvement plans, into the qualified categories.

Category	Scoring range	Reliability
Green area	75 - 100 points	medium reliable - very reliable
Yellow area	60 - 74 points	sufficiently reliable - moderately reliable
Red area	< 60 points	critical

The **supplier assessment monitoring and management model** ensures that **bonuses** are granted on a quarterly basis in the absence of anomalies, and that decreases are calculated and allocated when the analysis of **anomalies** (nonconformities) is concluded and specific corrective actions are defined.

With the development of the new supplier qualification and monitoring model, **the rating calculation system will also be modified by the first half of 2024**. The system will be updated to further enhance supplier performance and mitigate the risk associated with supply chain.

Thanks to an ongoing revision and standardisation of the monitoring checklists (published on the company's intranet, always available to compilers), an increasing consistency of the content of the controls carried out and the fairness of the assessments made at Group level is guaranteed. This assigns, in a standardised way, a decrease in the score given to specific suppliers (including principals, contractors, subcontractors/sub-subcontractors) responsible for non-compliant behaviour, which can be detected by the field monitoring documentation (checklist) compiled by contract managers or their delegate. Suppliers incurring serious or very serious non-compliances may be subject to temporary suspension from new invitations to tender for a period ranging from three to six months. **No suspensions were carried out in 2023.**

Selecting suppliers: tenders awarded adopting the most economically advantageous bid method

Since 2008, the Hera Group's Procurement Guidelines have favoured the most economically advantageous bid method as a criterion for evaluating bids using sustainability criteria consistent with the principles of the Code of Ethics and in compliance with current legislation on public contracts.

Within the areas identified by the Guidelines and, more specifically, **respect for the environment, social commitment, performance quality and economic value**, sustainability criteria have been defined based on the experience gained in managing contracts tendered using the most economically advantageous bid method and the applicable regulations, in line with the Group's objectives. For each business area, **a minimum number of sustainability criteria** to be considered when choosing a supplier have been established, based on the tender's economic value and criticality (evaluating the tender's impact on the environment, workplace safety, the quality of the service provided to customers, the duration of the contract or the amount). The **choice of sustainability criteria** falls under the responsibility of the Purchasing and Procurement Department of Hera Spa and the Purchasing and Procurement Departments of AcegasApsAmga and Marche Multiservizi, which, in agreement with the corporate representatives concerned, choose the criteria to be adopted for the type of tender, the weight given to the sustainability criterion in relation to the tender in question, and the assessments with respect to previous tenders and their results. The Purchasing and Procurement Department of Hera Spa may leverage technical support from the Shared Value and Sustainability Department and the Quality, Safety and Environment Department in the choice of criteria.

The main criteria adopted include: management of atmospheric emissions and noise; preventing, reusing and recycling waste; energy efficiency; reducing the hazardous substances used; reducing water consumption; adopting a company's own Code of Ethics; inclusion of disabled and disadvantaged workers; accident prevention and safety training (social commitment); the quality of materials, tools and equipment; professional qualifications and skills and technical performance and output. In 2019, additional criteria related to the **circular economy** were introduced, as detailed below in this chapter and in the case study dedicated to the application of circular economy principles along the supply chain.

Note that as part of Hera Spa's **ISO 50001** certification process, it has been stated in corporate procedures that any business unit which so requires, if it is found that the outsourced activity or asset has a significant impact on the Group's energy consumption, must proceed with an assessment of the energy efficiency requirements on the basis of an Energy Management document used for the assessment of the energy impact.

The new **Procurement Code**, published by Legislative Decree 36/2023 and effective as of July 1, 2023, in continuity with the previous Procurement Code Legislative Decree No. 50/2016 and its subsequent amendments, confirmed the mandatory and exclusive use of the award criterion according to the economically most advantageous tender method in certain cases (Art. 108/2nd paragraph), such as labor-intensive services (such as cleaning services), engineering, architecture or other technical and intellectual services with an amount of 140,000 euros or more, and services and supplies with an amount of 140,000 euros or more that are characterized by significant technological content or have an innovative character. The Hera Group has actually anticipated by at least ten years these virtuous practices in the selection of suppliers in the procedures governing procurement.

PUBLIC TENDERS USING MOST ECONOMICALLY ADVANTAGEOUS BID METHOD

	2021	2022	2023
Number of public calls for tenders published	72	68	94
Number of public calls for tenders published with the most economically advantageous bid method	38	44	53
Value of public tenders published (mn€)	426.5	575.1	892.4
Value of public tenders published with the most economically advantageous bid method (mn€)	336.1	546.1	777.2
Value of tenders with most economically advantageous bid method (% of total value of tenders)	78.8%	95.0%	87.1%
Average score assigned to aspects of sustainability in public tenders assigned during the year	38.4	40.6	40.0

This data does not include the companies A.C.R., Aliplast, Aresgas, ASA, Biorg, Feronia, F.Ili Franchini, Green Factory, Hera Comm Marche, Hera Trading, Horowatt, Macero Maceratese, Marche Multiservizi Falconara, Recycla, Tiepolo, Vallortigara, Wolmann. Intercompany purchases are excluded.

In 2023, 94 public tenders were published, with a total budget of approximately 892 million euro: of these, 53 tenders were carried out following the **most economically advantageous bid method**, amounting to a total of 777 million euro or 87% of the overall value of the tenders issued. Over the last three years, the value of public tenders with the most economically advantageous bid has constantly increased, as has the percentage impact on the total value of public tenders.

The **average score assigned for aspects of sustainability** in public tenders was **40** (unchanged compared to 2022).

The Group's goal is to continue to assign a relevant score to environmental and social sustainability aspects in tenders conducted with the most economically advantageous offer.

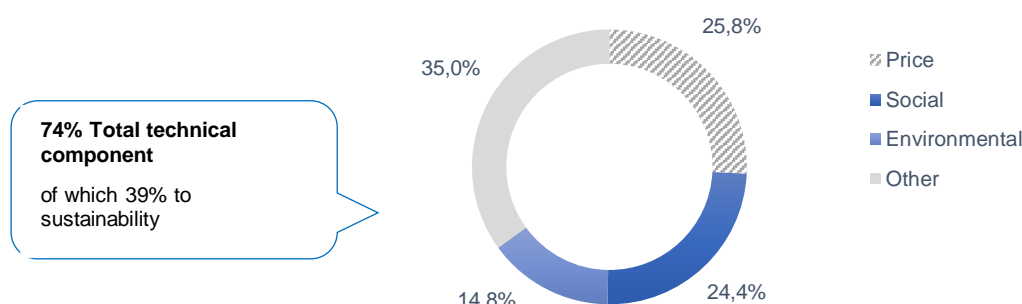
TOTAL TENDERS WITH MOST ECONOMICALLY ADVANTAGEOUS BID METHOD

	2021	2022	2023
Value of total tenders to which the most economically advantageous bid method is applicable (mn€)	681.0	831.4	982.3
Value of tenders with most economically advantageous bid method (%)	65.1%	67.7%	65.8%
Value of the most economically advantageous bid method with sustainability criteria (%)	98.6%	97.9%	99.6%
Value of tenders with most economically advantageous bid method related to circularity criteria (%)	12.5%	13.8%	14.3%
Average score assigned to aspects of sustainability in tenders with most economically advantageous bid method	37.8	39.2	39.2
<i>of which average score assigned to aspects of circularity in the most economically advantageous bid method</i>	8.3	13.2	10.2

This data does not include the companies A.C.R., Aliplast, Aresgas, ASA, Biorg, Feronia, F.Ili Franchini, Green Factory, Hera Comm Marche, Hera Trading, Horowatt, Macero Maceratese, Marche Multiservizi Falconara, Recycla, Tiepolo, Vallortigara, Wolmann. Intercompany purchases are excluded.

Extending the analysis to all tenders and not only to public tenders, across the Group in 2023, **66% of tenders were awarded using the most economically advantageous bid method**: in terms of value, **99.6%** of these were awarded including sustainability criteria among the technical criteria. The average score assigned to the technical component was 74 points out of 100, of which **39 points were related to sustainability criteria: 15 related to environmental aspects** (of which more than 10 to circularity aspects) and **24 to social aspects**.




TOTAL TENDERS WITH THE MOST ECONOMICALLY ADVANTAGEOUS BID METHOD: SCORES AWARDED TO THE VARIOUS COMPONENTS (WEIGHTED AVERAGE OUT OF THE AMOUNT) (2023)






The Group intends to continue to assign a significant **score for aspects of environmental and social sustainability** in tenders issued in line with the most economically advantageous bid method.

In terms of the importance and relevance assigned to sustainability criteria in the evaluating offers, the tenders having a value of more than 10 million euro awarded in 2023 are listed below:

Type	Description	Local area	Amount (mn€)	Duration (years)	Technical component	Sustainability
Open procedure tender	Road resurfacing	ER	33	1	70	<p>Environmental (7, of which 7 on circularity): ISO14001 certification, Use at construction sites of New Jersey median barriers made from secondary raw material, Use at construction sites of plastic delimitation net made from secondary raw materials, Use at construction sites of warning cones made from secondary raw materials, Use at construction sites of signs made from secondary raw material.</p> <p>Social (45): Accident rate trend, ISO 45001 certification, SA 8000 certification, ISO 37001 certification, Legality rating, First aid training in the last three years, Fire safety training in the last three years, Training for Supervisor qualification in last three years, Street sign training in the last three years.</p> <p>Other technical aspects (18)</p>
Restricted procedure tender	Supply of containers with metal tanks of different volumes, which can be emptied using mechanical equipment, for differentiated and undifferentiated MSW collection.	ER	30.8	2	70	<p>Environmental (6, of which 6 on circularity): ISO50001 certification, ISO14001 certification</p> <p>Social (12): SA 8000 certification, ISO 45001 certification, Absence of gender discrimination reports, Presence of the Disability Manager in the company staff</p> <p>Other technical aspects (52)</p>
Open procedure tender	System integration services for the execution of IT activities and projects	ER	26.6	3	100	<p>Environmental (2, of which 2 on circularity): corporate certifications (ISO 20001, ISO 270001, ISO 45001, ISO 14001, ISO 37001, SA 8000)</p> <p>Social (21.5): total number of employees in the area of system integration, governance and management, transfer of know-how and innovative solutions, a Code of Ethics is available</p> <p>Other technical aspects (76.5)</p>
Open procedure tender	Municipal waste transport services performed with roll-off vehicles and loader vehicles	ER	23	4	70	<p>Environmental (38, of which 10 on circularity): Average age of the vehicles, environmental impact of the vehicles offered, vehicle power supply of the vehicles offered by the competitor (electric/methane/LPG)</p>

Type	Description	Local area	Amount (mn€)	Duration (years)	Technical component	Sustainability
						Social (6): SA 8000, ISO 45001 Other technical aspects (26)
Open procedure tender	Design and execution activities of works relating to a system called "BUBANO Plant Site"	ER	21	1	70 	Environmental (21, of which 21 on circularity): material circularity - commitment to the use of specific "steel" materials, material circularity (starting with recovery of concrete), installation of reduced loss transformers, technical improvements "pump motors - efficiency, technical improvements "medium voltage switchboards". Other technical aspects (49)
Open procedure tender	Manual and mechanised sweeping service including ancillary services and other environmental services to be carried out within the municipality of Trieste	TR	18	4	80 	Environmental (41, of which 35 on circularity): Minimum level of vehicle emission pollutants (greater reward for electric and hybrid vehicles), Sending waste from street sweeping to a recovery plant, Environmental impact of vehicles, Recharging electrical equipment used in the tender with energy produced from renewable sources, Ownership of a supply contract with electricity from 100% renewable sources, ISO 50001 energy management system certification, feasibility study of a design for the containment of the use of water resources in carrying out the tender activities as well as the recovery and possible reuse of said resources. Social (14): Accident rate trend, ISO 45001 certification Health and safety management system, SA 8000 social responsibility certification, Horn installed on vehicles Other technical aspects (25)
Restricted procedure tender	Customer service - back office	ER-TR	16.8	2	80 	Social (7): ISO 45001 certification, SA 8000 certification, continuity of service with the remote control of operators. Other technical aspects (73)

Type	Description	Local area	Amount (mn€)	Duration (years)	Technical component	Sustainability
Open procedure tender	Municipal waste collection services in the Bologna area and province, and in the municipalities of Firenzuola, Marradi and Palazzuolo sul Senio	ER	15.8	4	70 	<p>Environmental (30 of which 8 on circularity): Average age of the vehicles, environmental impact of the vehicles offered, vehicle power supply offered (electric/methane/LPG)</p> <p>Social (6): SA 8000, ISO 45001</p> <p>Other technical aspects (34)</p>
Privately negotiated tender	Municipal waste transport services performed with roll-off vehicles and loader vehicles, in the municipalities of Modena and Provincia	ER	15.4	4	70 	<p>Environmental (38, of which 10 on circularity): Average age of the vehicles, environmental impact of the vehicles offered, cataloguing, vehicle power supply offered (electric/methane/LPG)</p> <p>Social (6): SA 8000, ISO 45001</p> <p>Other technical aspects (26)</p>
Negotiated procedure tender	Supply and installation of a Fume Purification System (FPS) to be installed at the Padua waste-to-energy plant	TR	14	4	70 	<p>Environmental (56, of which 56 on circularity): Electricity consumption at operating conditions, Optimisation of slaked lime consumption, Optimisation of sodium bicarbonate consumption, Consumption of activated carbon, evaluated as an average day and measured in mg/Nm³ of fumes, Consumption index of reagents such as slaked lime, sodium hydroxide and ammonia solution</p> <p>Social (1): BIM Specialist Function in the Technical Area</p> <p>Other technical aspects (13)</p>
Open procedure tender	Turnkey construction of the new primary substation for the transformation of electrical energy called "M. Baldaccini" located in Madonna dei Baldaccini	ER	12.9	1	70 	<p>Environmental (16, of which 16 on circularity): use of gas with low environmental impact to replace SF₆ gas for high voltage equipment, ISO14001, ISO 50001</p> <p>Social (21): Legality rating Accident rate trend, ISO 45001, SA 8000, additional employees made available for carrying out the work, in possession of a PES qualification (expert person) pursuant to the CEI EN 50110 standard, with the ability to perform high- and low-voltage work.</p> <p>Other technical aspects (33)</p>

Type	Description	Local area	Amount (mn€)	Duration (years)	Technical component	Sustainability
Privately negotiated tender	Replacement of company canteen service for Hera Spa employees through the provision of meals, accessible through the use of the employee's company badge, in affiliated establishments	ER-TR	12.8	3	65 	Social (10): Additional partner establishments with menus suitable for people with Celiac Disease Other technical aspects (55)
Open procedure tender	Implementation contract for the assignment of the replacement service of mechanical meters with electronic devices and electronic meters with NG meters, on the gas metering unit (GMU) Groups, distributed in the areas managed by Group companies	ER-MA	11.4	2	70 	Environmental (7, of which 7 on circularity): Certificazione ISO14001, Vehicles powered solely by electricity made available Social (21): Legality rating Accident rate trend, ISO 45001, SA 8000, first aid training for employees made available, with reference to the minimum team, entirely carried out entirely in the last 1096 days (3 years), fire safety training for employees made available, with reference to the minimum team, carried out entirely in the last 1826 days (5 years) Other technical aspects (42)
Restricted procedure tender	Ordinary and extraordinary mechanical maintenance service and mechanical investment activities at the waste-to-energy plants and waste treatment plants of Herambiente s.p.a.	ER	11.4	42	70 	Environmental (6, of which 6 on circularity): ISO14001, ISO50001 Social (43): training of employees employed in the tender activities (general and specific high-risk training, supervisor training, first aid training, medium-risk fire safety training, confined space training), additional staff qualified for steel welding, Accident rate trend, availability of prevention and protection service staff members (ASPP), ISO45001, SA 8000A Other technical aspects (21)

8.04 Contract management

The **Procurement Guidelines**, in line with the Group's Code of Ethics and its organisational model, pursuant to Legislative Decree 231/2001 and the related "**Procurement Protocol**", set out the basic principles of the Hera Group's procurement activities when acquiring goods, services and works required to operate, both on the free market and when subject to public procurement regulations (Public Contracting Code, Legislative Decree 36/2023).

As of July 2023, the new public contracts code (Legislative Decree 36/2023) took effect, introducing important innovations in the awarding procedures for works, services and supplies. The most relevant change and one with the greatest operational impact is represented by the mandatory requirement from January 2024 for all contracting stations to equip themselves with their own digital procurement platform interoperable with the Anac platforms to ensure the full implementation of the National Digital Procurement Ecosystem (e-procurement). See the section "The vendor management and qualification system" for more information on the new Hera_Pro portal, which anticipates this regulatory obligation.

Note that Hera Spa has been ISO 37001:2016 certified since 2019. This certification consists in adopting a management system aimed at **preventing and addressing possible cases of corruption and promoting an ethical corporate culture**. This certification required some changes to be made to the general terms and conditions for contracts adopted in tender procedures, aimed at making this management system operational from the procurement standpoint. More specifically, during the meeting held on 25 September 2019, Hera Spa's Board of Directors adopted the Corruption prevention model, integrated into the Organisation and management model, pursuant to Legislative Decree 231/2001, whose foundation lies in the principles and values set forth in the Code of Ethics and the Quality and sustainability policy adopted by the Hera Group.

Use of subcontracts

With regard to subcontracts, the **procedure** introduced was **used** in 2021, with full compliance also shown by AcegasApsAmga, but not yet by Marche Multiservizi (which, however, sends the data for overall Group reporting).

The **authorisation to subcontract** makes the works directors and company contract representatives responsible for document checking activities, while Hera Spa's Vendor rating and assurance department is responsible for validating the process, verifying the regularity of social security contributions, checking the list of qualified suppliers and their score, searching the ANAC electronic records and, if necessary, requesting anti-mafia information from the Prefecture, with direct access to the National Anti-Mafia Database as well as requesting a Criminal records certificate. All documentation concerning the request, verification and authorisation has been **standardised across the Group** and is kept up to date with the reference legislation by the Group's Tenders and regulations department. All the documentation is available to companies in the reserved document area of the supplier portal and to all employees via the Company's intranet.

The **monitoring of subcontractor activities at worksites** (supplier monitoring checklist) was consolidated, along with obligations allowing for simple, correct and accurate monthly administrative reporting, including a precise verification of payments and wage recognition to employees

The Group's **standard specifications**, in accordance with the reference legislation, require the contractor to pay its subcontractors and to provide the works manager, upon request, with adequate proof of payment with regard to the various Work progress reports (WPRs) and/or Performance certification forms (PCFs) issued. In the absence of such proof, the Works manager/Company contract manager notifies the appropriate administrative department of the suspension of payments only concerning the non-proven amount in the subsequent WPR/PCF until such time as the payment is made. This method is an alternative to direct payment of subcontractors and can be applied directly at the beginning of the contractual relationship in the case of micro/small enterprises, as provided for by law, or during the course of work in other cases.

In 2023, **about 93 million euro were subcontracted** (down from 81 million in 2022, equivalent to about 7% of the amount of works and services outsourced by the Group, while the amount disclosed for the subcontracts managed came to 18 million euro (down from 20 in 2022), equivalent to 1% of the total works and services outsourced by the Group. These figures were up compared to the previous years due to significant changes in the regulatory framework, which gradually increased the percentage of contractual amounts to be subcontracted. However, the percentage impact of subcontracts on the total value of supplies has been constant over the years.

Timing for payment as per contract

Average contractual payment times for supplies gradually decreased, settling at 56 days in late 2023 (up from 55 in 2022 and 2021), in line with the contractual standard that sets average payment times at 60 days for the Hera Group.

Monitoring accidents at suppliers' workplaces

In line with the principles and objectives of the Hera Group and in order to gain a complete picture of the impact of accidents related to the activities carried out, directly and indirectly, the **Hera Group monitors the accident rates of its suppliers of works and services**. The specifications and contracts involved require suppliers to notify Hera as follows:

- accident events, near misses and environmental incidents must be reported within the first working day following the relevant event, recording them on the Hera Group's E-procurement platform;
- at the end of the contract, or within mid-February for multi-year contracts, suppliers must draw up an Annual accident summary, once again recording it on the Hera Group's E-procurement platform.

This phase of data collection and analysis has been computerised, using the SAP SRM platform.

The involvement of suppliers in the Hera Group's Occupational health and safety (OHS) and ESG Policies is a crucial element in guaranteeing healthy and safe working environments for all workers. This is achieved by working together to integrate prevention and protection processes, involving suppliers as active participants in achieving health and safety objectives.

The involvement of suppliers starts from sharing the Hera Group's policies in terms of health and safety and knowledge of company procedures that impact suppliers of works and services (e.g. work in confined spaces, work permits). In order to encourage the sharing of Ohs principles with suppliers of works and services, when the contract is signed, the Quality-Safety-Environment-Sustainability Policy documents, the Code of Ethics and the General Quality-Safety-Environment-Energy Regulations are sent to them (see the section "Qualification, selection and evaluation of suppliers", where the supplier monitoring activities are also reported, which include areas relating to work safety).

Prior to the activation of the works and services contract, the active involvement of suppliers is essential for the preventive assessment of interference risks and the identification of appropriate measures to mitigate these risks.

[403-9]

NUMBER OF AND RATE OF ACCIDENTS AND INJURIES AT SUPPLIERS OF SERVICES AND WORKS

	2021	2022	2023
Number of injuries at the workplace	313	284	252
Rate of injuries at the workplace (frequency)	22.4	22.8	22.3
Number of deaths as a result of accidents at work	1	0	0
Death rate due to injuries at the workplace	0.07	0	0
Hours of work	13,944,492	12,446,283	11,314,868

The frequency rate is the number of accidents per million hours of work. The death rate is the number of deaths per million hours of work. This data does not include the companies ACR, Aliplast, Aresgas, ASA, Biorg, Feronia, F.lli Franchini, Green Factory, Hera Comm Marche, Hera Trading, Horowatt, Macero Maceratese, Marche Multiservizi Falconara, Recycla, Tiepolo, Vallortigara, Wolmann, Con Energia, Macero Maceratese, Hera Comm Marche, Wolmann, Marche Multiservizi Falconara, Green Factory. Intercompany purchases are excluded.

In 2023, **693 suppliers** (1,601 in 2022) **reported accident data**, for a contract value totalling 653 million euro (795 million in 2022), representing 74% of the value of services and works supplied (professional services and consultancy excluded, since they are not considered significant from the occupational safety point of view and PNRR-related amounts excluded except for those from accident contracts, as sporadic supplier activities). The percentage of summaries declined from last year (83%), largely due to the start-up activities of the new information platform that brought a change in operations with related need for run-in.

All reported injuries were analyzed and the related contracts were reviewed and summarized).

Overall, **252 accidents were reported**; data processing showed an average frequency rate coming to 22.3 (as against 22.8 in 2022) and a severity rate of 0.55 (unchanged with respect to 2022). Both rates were essentially in line with the previous year.

Analysing this data for the **most significant product categories from the point of view of accidents**, the following rates emerge:

- for the works category ("general works"), the frequency rate was 17.7 and the severity rate was 0.75 (in 2022, these rates stood at 14.1 and 0.44, respectively);
- for the waste management services category, the frequency rate was 35.2 and the severity rate 0.60 (in 2022 they stood at 38.5 and 0.75, respectively).

8.05 Supplier relations

The year 2023 was dedicated to strengthening dialogue and continuous discussion with suppliers in a number of different areas.

First of all, the **systematic discussion continued with suppliers** who play a strategic role with the Group, both in terms of volumes and in terms of the criticality of the services/products provided (over 80 meetings with over 60 economic operators).

On the occasion of the launch of the new Hera_Pro supplier portal and the new Vendor Management model, an **information campaign** was held for all qualified suppliers via dedicated emails and publication on the Hera Group's institutional website of the updated information note and manuals to support the use of the new portal. Furthermore, two **webinars dedicated** to illustrating the operational innovations introduced regarding the qualification and tender management module and the post-contract module were also offered to over 250 of the main suppliers.

In July 2023, the **"Growing Together" convention** was held, an event bringing together 120 suppliers, during which the Network procurement plan was showcased, particularly challenging also in the light of the intervention plan financed through the National Recovery and Resilience Plan, while an in-depth analysis of the macroeconomic scenario was conducted along with six panels at which the individual business plans of the main Business Units were presented.

In the run-up to the event, a **survey** of suppliers in the network area was conducted in order to gain an understanding of how the Hera Group is perceived as a client, the market penetration rate and potential, as well as the key critical issues/challenges faced by suppliers. Specifically, an overall **appreciation emerged towards the Hera Group** as the commissioning party: 70% appreciate the economic stability and solid reputation of the Hera Group, 48% the geographical proximity and 36% the timeliness of payments (percentages of suppliers who cited this variable among their top 3 preferred choices), while all suppliers expressed interest in acquiring new orders from the Hera Group.

In terms of critical issues, the most significant data concerns the 78% of suppliers who noted **difficulty in hiring staff** and 27% in finding resources and materials.

In this regard, in order to support companies in its supply chain in the search and selection of qualified manpower, in 2023 the Hera Group renewed and further expanded its coverage of the **subsidised agreement** with the Manpower group. This agreement makes it possible for related companies to draw on a pool of **qualified and appropriately trained operators**, who can then be employed on construction sites and/or under existing service contracts with the Hera Group.

Amid an increasingly complex and challenging employment environment, the initiative intends to respond to the growing **recruitment needs** through a distinctive project, which relies on a widespread marketing campaign, the most appropriate candidate evaluation methodologies and an excellence-oriented training programme targeting the development of technical skills and security content. This initiative drew in over 30 suppliers in 2023.

In 2023, to deal with the **flood emergency in Emilia-Romagna**, some **200 suppliers** were involved who promptly responded and demonstrated great solidarity, both from the impacted areas and from other regions of the country, offering their support with teams of operators, technicians, vehicles and equipment made available to restore services and affected areas.

The launch of a **programme to support the development and expansion of the technical implementation skills and quality capabilities of suppliers** is planned for 2024. A part of the programme, special attention will be paid to "capacity building" tools to encourage the **sustainable development of suppliers both on the Esg front** (for example, with specific reference to CSRD reporting, achievement of certifications, targeted training on safety, sustainability and circularity, services for energy and environmental efficiency), as well as technical and financial growth tools (factoring services, search for and training of specialised personnel, support for the rental of vehicles and equipment, etc.).

Litigation with Suppliers

[2-27]

The number of litigations was in decline: 29 disputes with suppliers were pending at the end of 2023, compared to 21 at the end of 2022. Eight disputes commenced in 2023, mainly concerning procurement issues.

Focus on shared value, area by area

Bologna

CREATING SHARED VALUE ...

Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Energy efficiency for households 34% of energy contracts with at least one energy efficiency solution. These amounted to 202 thousand	Recycling 71% separate waste collection, of which 78% recycled. 4% of municipal waste in landfills	Digitization 91% of gas meters are already electronic 469 thousand meters, of which 31 thousand NexMeter
"Green" energy 52% of customers with electricity from renewable sources and gas with CO ₂ emissions offsetting	Reuse 317 thousand euro of pharmaceuticals that have not yet expired and 140 tonnes of bulky waste collected and reused	Employment 2,687 workers in the local Bologna area and 266 hires in 2023
Energy production 28 energy production plants (163,0 MW of power), of which 15 from renewable sources (40.4 MW of power)	Wastewater purification 100% of urban agglomerations >2,000 p.e. compliant, 83% of urban agglomerations 200-2,000 p.e. compliant	Social inclusion 55 million euro value of household and company bills paid in instalments; 101 thousand households involved (+102% from 2022)

* Excluding green waste, 2022 figures

CSV Case Study	CSV Investments	CSV Case Study
New Sorted collection The adaptation of waste collection services to improve the quantity and quality of separate waste collection continued, recovering and recycling as much material as possible to protect the environment. Novelties were introduced in 13 more municipalities in the Bologna and Imola area, with kit distribution, public meetings and infopoints.	New, sustainable and efficient lighting Hera Luce began changing the appearance of streets and neighbourhoods in Imola, Mordano and Castel Guelfo by replacing the old-generation lighting points, totalling over 13,000, with new LED lights. The operation, together with the upgrading of infrastructure, will reduce energy consumption and save tons of CO ₂ for an investment of over 28 million euro.	From waste to energy production, the Galliera landfill site is revitalized Having received waste up to 10 years ago, the site now site generates energy from renewable sources: the Hera Group built a photovoltaic plant on the decommissioned landfills in Galliera that can generate 1.4 GWh of electricity per year, equal to the consumption of more than 500 households, reducing more than 600 tonnes of CO ₂ emissions.

... ALONGSIDE THE PROTAGONISTS OF CHANGE

Economic value distributed to the Bologna area	A high-quality service... at a lower price
685 million euro, of which: 173 million workers 42 million shareholders 19 million PA 451 million suppliers 2,613 jobs created (supplier-induced employment)	Customer Satisfaction Index in the Bologna area [*] : 75/100 Average yearly expense for the waste service for a household ^{**} (Source: Cittadinanzattiva): -19% compared to the Italian average (286 euro in Bologna, the Italian average was 353) Annual waste collection service expense for non-residential users ^{***} : -28% compared to the Italian average (10.20 euro/m ² for Bologna, 14.25 euro/m ² for Italy)

^{*} Does not include the Imola-Faenza area, where the Customer Satisfaction Index was 73/100

^{**} 3 people in 100 m². Source: Cittadinanzattiva

^{***} 1,000 m² hotel, 180 m² restaurant, 200 m² supermarket and 3,000 m² industry. Source: Data from municipality websites processed by Hera

Ferrara

CREATING SHARED VALUE ...

Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Energy efficiency for households 32% of energy contracts with at least one energy efficiency solution. These amounted to 51 thousand	Recycling 88% separate waste collection (first provincial capital in Italy), of which 72% was recycled* 0% of municipal waste in landfills	Digitization 86% of the gas meters installed are electronic 119 thousand meters, of which 63 thousand NexMeter
"Green" energy 57% customers with electricity from renewable sources and gas with CO ₂ emissions offsetting	Reuse 46 thousand euro of pharmaceuticals that have not yet expired and 31 tonnes of bulky waste collected and reused	Employment 446 employees in the Ferrara area and 26 hires in 2023
Energy production 4 energy production plants (29,2 MW of power), of which 3 from renewable sources (20.7 MW of power)	Wastewater purification 100% urban agglomerations >2,000 p.e. compliant, 87% of urban agglomerations 200-2,000 p.e. compliant	Social inclusion 11 million euro value of household and company bills paid in instalments; 16 thousand households involved (-24% from 2022)

* Excluding green waste, 2022 figures

CSV Case Study	CSV Investments	CSV Case Study
Pontelagoscuro purification plant, ultrasound against algae Hera tests the Dutch company Lg-Sonic's system in the plant: 16 solar-powered transmitters immersed in the lagoon basins limit the algae's ability to rise to the surface and reproduce, thus reducing the use of chemicals when purifying water in the Po River.	Zero-emission travel with Smart Hubs As part of Air-Break, the European programme to reduce smog, for the Municipality of Ferrara, Hera has designed the Smart Hubs, infrastructures that allow the recharging of electric bicycles and scooters, but that's not all: they also house a vehicle maintenance kit, a defibrillator and a warehouse for receiving e-commerce parcels.	Gas 4.0 operators certified at the AI Training Center The HerAcademy Training Center in Ferrara, the Hera Group's training hub, has certified the first Gas 4.0 operators, employees of the multi-utility's network services. Certification for supervising gas distribution systems can be obtained at the facility, in accordance with UNI 11632, with lessons conducted in a real scenario and in complete safety.

... ALONGSIDE THE PROTAGONISTS OF CHANGE

ECONOMIC VALUE DISTRIBUTED TO THE FERRARA AREA	A high-quality service... at a lower price
71 million euro, of which: 29 million workers 5 million shareholders 4 million PA 33 million suppliers 194 jobs created (supplier-induced employment)	Customer Satisfaction Index in the Ferrara area: <u>75/100</u> Average yearly expense for the waste service for a household* (Source: Cittadinanzattiva) -27% compared to the Italian average 258 euro in Ferrara** the Italian average was 353 euro Annual waste collection service expense for non-residential users*** -27% compared to the Italian average (10.40 euro/m ² for Ferrara**** 14.25 euro/m ² for Italy)

* 3 people in 100 m². Source: Cittadinanzattiva waste

*** 1,000 m² hotel, 180 m² restaurant, 200 m² supermarket and 3,000 m² industry. Source: Data from municipality websites processed by Hera

**** Considered as annual disposals of mixed waste amounting to 1,200 litres per hotel, 3,120 litres per restaurant, 9,360 litres per supermarket and industrial activities

Forlì-Cesena

CREATING SHARED VALUE ...

Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Energy efficiency for households 31% of energy contracts with at least one energy efficiency solution. These amounted to 65 thousand	Recycling 81% separate waste collection, of which 83% was recycled* 0% of municipal waste in landfills	Digitization 96% of gas meters are already electronic 159 thousand meters
"Green" energy 55% customers with electricity from renewable sources and gas with CO ₂ emissions offsetting	Reuse 39 thousand euro of pharmaceuticals that have not yet expired and 154 tonnes of bulky waste collected and reused	Employment 603 employees in the Forlì-Cesena area and 75 hires in 2023
Energy production 19 energy production plants (30,2 MW of power), of which 7 from renewable sources (9.1 MW of power)	Wastewater purification 100% urban agglomerations >2,000 p.e. compliant, 89% of urban agglomerations 200-2,000 p.e. compliant	Social inclusion 59 million euro value of household and company bills paid in instalments; 217 thousand households involved (+768% from 2022)

* Excluding green waste, 2022 figures

CSV Investments	CSV Case Study	CSV Case Study
Five schools safer, more eco-friendly and greener in Forlì The seismic and energy retrofitting of five Forlì schools envisages the management of systems in 192 municipal buildings and energy efficiency upgrades in 21 buildings, with energy savings of 17.5% per year and an investment of almost 4 million euro by Hera Servizi Energia.	Green hotels are launched in Cesenatico The project, originating from a proposal by HeraLab and supported by the Municipality and Adac-Federalberghi to promote environmental sustainability and the circular economy in tourism activities, envisages, among other things, the measurement and monitoring of participants' performance to assess their sustainable behaviour, including through the training of operators and providing support in communication activities.	Cesena's first urban forest is now ready The city's first urban forest was planted in Cesena, with 5,900 forest seedlings, one thousand of which were planted thanks to ECO Alberi, Hera's initiative to improve the ecosystem in the local area, contributing to CO ₂ reduction, and encouraging communities to make increasingly sustainable choices.

... ALONGSIDE THE PROTAGONISTS OF CHANGE

Economic value distributed to the Forlì-Cesena area	A high-quality service... at a lower price
144 million euro, of which: 39 million workers 10 million shareholders 15 million PA 80 million suppliers 459 jobs created (supplier-induced employment)	Customer Satisfaction Index in the Forlì-Cesena area: <u>73/100</u> Average yearly expense for the waste service for a household* (Source: Cittadinanzattiva) -35% compared to the Italian average 230 euro in Cesena, the Italian average was 353 Waste collection service expense for non-residential users** -59% compared to the Italian average 5.91 euro/m ² for Cesena 14.25 euro/m ² for Italy

* 3 people in 100 m². Source: Cittadinanzattiva

** 1,000 m² hotel, 180 m² restaurant, 200 m² supermarket and 3,000 m² industry. Source: Data from municipality websites processed by Hera

Modena

CREATING SHARED VALUE ...

Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Energy efficiency for households 32% of energy contracts with at least one energy efficiency solution. These amounted to 116 thousand	Recycling 74% separate waste collection, of which 77% was recycled* 0% of municipal waste in landfills	Digitization 91% 213 thousand gas meters are already electronic, of which 70 thousand are NexMeter
"Green" energy 55% customers with electricity from renewable sources and gas with CO ₂ emissions offsetting	Reuse 211 thousand euro of pharmaceuticals that have not yet expired and 271 tonnes of bulky waste collected and reused	Employment 1,332 employees in the Modena area and 236 hires in 2023
Energy production 10 energy production plants (31,9 MW of power), of which 6 from renewable sources (16.8 MW of power)	Wastewater purification 100% urban agglomerations >2,000 p.e. compliant, 70% of urban agglomerations 200-2,000 p.e. compliant	Social inclusion 17 million euro value of household and company bills paid in instalments; 28 thousand households involved (-7% from 2022)

* Excluding green waste, 2022 figures

CSV Investments	CSV Investments	CSV Case Study
The biomethane plant in Spilamberto is an example of a circular economy The plant dedicated to annually producing 3.7 million m ³ of biomethane and 18,000 tonnes of compost has been inaugurated. An example of a circular economy, the biogas plant contributes to the green transition. It is a project of Biorg, the NewCo founded by the partnership between Herambiente and Inalca, which invested 28 million euro.	A hub in Modena to produce green hydrogen instead of landfills IdrogeMO is the Hera Group and Snam project to build a hub that will produce up to 400 tonnes of renewable hydrogen per year for public transport and industry. With an investment of over 20 million euro, a state-of-the-art electrolyser and photovoltaic field will be constructed on a decommissioned landfill.	Water, interconnection works with the mountain in Prignano commence An intervention has begun in Prignano to ensure greater water availability to the hill and Apennine areas during periods of drought. Two new pumping stations will ensure service continuity, allowing water to be conveyed to a higher level.

... ALONGSIDE THE PROTAGONISTS OF CHANGE

Economic value distributed to the Modena area	A high-quality service... at a lower price
214 million euro, of which: 86 million workers 18 million shareholders 10 million PA 100 million suppliers 580 jobs created (supplier-induced employment)	Customer Satisfaction Index in the Modena area: 67/100 Average yearly expense for the waste service for a household* (Source: Cittadinanzattiva) -17% compared to the Italian average 293 euro in Modena, the Italian average was 353 Waste collection service expense for non-residential users** -32% compared to the Italian average 9.72 euro/m ² for Modena 14.25 euro/m ² for Italy

* 3 people in 100 m². Source: Cittadinanzattiva

** 1,000 m² hotel, 180 m² restaurant, 200 m² supermarket and 3,000 m² industry. Source: Data from municipality websites processed by Hera

Padua

CREATING SHARED VALUE ...

Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Energy efficiency for households 16% of energy contracts with at least one energy efficiency solution. These amounted to 26 thousand	Recycling 65% separate waste collection, of which 89% was recycled* 0% of municipal waste in landfills	Digitization 34% customers with electronic billing
"Green" energy 55% customers with electricity from renewable sources and gas with CO ₂ emissions offsetting	Reuse 26 editions of the "Ecological Saturdays" to fight the illegal dumping of bulky waste and promote the culture of reuse (53 tonnes of bulky waste collected)	Employment 605 employees in the Padua area and 78 hires in 2023
Energy production 5 energy production plants (17,1 MW of power), of which 2 from renewable sources (7.4 MW of power)	Wastewater purification 100% of urban agglomerations >2,000 p.e. compliant	Social inclusion 8 million euro value of household and company bills paid in instalments; 7 thousand households involved (-13% from 2022)

* Excluding green waste, 2022 figures

CSV Investments	CSV Case Study	CSV Case Study
Seven new biodryers in Padua's purification plants In light of the positive experience with the first pilot plant, seven biodryers will be installed in Padua's sewage treatment plants by 2026. With this 6.5 million euro investment, 11 thousand tonnes of sludge per year will be treated, dehydrating it by more than 50%, reducing energy consumption, environmental impacts on the entire chain, and increasing reuse in agriculture.	A shared plan to reduce water losses With the "Sustainable water management" project, developed in partnership with the other Ato Bacchiglione operators and financed by the Nrrp [<i>National Recovery and Resilience Plan</i>], the digitalisation and monitoring of water networks is expected to reduce grid water losses by 35 % within 2026 and to save 13 million m ³ of water in five years.	Energy upgrading in the name of a circular economy The energy requalification interventions Hera Servizi Energia carried out adopt solutions aimed at increasing the life of components and facilitating the reuse of materials at the end of their life. In 10 interventions in the Veneto region, 81% of the waste produced by replacing windows and doors and 100% created by replacing boilers was recovered.

... ALONGSIDE THE PROTAGONISTS OF CHANGE

Economic value distributed to the Padua area	A high-quality service... at a lower price
155 million euro, of which: 39 million workers 7 million shareholders 4 million PA 105 million suppliers 609 jobs created (supplier-induced employment)	Customer Satisfaction Index in the Padua area: 75/100 Average yearly expense for the waste service for a household* (Source: Cittadinanzattiva) -31% compared to the Italian average 245 euro in Padua, the Italian average was 353 Waste collection service expense for non-residential users** -3% compared to the Italian average 13.80 euro/m ² for Padua 14.23 euro/m ² for Italy

* 3 people in 100 m². Source: Cittadinanzattiva

** 1,000 m² hotel, 180 m² restaurant, 200 m² supermarket and 3,000 m² industry. Source: Data from municipality websites processed by Hera

Pesaro-Urbino

CREATING SHARED VALUE ...

Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Energy efficiency for households 24% of energy contracts with at least one energy efficiency solution. These amounted to 30 thousand	Recycling 73% separate waste collection, of which 82% was recycled* 21% of municipal waste in landfills	Digitization 87% of the gas meters installed are electronic 81 thousand meters
"Green" energy 53% customers with electricity from renewable sources and gas with CO ₂ emissions offsetting	Reuse 124 tonnes of bulky waste collected and re-used	Employment 607 workers in the Pesaro-Urbino area and 68 new hires in 2023
Energy production 2 energy production plants (1 MW power) of which 1 from renewable sources	Wastewater purification 96% of urban agglomerations >2,000 p.e. compliant. by 2025)	Social inclusion 13 million euro value of household and company bills paid in instalments; 44 thousand households involved (+238% from 2022)

* Excluding green waste, 2022 figures

CSV Investments	CSV Case Study	CSV Case Study
Reverse osmosis leachate treatment A latest-generation reverse osmosis plant for treating leachate at the Cà Asprete Tavullia landfills. This investment eliminates the need to transport leachate by tanker trucks outside the region to sites suitable for treatment with the consequential creation of atmospheric pollution by vehicle traffic. An estimated saving of 192 tonnes of CO ₂ per year.	Emergency work completed after the flood The major emergency works in the areas affected by the September 2022 floods financed by the Ministry were completed in 2023. The interventions carried out were defined, in agreement with the municipalities concerned, as those of highest priority. They included the sewage and aqueduct grids, purification plants, sewage lifts, drinking water reservoirs and springs.	Action plan for adaptive resource management in response to droughts and water scarcity The available resources and hydrological balance of the Province of Pesaro and Urbino were analysed, along with the drinking, agricultural and industrial needs, and the resources and requirements identified were compared. It was, therefore, possible to identify different optimisation scenarios in the short, medium and long term to recover the necessary water resources and identify the actions to be carried out.

... ALONGSIDE THE PROTAGONISTS OF CHANGE

Economic value distributed to the Pesaro-Urbino area	A high-quality service... at a lower price
77 million euro, of which: 39 million workers 9 million shareholders 6 million PA 23 million suppliers 130 jobs created (supplier-induced employment)	Customer Satisfaction Index in the Pesaro-Urbino area: 73/100 Average yearly expense for the waste service for a household* (Source: Cittadinanzattiva) -19% compared to the Italian average 285 euro in Pesaro, the Italian average was 353 Waste collection service expense for non-residential users** -36% compared to the Italian average 9.09 euro/m ² for Pesaro 14.25 euro/m ² for Italy

* 3 people in 100 m². Source: Cittadinanzattiva

** 1,000 m² hotel, 180 m² restaurant, 200 m² supermarket and 3,000 m² industry. Source: Data from municipality websites processed by Hera

Ravenna

CREATING SHARED VALUE ...

Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Energy efficiency for households 33% Consumption Log agreements. These amounted to 82,000	Recycling 78% separate waste collection, of which 80% was recycled* 0% of municipal waste in landfills	Digitization 96% of the gas meters installed are electronic 171 thousand meters
"Green" energy 58% customers with electricity from renewable sources and gas with CO ₂ emissions offsetting	Reuse 241 thousand euro of pharmaceuticals that have not yet expired and 156 tonnes of bulky waste collected and reused	Employment 646 employees in the Ravenna area and 42 employee hires in 2023
Energy production 14 energy production plants (20,3 MW of power), of which 10 from renewable sources (11.2 MW of power)	Wastewater purification 100% urban agglomerations >2,000 p.e. compliant, 96% of urban agglomerations 200-2,000 p.e. compliant	Social inclusion 50 million euro value of household and company bills paid in instalments; 206 thousand households involved (+636% from 2022)

* Excluding green waste, 2022 figures

CSV Case Study	CSV Case Study	CSV Investments
Cotignola adopts new lights: the town's street lighting goes green The agreement signed between the municipality and Hera Luce envisages interventions that will allow energy savings of 63.8% (over 635,000 kWh/year, which corresponds to the average energy consumption of 235 households), equal to 256 tonnes of CO ₂ that will not be emitted into the atmosphere each year.	Door-to-door also extended in the historic centre of Ravenna The new waste collection system, introduced throughout the municipality in stages starting in 2019, considered the different special features that characterise the heart of the city, with the goal, shared by the municipal administration and Hera, of increasing separate waste collection to protect the environment from 59% in 2019 to 78% in 2023.	Hera's works to upgrade and expand the Lido di Classe purification plant completed The complex and innovative project required a significant organisation to guarantee the operation of the plant serving three agglomerations of up to 30,000 residents in the summer months as opposed to 1,800 in the winter months, even when the works were underway. The investment amounted to over 3.6 million euros.

... ALONGSIDE THE PROTAGONISTS OF CHANGE

Economic value distributed to the Ravenna area	A high-quality service... at a lower price
183 million euro, of which: 42 million workers 12 million shareholders 8 million PA 121 million suppliers 700 jobs created (supplier-induced employment)	Customer Satisfaction Index in the Ravenna area**: 73/100 Average yearly expense for the waste service for a household* (Source: Cittadinanzattiva) -24% compared to the Italian average 270 euro in Ravenna, the Italian average was 353 Annual waste collection service expense for non-residential users*** -34% compared to the Italian average 9.36 euro/m ² for Ravenna 14.25 euro/m ² for Italy

* 3 people in 100 m². Source: Cittadinanzattiva

** Does not include the Imola-Faenza area, where the Customer Satisfaction Index was 73/100

*** 1,000 m² hotel, 180 m² restaurant, 200 m² supermarket and 3,000 m² industry. Source: Data from municipality websites processed by Hera

Rimini

CREATING SHARED VALUE ...

Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Energy efficiency for households 21% of energy contracts with at least one energy efficiency solution. These amounted to 1.4 thousand	Recycling 70% separate waste collection, of which 81% was recycled* 0% of municipal waste in landfills	Digitization 37% customers with electronic billing
"Green" energy 67% customers with electricity from renewable sources and gas with CO ₂ emissions offsetting	Reuse 16 thousand euro of pharmaceuticals that have not yet expired and 22 tonnes of bulky waste collected and reused	Employment 546 employees in the Rimini area and 29 hires in 2023
Energy production 4 energy production plants (12,1 MW of power), of which 3 from renewable sources (6.8 MW of power)	Wastewater purification 100% urban agglomerations >2,000 p.e. compliant, 100% of urban agglomerations 200-2,000 p.e. compliant	Social inclusion 5 million euro value of household and company bills paid in instalments; 10 thousand households involved (+150% from 2022)

* Excluding green waste, 2022 figures

CSV Investments	CSV Case Study	CSV Case Study
Bathing Protection Plan: redevelopment of the sixth discharge point in Miramare The sixth marine discharge point was upgraded, a step towards the final objective of the Bathing Protection Plan, set up by the Municipality of Rimini, Hera, Amir and Romagna Acque for a value of more than 200 million euro, to protect the sea and reduce bathing bans.	The number of underground ecological islands in the historic centre of Rimini has risen to five The restyling of Rimini's historic city centre in connection with waste collection continues with the gradual replacement of bins and trash containers with underground ecological islands. This system combines environmental sustainability, urban quality and the enhancement of urban space. On the whole, the initiative involves about 5,000 household and nonhousehold users and includes the construction of 14 underground ecological islands.	The Hera customer help reopened in the municipality of Novafeltria The contact point for enquiries concerning water services and possible connections, cancellations, take-overs, bills and new contracts is back in operation. The new Hera point results from the multi-utility's and the municipal administration's desire to remain close to the communities served.

... ALONGSIDE THE PROTAGONISTS OF CHANGE

Economic value distributed to the Rimini area	A high-quality service... at a lower price
127 million euro, of which: 35 million workers 8 million shareholders 11 million PA 73 million suppliers 425 jobs created (supplier-induced employment)	Customer Satisfaction Index in the Rimini area: 73/100 Average yearly expense for the waste service for a household* (Source: Cittadinanzattiva) -16% compared to the Italian average 296 euro in Rimini, the Italian average was 353 Waste collection service expense for non-residential users** -2% compared to the Italian average 13.98 euro/m ² for Rimini 14.25 euro/m ² for Italy

* 3 people in 100 m². Source: Cittadinanzattiva

** 1,000 m² hotel, 180 m² restaurant, 200 m² supermarket and 3,000 m² industry. Source: Data from municipality websites processed by Hera

Trieste, Udine, Gorizia

CREATING SHARED VALUE ...

Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Energy efficiency for households 23% of energy contracts with at least one energy efficiency solution. These amounted to 70 thousand	Recycling 46% separate waste collection, of which 87% was recycled* 0% of municipal waste in landfills	Digitization 86% of the gas meters installed are electronic 284 thousand meters, of which 78 thousand NexMeter
"Green" energy 44% customers with electricity from renewable sources and gas with CO ₂ emissions offsetting	Reuse 12 editions of the "Ecological Saturdays" to fight the illegal dumping of bulky waste and promote the culture of reuse (91 tonnes of bulky waste collected)	Employment 1,243 workers in the area and 130 hires in 2023
Energy production 8 energy production plants (15,5 MW of power), of which 6 from renewable sources (7.6 MW of power)	Wastewater purification 100% urban agglomerations >2,000 p.e. compliant, 99% of urban agglomerations 200-2,000 p.e. compliant	Social inclusion 10 million euro value of household and company bills paid in instalments; 8 thousand households involved (-38% from 2022)

* Excluding green waste, 2022 figures

CSV Investments	CSV Case Study	CSV Case Study
Industrial symbiosis for green hydrogen production Planning began for the Hydrogen Hub plant in Trieste, a 15.8 million euro investment to generate entirely renewable hydrogen using wastewater from the waste-to-energy plant and energy produced by the photovoltaic plant, saving 9 thousand tons of CO ₂ eq/year. The use of hydrogen produced in the transport sector will avoid an additional 21 t of CO ₂ for every t of hydrogen used.	Reuse and reduction of material consumption in grid works The pilot project for the recovery of excavated soil and rocks in the gas pipeline replacement works in Gorizia, where 63% of the gravel/grit was reused on site, thus avoiding the use of new materials and reducing the impact of road transport, has been completed.	Loome, the infinite lamppost The first 14 Loome luminaires were installed at AcegasApsAmga's Broletto headquarters in Trieste. These luminaires are manufactured from 50% of the plastic collected as waste by the Group and processed by Aliplast. An infinite cycle: the lamppost polymer is 100% recyclable at the end of its life, giving rise to new luminaires.

... ALONGSIDE THE PROTAGONISTS OF CHANGE

Economic value distributed to the Friuli-Venezia Giulia area	A high-quality service... at a lower price
309 million euro, of which: 80 million workers 14 million shareholders 13 million PA 202 million suppliers 1,168 jobs created (supplier-induced employment)	Customer Satisfaction Index in the Trieste area: 74/100 Customer Satisfaction Index in the Udine area: 73/100 Average yearly expense for the waste service for a household* (Source: Cittadinanzattiva) -11% compared to the Italian average 316 euro in Trieste, the Italian average was 353 Waste collection service expense for non-residential users** -3% compared to the Italian average 14.71 euro/m ² for Trieste 14.25 euro/m ² for Italy

* 3 people in 100 m². Source: Cittadinanzattiva

** 1,000 m² hotel, 180 m² restaurant, 200 m² supermarket and 3,000 m² industry. Source: Data from municipality websites processed by Hera

Information on eco-sustainable economic activities (EU Regulation 2020/852)

In March 2018, the European Commission published the **Action plan on sustainable finance** to create a body of rules around sustainable finance, with the ultimate purpose of directing the flow of private capital towards a more sustainable and inclusive development model in line with the commitments made under the Paris Climate Agreement. **Establishing a unified classification system for sustainable activities**, i.e., a Taxonomy, is the most critical and urgent action foreseen in the action plan.

What the Taxonomy is

The European Union Taxonomy is a unique European classification system that establishes a list of environmentally sustainable economic activities. This ranking tool is intended to help the European Union scale up sustainable investment and deliver the Green Deal. The Taxonomy sets out to provide companies, investors, and policymakers with standard criteria for determining the economic activities that contribute to an economy that does not negatively impact the environment. This way, according to the European Union, it is also possible to create security for investors regarding greenwashing, to help companies in the ecological transition, and to help move investments where they are most needed.

How it works

The European Union Taxonomy defines six environmental objectives to identify environmentally sustainable economic activities:

- **Climate change mitigation (CCM);**
- **Climate change adaptations (CCA);**
- **Sustainable use and protection of water and marine resources (WTR);**
- **Transition to a circular economy (CE);**
- **Prevention and reduction of pollution (PPC);**
- **Protection and restoration of biodiversity and ecosystems (BIO).**

An economic activity is defined as environmentally sustainable if: it contributes substantially to the achievement of at least one of the six environmental objectives; it does not cause significant damage to any of the remaining environmental objectives (Do No Significant Harm - DNSH); it is carried out in compliance with the minimum safeguards (based on international guidelines for the respect of human rights); it complies with the technical screening criteria set by the Commission.

The definition process and entry into force

Based on the first recommendations developed by the TEG (Technical Expert Group), the subsequent contribution of the Sustainable Finance Platform, and a wide range of stakeholders and institutions, **Regulation 852** establishing the European Taxonomy of environmentally sustainable activities was published in the Official Journal of the European Union on 22 June 2020 and entered into force on 12 July of the same year.

As envisaged by Regulation 852, the European Commission is called to adopt delegated acts aimed at supplementing and developing the regulation itself, specifying the technical screening criteria and the procedures for respecting the DNSH standard to be able to consider an economic activity, among those in the list of eligible activities defined by the Commission, as sustainable from an environmental point of view. At the date of approval of this report, the Commission has published:

- The **first delegated act on the two climate mitigation and adaptation targets** (EU 2021/2139), later amended by the delegated act EU 2023/2485, which to date identifies 14 economic sectors and 121 economic activities that can contribute to the attainment of climate change mitigation and/or adaptation targets. With particular reference to the mitigation target, the list of activities in the first version of the delegated act published in 2021 was defined by prioritising the NACE sectors with the highest emission impact in terms of Scope 1 emissions and considering those strategic for fostering the energy transition. The list accounts for 64% of greenhouse gas emissions in the European Union (source 2021 Eurostat data). All sectors and activities are expected to substantially contribute to climate change adaptation. However, it was impossible to conduct the DNSH assessment for all sectors of the economy. So, the starting point for the evaluation was the same set of mitigation activities.

- The **Delegated Act** (EU 2021/2178), as later amended by Delegated Act EU 2023/2485, **which specifies the disclosure requirements** in terms of content, methodology and presentation, for companies subject to the obligation to prepare an annual non-financial statement (Sustainability Report). These companies must report turnover, operating expenses (OPEX) and capital expenditures (CAPEX) of the portion of **eligible economic activities aligned with the taxonomy**, i.e. that comply with the technical screening criteria, the DNSH principle and the minimum safeguards defined by the European Commission.
- The **complementary delegated act** (EU 2022/1214) which introduced specific nuclear energy and fossil gas energy production activities to the list of eligible economic activities by defining the technical screening criteria for their alignment.
- The **delegated act on the sustainable use and protection of waters and marine resources, the transition to a circular economy, pollution prevention and control, and the protection and restoration of biodiversity and ecosystems** (EU 2023/2486), which to date identifies 8 economic sectors and 35 activities that can contribute to the attainment of the Regulation's four environmental objectives.

To date, the taxonomy has a total of **156 economic activities** covering **16 sectors**. For each of them, the delegated acts identify the **technical screening criteria** to determine the conditions under which an economic activity may be considered to substantially contribute to at least one objective and whether it causes significant harm to any other relevant environmental objective. The Commission is expected to review and, if necessary, periodically modify the screening criteria in line with scientific and technological developments.

Referring to the delegated act that, in 2023, introduced the first 35 activities that can contribute to the taxonomy's remaining four environmental objectives, the Commission developed a methodology to select and prioritise the economic activities to be included. In particular, **activities and economic sectors with the greatest potential to substantially contribute to one or more of the objectives** and for which it was immediately possible to develop the relevant technical criteria **were prioritised**. For specific sectors and activities not yet included, such as agriculture, forestry, fishing, and certain manufacturing activities, the Commission is still assessing the criteria with a view to their definitive inclusion within the Regulation.

The non-priority activities among those considered will be the focus for developing future delegated acts within the taxonomy as part of an approach entailing the continuous evolution of the standard. Therefore, activities not currently listed cannot automatically be deemed "unsustainable" merely because they are not yet included within the scope of the taxonomy.

Furthermore, in parallel, the Sustainable Finance Platform is drafting and developing non-binding guidelines regarding the "Environmental Transition Taxonomy" that aim to extend the Taxonomy approach also to activities with low environmental impact and activities that need to transition to more sustainable performance and the "Social Taxonomy" guidelines, which clearly establish what constitutes a social investment and which economic activities can be considered socially sustainable.

The Hera Group's position and commitment

The Hera Group has welcomed the introduction of the Taxonomy, given the importance of the ambitious goal of providing a standard definition to all stakeholders of what can be considered sustainable from a scientific point of view.

In line with this approach, the Group would like to emphasise that for this third year under the Regulation, Delegated Act EU 2021/2178 requires non-financial companies to disclose in their reports the proportion of alignment with the first two climate mitigation and adaptation targets and eligibility only for the activities listed for the remaining four environmental targets. The Hera Group has voluntarily chosen to **anticipate its alignment with the six taxonomy objectives** to immediately capitalise on its contribution to the sustainable transition as envisaged by the Regulation.

This regulation must be viewed as an added value, as it complements and supplements the quantification of shared-value EBITDA, which the Group has been pioneering since 2016 to quantify, through its actions, the need for change and global challenges in the direction of sustainability to demonstrate its response.

In addition to this, in continuity with what was done in 2021 and 2022, a voluntary decision was made to supplement this reporting with the quantification of the profitability deriving from the Group's activities that comply with the technical screening criteria and to highlight the portion of investments in eligible and aligned activities in the 2023-2027 Business Plan.

The Hera Group has actively engaged in the regulatory development process, participating in various consultation procedures and contributing directly through the European Commission's official channels and indirectly through the various industry associations in which the Group participates. In particular, on 17 October 2023, the European Commission introduced the EU Taxonomy stakeholder request mechanism, a questionnaire open to the parties affected by the Regulation to submit suggestions based on scientific and/or technical evidence concerning new economic activities that could be added to the taxonomy or on potential revisions of the technical screening criteria for existing activities. Within the scope of these processes, positions were expressed concerning several issues of importance to the Group, which were discussed at various national and European institutional work forums. Among these were:

The Sale of renewable energy: to date, the regulation does not provide for the inclusion, within the list of eligible activities, of the sale of energy, which, on the contrary, constitutes an essential element of the entire value chain and plays a fundamental role in the decarbonisation itinerary, allowing for sustainable electrification of consumption. Companies operating in the sales sector and promoting renewable energy consumption among customers can significantly contribute to the energy transition, guiding demand. The Group claims that the sale of renewable electricity should be considered among the mitigation activities and enjoy the same consideration and relevance associated with generating and distributing electricity (currently in the list of eligible activities).

The role of waste-to-energy plants in the waste hierarchy: waste-to-energy plants with energy recovery are not included in the list of eligible activities. The Hera Group considers this type of plant essential in the transition phase towards a circular economy, as they contribute to the disposal of non-recyclable fractions of waste, avoiding landfills (a much more harmful alternative from an environmental point of view), and can provide the heat necessary for operating of highly efficient district heating systems, thus avoiding the production of CO₂ emissions from fossil sources.

The role of gas in the energy transition process: on 11 July 2022, the European Parliament and the European Council approved the complementary delegated act EU 2022/1214 on climate objectives (mitigation and adaptation), which includes, under strict conditions, specific nuclear energy and gas energy production activities in the list of eligible activities. According to the Commission, the criteria for these activities should help accelerate the transition from solid or liquid fossil fuel, including coal, towards a climate-neutral future. However, the Group considers the conditions for compliance with the technical screening criteria to be excessively challenging. For example, the emission threshold 100 gCO₂/kWh existing plants must meet does not appear to adequately consider the state of available technology and seems unrealistic considering the current lack of carbon abatement solutions, presenting high costs and operational complexities that cannot always be overcome.

Waste collection methods: On 27 June 2023, the European Parliament and the EU Council approved Delegated Act EU 2023/1486 on the remaining four environmental objectives, which includes the "Collection and transport of non-hazardous and hazardous waste" (Activity 2.3 EC) for the transition to a circular economy objective. One of the technical criteria for establishing the substantial contribution to this target requires that municipal waste be collected "mainly through door-to-door collection systems or controlled collection points to ensure a high level of separate waste collection and low contamination rates". However, based on the Hera Group's experience, mixed collection methods can also secure high levels of separate waste collection and low contamination rates. Therefore, the Group believes these criteria must prioritise achieving a high level of separate waste collection, regardless of the method.

The Taxonomy analysis and reporting process

Following the recommendations of Delegated Act 2021/2178 introducing disclosure requirements for the taxonomy, a multi-step process was developed through which the applicability of the taxonomy could be analysed along the entire value chain, taking into account all of the Group's consolidated companies. The process concerned all the taxonomy's objectives for which the delegated acts 2021/2139, 2022/1214 and 2023/2486d introduce the list of activities that substantially contribute to these objectives and the list of technical screening criteria and the DNSHs that said activities must comply with to be classified as eco-sustainable, to identify the Group's activities that are eligible aligned, eligible non-aligned, and non-eligible.

Eligible

Aligned eligible activity: activity carried out by the Hera Group explicitly included in the taxonomy regulation that meets the technical screening criteria developed, respects the DNSH principle and the minimum safeguards

Non-aligned eligible activity: activity carried out by the Hera Group explicitly included in the taxonomy regulation that does not meet the criteria of technical screening and/or does not respect the DNSH principle and/or the minimum safeguards

Not Eligible

Non-eligible activity: activity carried out by the Hera Group which has not been explicitly included in the taxonomy regulation because it does not contribute substantially to any environmental objective

The analysis was carried out in the following stages:

- Establishment of a working group coordinated by the Shared Value and Sustainability Department together with the Central Administration, Finance, and Control Department;
- Preliminary analysis of the Group's activities concerning the **four new environmental objectives** to assess their degree of **eligibility**, with particular attention to the analysis of **overlaps** between the definitions of eligible activities that may contribute to attaining more than one objective. Within the scope of this preliminary mapping, **13 eligible activities** related to different Group companies were identified. The alignment with the technical criteria for these activities was assessed. Next, the eligible portions of **turnover, OPEX, CAPEX and EBITDA** were calculated based on data and information for 2022 and aligned with the Regulation. This exercise allowed a preliminary estimate of Delegated Act 2023/2486's impact on the values published in the 2022 reporting, also in the light of any overlap to value the contribution to **multiple taxonomy objectives**.
- Update on 2023 data and information on mapping activities that can contribute to attaining the **six taxonomy objectives** and be attributed to Hera Group activities. Within the scope of this mapping, **37 eligible activities were identified**, 24 of which fall under the mitigation objective and 13 under the remaining four environmental objectives. These activities were associated with different Group companies, for which different processes, services, plants and other types of assets were analysed in detail;
- Once the eligible activities forming part of the Group's portfolio were identified, the Group's management and company technical representatives were consulted to verify compliance with the technical screening criteria and the DNSHs indicated in the Regulation. 43 people from 13 different Group companies and departments were involved in this stage. To verify the compliance of the technical criteria concerning the DNSHs as they relate to climate change adaptation, the sustainable use and protection of water and marine resources, and the protection and restoration of biodiversity and ecosystems, support was needed from Quality, Safety, and Environmental Management and from Central Market - Energy Risk Analysis and Control Management.

Focus on DNSH Principle

Adaptation to climate change

In 2019, Hera launched a **systematic analysis of the risks and opportunities** related to climate change according to the recommendations of the **Task Force on Climate-related Financial Disclosures (TCFD)**. The objective of the analysis is to identify potential vulnerabilities to extreme natural events for their corporate assets, assessing its impact and developing mitigation actions to **improve asset resilience** and the use of the insurance market for residual risk. Hera carries out this analysis on the basis of three time horizons, consistent with the duration of the investment: short term, medium term until 2030 and long term until 2050.

In terms of **adaptation**, Hera is increasing the **resilience of its networks and services**, with initiatives such as the **integration and increase of water resources and interconnections**, the **detection of high-tech water losses**, the new **drainage and water treatment system** and the **upgrading of the electricity distribution network**, to cope with the energy transition towards electrification of consumption. A significant part of the investments in Hera's strategic plan is aimed at improving the resilience to the physical risks of climate change. Adaptation solutions are designed to improve the Hera Group's carbon footprint, with emission reduction targets validated by the **Science Based Target Initiative** and implemented using the best available technologies. In addition, specific initiatives are evaluated and designed with the involvement of local communities to understand and address their concerns and local public institutions to integrate their proposals and expectations into the final project. In 2023, the analysis of risks and opportunities related to climate change continued. The new business plan is defined in relation to multiple strategic axes of development, among others carbon neutrality and resource regeneration (energy transition) and Risk Management (resilience) in line with which the new investment plan aimed at pursuing opportunities and mitigating the identified risks was articulated. These include the construction of new primary electrical distribution side cabins and the resilience interventions of electricity networks in the face of the risk of worsening extreme events, while on the integrated water service side, the district water supply system, the strengthening of watershed ridges, the renewal and interconnection of networks are highlighted, the enhancement of remote control of water supply systems and the installation of smart meters. Important drivers of climate risk mitigation are finally investments for the development of energy efficiency initiatives and heat management aimed at customers and initiatives for the development of photovoltaic utility scale, the strengthening of geothermal energy and the strengthening of the geothermal district heating system.

Sustainable use and protection of water and marine resources

The Hera Group carries out all the activities that can have an impact on water resources in accordance with the **Consolidated Environmental Law D.Lgs. n. 152/2006**, which regulates soil protection and the fight against desertification, **the protection of water against pollution** and **the management of water resources** are also implementing **Directive 2000/60/EC** as a framework for Community action on water.

Protection and restoration of biodiversity and ecosystems

All the Group's activities take place in Italy and therefore, where applicable, an **Environmental Impact Assessment (EIA)** is carried out in accordance with **Legislative Decree 152/2006** and subsequent amendments and additions (Environmental Code) which transposes Directive 2011/92/EU as amended by 2014/52/EU. In cases where the EIA is not strictly required, the activities are still subject to authorization by other national regulations. According to the legislation, once the impacts are assessed, specific mitigation measures are identified, where necessary, to reduce their significance and, if necessary, to implement appropriate compensatory measures. Within the Sustainability Report, the main Environmental Impact Assessments presented during the year, on an annual basis, are made public.

- At the same time, the management control offices of the companies and departments concerned were engaged to determine the availability and granularity of the economic data necessary to quantify the KPIs relating to turnover, OPEX, and CAPEX associated with the eligible Group activities according to Taxonomy;
- Compliance with the minimum safeguard guarantees was verified, pursuant to the provisions of Regulation 852. Hera complies with the minimum safeguard guarantees thanks to the Group companies' adoption of the **Code of Ethics**, most recently updated in 2022. For a more detailed discussion, see this Sustainability Report's "[Sustainability management](#)" section. The Group promotes the fight against corruption and fraud by embracing the commitment to "zero tolerance", reaffirmed not only in the Code of Ethics but also in the **Model for the Prevention of Corruption** (for a more detailed discussion, see the "[The compliance system for prevention of corruption and fraud](#)" section. Hera has defined and formalised its **Tax Strategy** within the scope of implementing the procedures and safeguards for managing and controlling tax risk (**Tax Control Framework**). The values expressed by this strategy are inspired by and consistent with the Group's Code of Ethics and guide company operations, providing for specific lines of conduct that Hera intends to maintain to achieve the strategic objectives it has set for itself.
- Finally, the economic KPIs (turnover, OPEX and CAPEX) were quantified following the accounting standards described later under "Accounting standards".

The 13 activities identified as eligible after analysing the new 35 activities for the remaining four environmental objectives (EU Delegated Act 2023/2486) contribute to the following objectives.

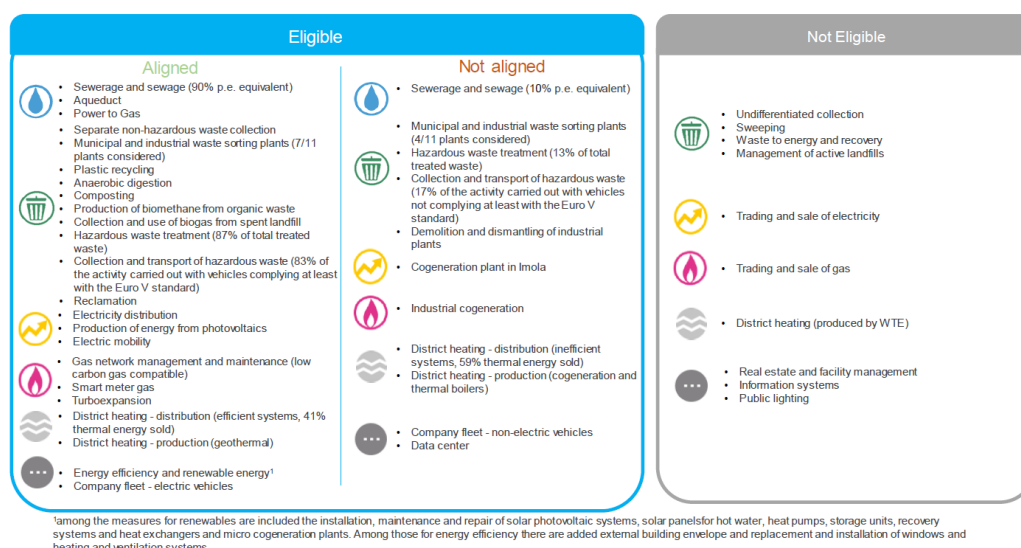
- **Sustainable use and protection of water and marine resources**, of the 6 new activities contributing to this objective, the Group was eligible for three activities: manufacture and installation of leakage control technologies in water systems (1.1 WTR), water supply (2.1 WTR) and urban wastewater treatment (2.2 WTR). These activities overlap with activities already analysed under the climate change mitigation objective, with particular reference to the construction, extension and operation of water collection, treatment and supply systems (5.1 CCM) and wastewater collection and treatment (5.3 CCM).
- **Transition to a circular economy**, of the 21 new activities contributing to this objective, the Group was eligible for six activities: manufacture of plastic packaging goods (1.1 CE), collection and transport of non-hazardous and hazardous waste (2.3 CE), treatment of hazardous waste (2.4 CE), recovery of bio-waste by anaerobic digestion or composting (2.5 CE), sorting and material recovery of from non-hazardous waste (2.7 CE) and demolition and wrecking of buildings and other structures (3.3 CE). These activities overlap with activities already analysed under the climate change mitigation objective, with particular reference to the activities of collection and transport of non-

hazardous waste in source-separated fractions (5.5 CCM), anaerobic digestion of organic waste (5.7 CCM) and material recovery from non-hazardous waste (5.9 CCM).

- **Prevention and reduction of pollution**, of the 6 new activities contributing to this objective, the Group was eligible for four activities: collection and transport of hazardous waste (2.1 PPC), treatment of hazardous waste (2.2 PPC), and remediation of legally non-conforming landfills and abandoned or illegal waste dumps (2.3 PPC) and remediation of contaminated sites and areas (2.4 PPC). These activities do not overlap with activities already analysed under the climate change mitigation objective. However, with particular reference to the definition of activity 2.1 PPC, there is an overlap with the activity of collecting and transporting non-hazardous and hazardous waste (2.3 EC) and an overlap of the activity 2.2 PPC with the activity of treatment of hazardous waste (2.4 CE).
- **Protection and restoration of biodiversity and ecosystems**, the Group was not eligible for the 2 new activities that contribute to this objective, namely, the conservation activity, including the restoration of habitats, ecosystems and species (1.1 BIO) and the activity related to hotels, holiday accommodation, camping grounds and similar accommodation (2.1 BIO).

Compared to 2022, the reporting scope was expanded in 2023 **from 12 to 13 companies** after acquiring ACR within the Group.

OVERVIEW OF HERA GROUP ACTIVITIES ALIGNED WITH THE TAXONOMY



As shown in the summary view, **most of the activities were aligned**, however activities related to: a portion of **sewerage and wastewater service** (activity 5.3 CCM *Construction, extension and operation of waste water collection and treatment systems* and 2. 2 WTR *Urban waste water treatment*), for a limited number of territories that do not yet meet energy efficiency thresholds and a few urban agglomerations in the process of being brought into compliance with current sewage legislation (corresponding to 10% of the p.e. served), **waste sorting** (activity 5.9 *Material recovery from non-hazardous waste*) in relation to three plants that do not meet the required material recovery threshold, **hazardous waste treatment** (activity 2.2 PPC *Treatment of hazardous waste*) in relation to A.C.R.'s activity that is neither equipped with an internal laboratory nor a sampling procedure, and Vallortigara's activity that does not comply with the dissolved organic carbon (DOC) limit as regards the outgoing waste (these two companies treat 13% of the total hazardous waste treated by the Group), the **Collection and transport of hazardous waste** (activity 2.1 PPC *Collection and transport of hazardous waste*) for the portion of transport that carried out with vehicles non-compliant with the EURO V standard as a minimum (this figure is 17% of the total number of vehicles used by the Group) and activity 2.3 EC) for the portion of transport that takes place with vehicles not compliant with the EURO V standard as a minimum (the number of vehicles non-compliant with the EURO V standard as a minimum of the companies carrying out the activity is 17% of the total); a portion of **district heating/cooling distribution** (activity 4.15 CCM *District heating/cooling distribution*) that does not meet the definition of efficient district heating and cooling systems (equal to 59% of the thermal energy sold in 2023); the portion of the **company fleet** relative to non-electric vehicles (activity 6.5 CCM *Transport by motorcycles, passenger cars and light commercial vehicles* and 6.6 CCM *Freight transport services by road*)

and the **data centre** activity (activity 8.1 CCM *Data processing, hosting and related activities*), for energy efficiency aspects. Furthermore, none of the activities introduced by the complementary delegated act EU 2022/1214 are aligned with the technical screening criteria: the production of energy from the Imola **cogeneration plant** (activity 4.30 CCM *High-efficiency co-generation of heat/cool and power from fossil gaseous fuels*), the production of **thermal energy from cogeneration and thermal boilers** in efficient district heating systems (activity 4.31 CCM *Production of heat/cooling from fossil gaseous fuels in an efficient district heating and cooling system*), and finally the construction and operation of **industrial cogeneration** plants (activity 4.30 CCM *High-efficiency co-generation of heat/cool and power from fossil gaseous fuels*).

Our results

For the sake of correctly representing and interpreting the results obtained within the scope of this analysis, it should be noted that the data on turnover, OPEX, CAPEX, and EBITDA **eligible for the taxonomy refer to the climate change mitigation, use and protection of water and marine resources, prevention and reduction of pollution, and the transition to a circular economy objectives**.

In some cases, part of the CAPEX reported may also meet the **adaptation to climate change** objective. However, since the perimeter overlaps perfectly, the reporting focused only on the mitigation objective, as indicated by the FAQs the EU Commission published on 19 December 2022 (Draft Commission Notice on the interpretation and implementation of certain legal provisions of the Disclosures Delegated Act under Article 8 of EU Taxonomy Regulation on the reporting of Taxonomy-eligible and Taxonomy-aligned economic activities and assets), in particular in point 8 "How should reporting undertakings address 'double-counting' in the context of business activities contributing to multiple environmental objectives".

As already reported, no group activities have been identified as eligible for the **protection and restoration of biodiversity and ecosystems** objective.

Managing overlapping

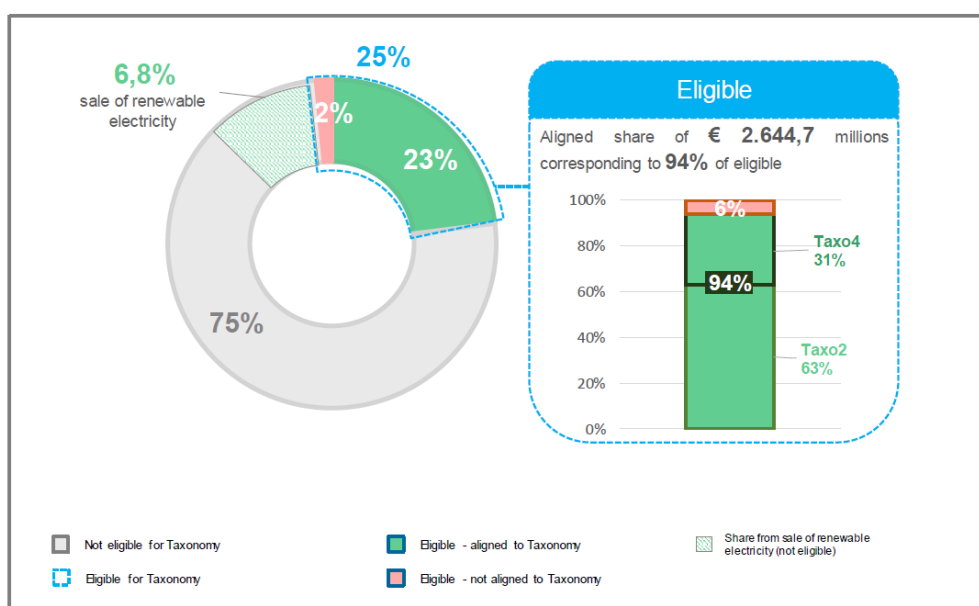
As described above, for the analyses required to apply the 2023 taxonomy, the Group examined the eligibility and alignment with economic activities that can **simultaneously contribute to the achievement of several taxonomy objectives** and that, in some cases, present **total or partial overlapping** in the perimeter established by the definition established by Regulation for each activity.

The Group decided to analyse compliance with the technical alignment criteria, including activities with mutual overlaps, concerning activities already assessed in the 2022 reporting for the mitigation objective and among those same activities listed in the taxonomy for the four new environmental objectives.

The analysis provided a detailed picture of the overlaps between eligible assets, showing some differences with respect to the ability of individual assets to exceed the technical alignment thresholds. **The Group has calculated the percentage of turnover, capex, opex and MOL eligible and aligned by enhancing the contribution of each individual activity to at least one environmental objective by optimizing the contribution to the objectives of the Regulation** and avoiding the double-counting in the management of overlapping assets. This approach has made it possible to measure the contribution to the achievement of more taxonomy objectives.

The Group's intention to analyse the alignment of all taxonomy activities is not only in line with the indications in the Regulation but also mitigates the so-called "**criteria shopping**" that the Commission identifies in the risk of selecting activities with technical criteria that are easier to satisfy at the expense of a comprehensive analysis of the contribution to multiple environmental objectives.

ADJUSTED TURNOVER (2023)



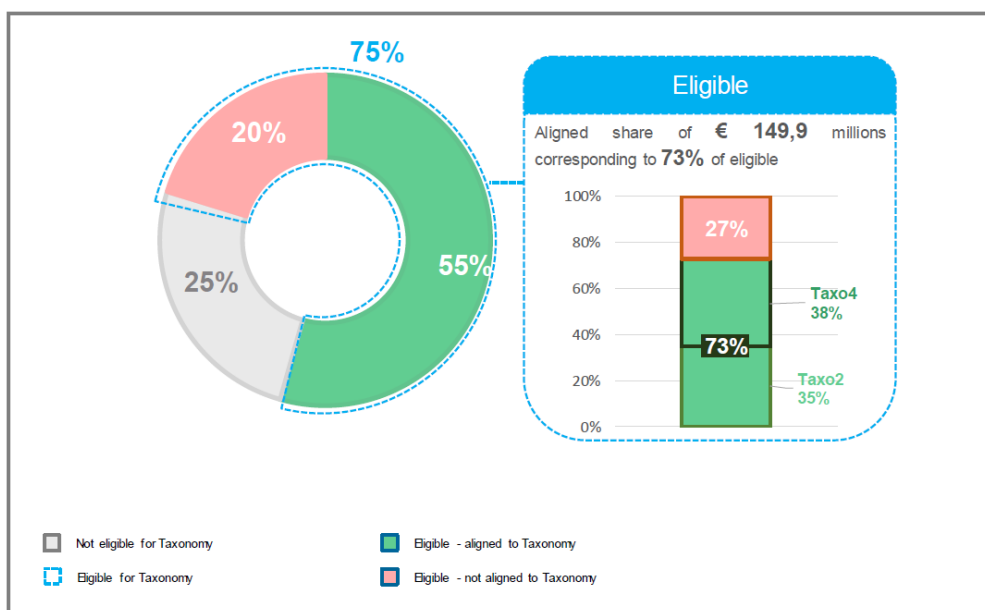
Turnover: in 2023, revenues related to eligible business **activities aligned** to the taxonomy are about **2.6 billion euros** (about 23% of the Group total), or 94% of the entire eligible share. This 94% is composed of 63% contributing to the climate change mitigation goal (Taxo2) and 31% contributing to the remaining four environmental goals (Taxo4). As described above, these results are the result of managing overlaps between the definitions of eligible activities that may contribute to different objectives of the taxonomy, amounting to 10 percent of the Group's total revenue.

For a correct reading of the data, it is essential to highlight that 6.8% of the ineligible turnover relates to the **sale of renewable electricity**, a sustainable activity not included in the Taxonomy list due to the logic explained previously under "The definition process and entry into force". From the Group's perspective, this activity is an essential element in the decarbonisation process, allowing the sustainable electrification of consumption. Assuming that the renewable electricity sales activity is eligible and aligned with the Taxonomy, the eligible aligned direct revenues would be 29.8% of the Group total.

Moreover, overall, more than two-thirds of the Group's turnover relates to the **sale and trading of electricity and gas**, activities not eligible for the Taxonomy and subject to **significant price fluctuations** dictated by the energy market, which can lead to annual variations in the portion of eligible and ineligible turnover. At the end of 2023, in particular, the denominator of the turnover-related KPI was strongly influenced in the energy sectors by the increase in the price of commodities and intermediation activities, which also generated corresponding substantial increases on the cost side. Therefore, to supplement the information and guarantee a timely managerial analysis, as well as to guarantee better comparability of the results, it was deemed appropriate to calculate the synthetic KPI of the "adjusted" turnover, sterilizing the anomalous price increase of 2022 that also impacted 2023. In the detailed table in the attachments, the data relating to the turnover KPI are shown in the version without management adjustments, where the revenues from aligned eligible activities are equal to 17% of the total Group turnover (+6% compared to 2022).

See the information under "Accounting standards" for further details on the methods of calculating the economic data.

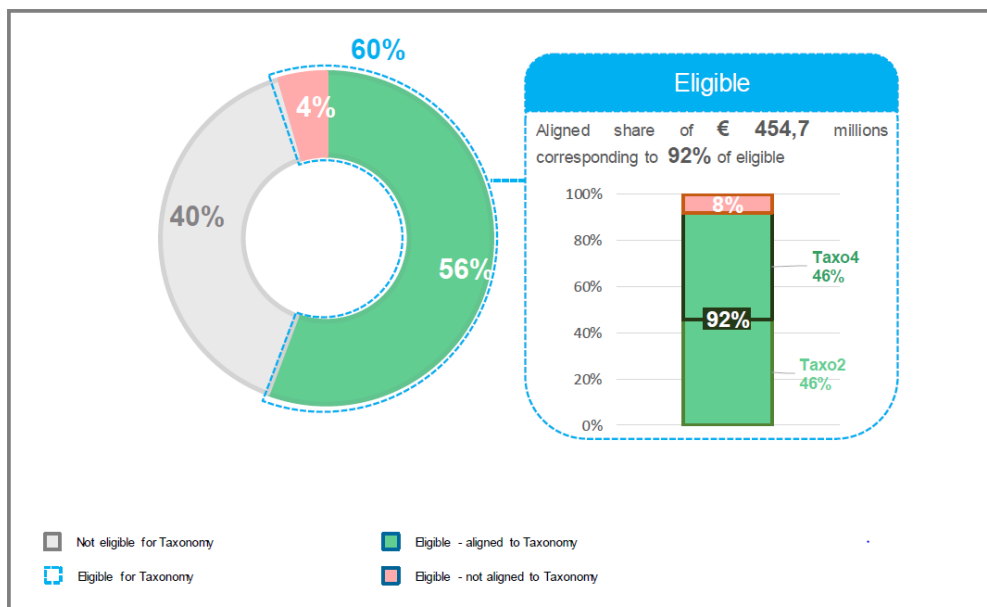
OPEX (2023)



Opex: In 2023, opex related to eligible business **activities aligned** with the taxonomy is **149.9 million euros** (about 55 percent of the Group total), or 73 % of the entire eligible share. This 73% is composed of 35% contributing to the climate change mitigation objective (Taxo2) and 38% to the remaining four environmental objectives (Taxo4). In the case of operating expenses, overlaps between definitions of eligible activities that may contribute to different objectives of the taxonomy amount to 21% of the Group's total opex.

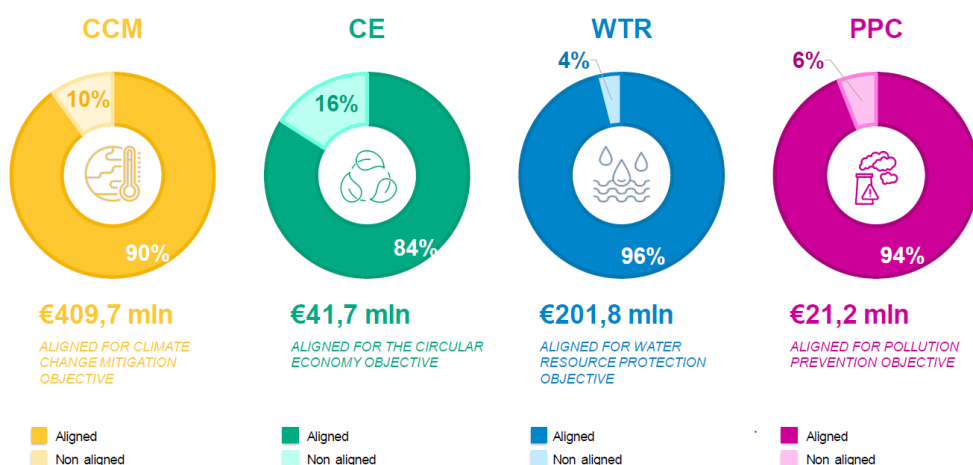
See the information under “Accounting standards” for further details on the methods of calculating the economic data.

CAPEX (2023)



Capex: In 2023, direct capex related to eligible business **activities aligned** with the taxonomy is **454.7 million euros** (about 56% of the Group's total operating investment before capital grants), or 92% of the entire eligible portion. This 92 % is composed of 46% contributing to the climate change mitigation objective (Taxo2) and 46% to the remaining four environmental objectives (Taxo4). In the case of capital expenditures, overlaps between definitions of eligible activities that may contribute to different objectives of the taxonomy amount to 31 % of the Group's total capex.

As far as CAPEX for 2023 is concerned, the table below shows the **contribution of the Group's eligible and aligned investments to the four taxonomy objectives relevant to Hera**. In particular, this calculation shows the absolute and percentage values for each individual objective, also considering those investments that may simultaneously contribute to more than one taxonomy objective.

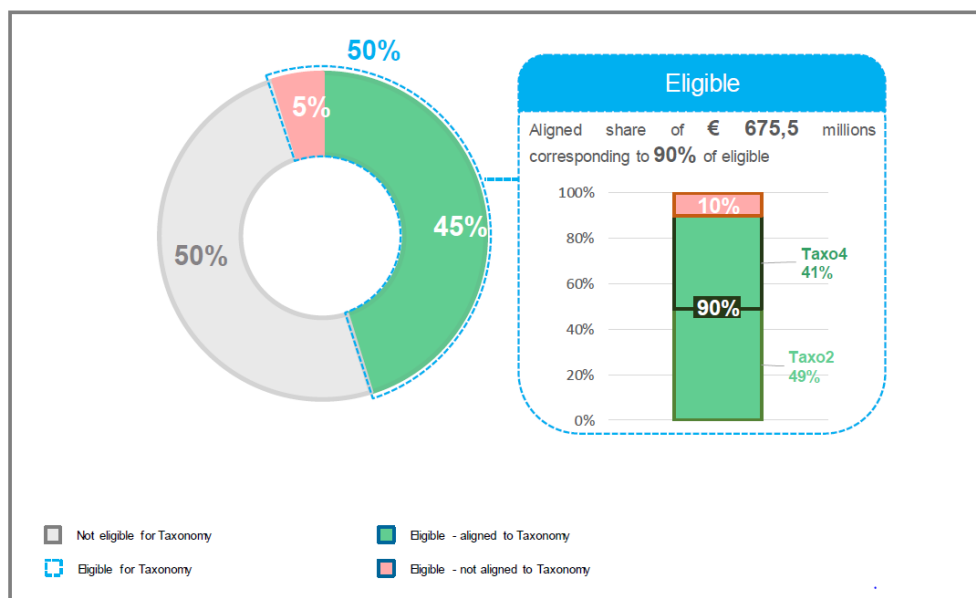


See the information under “Accounting standards” for further details on the methods of calculating the economic data.

Taxonomy EBITDA vs CSV EBITDA

As mentioned above, the Hera Group has decided to provide the figure relating to the **EBITDA** deriving from the Group's **taxonomy- eligible activities aligned with the climate change mitigation objective** for 2023 also. This is voluntary information, not prescribed by EU Regulation 2020/852 and subsequent delegated acts. It should be noted, however, that the EBITDA indicated was determined using criteria consistent with the EBITDA calculation in the Group's consolidated financial statements and is not limited to considering OPEX only as noted in the taxonomy regulation and delegated acts. For further details on the methods for calculating OPEX, see “Accounting Standards”.

“TAXONOMY EBITDA” (2023)



In 2023, EBITDA related to eligible business **activities aligned** with the taxonomy corresponds to **675.5 million euros** (about 45 percent of the Group total), or 90 % of the entire eligible share. This 90% is composed of 49% contributing to the climate change mitigation goal (Taxo2) and 41% to the remaining four environmental goals (Taxo4).

The “Taxonomy EBITDA” and the shared-value EBITDA (Csv EBITDA), which the Group has been quantifying since 2016, can therefore be compared; these two indicators have fundamental

conceptual differences and, by their very nature, are two not perfectly superimposable sets. The differences encountered impact firstly on the list of activities considered in their quantification (referred to as eligibility in the taxonomy) and secondly on how the portion of activities to be considered is calculated.

From a conceptual point of view, CSV EBITDA covers all six environmental Taxonomy objectives in its impact areas. In particular, mitigation responses can be found in “promotion of energy efficiency” and “energy transition and renewables”; similarities with the adaptation objective can be found in “resilience and adaptation” (which, however, adopts a broader vision of the resilience concept). In contrast, the remaining four environmental taxonomy objectives can be identified in the impact areas “transition to a circular economy”, “sustainable management of water resources”, and “protection of air, soil and biodiversity”. This confirms the validity of the approach the Group has been adopting for years, which, in fact, preceded the European legislation.

The main differences between the two approaches, which are and will always be evident in the numbers, mainly depend on:

- The inclusion in the CSV framework of activities with social objectives, such as the “economic development and social inclusion” impact area, and activities that promote innovation and digitisation;
- The different selection of activities that contribute to shared value, on the one hand, and to environmental objectives, on the other;
- The different method for calculating the economic values of the assets included both in the shared value and in the Taxonomy.

Regarding activities with social objectives, in the CSV EBITDA we observe value given to assignments to social cooperatives and initiatives to help customers who are in financial difficulty via the payment of bills in instalments. In the innovation and digitisation area, we find the development of projects and investments for digitising operational processes, the services offered to cities, and the remuneration deriving from investments in innovation.

CSV EBITDA includes other relevant activities from an environmental point of view and for the achievement of sustainable development, which are not included in the list of activities eligible for the Taxonomy, according to the logic adopted by the Commission (in particular, see the mitigation objective approach concerning Scope 1 emissions in “what is the European Taxonomy”):

- sales of renewable electricity;
- sale of methane gas with greenhouse gas offsetting;
- electricity and gas contracts signed with innovative energy efficiency commercial offers;
- efficient public lighting;
- the recovery of energy deriving from the incineration of waste (considered only for the portion of energy from renewable sources equal to 51%);
- obtaining white certificates.
- demolition and dismantling industrial plants

As regards the demolition activity, we note that the activity is included in the CSV EBITDA as potentially applicable for soil recovery. In contrast, from the point of view of the EU Taxonomy, this activity is included as eligible if the waste it generates is destined for recycling and recovery above a certain technical threshold.

Concerning activities included in both shared value and taxonomy for which different accounting methods are used, we find:

- Sewerage and purification, the marginality considers the proportion of reusable wastewater and the percentage of compliance with European and national legislation on the purification of wastewater in urban agglomerations >2,000 population equivalent in the CSV EBITDA;
- Aqueduct, the marginality is quantified considering the users served by aqueduct systems “covered” by the water safety management plans in the CSV EBITDA;
- Company fleet, only the marginality deriving from electric vehicles is considered eligible in the Taxonomy EBITDA, while in the CSV EBITDA, methane/LPG vehicles are also included;
- Telecommunications, only the marginality of the component deriving from the data centre activity is considered eligible in the Taxonomy EBITDA, while in the CSV EBITDA, it is considered in full as it corresponds to the “innovation and digitization” impact area;
- Waste collection, only the marginality deriving from the differentiated collection is reported as eligible and aligned in the Taxonomy EBITDA, while in the CSV EBITDA, the marginality of unsorted waste collection sent to energy production is also considered, partly designated the district heating service;

- In selecting municipal and industrial waste, only the marginality of the plants that convert at least 50% of the waste into secondary raw materials is considered eligible in the Taxonomy EBITDA. In contrast, in the CSV EBITDA, the marginality is quantified considering the percentage of waste sent for material and energy recovery (the latter excluded from the Taxonomy, as indicated above).

Accounting standards

What follows is a description of the accounting standards the Hera Group followed in formulating the economic KPIs presented.

As for the method of assigning the economic aggregates to the numerator, as already mentioned, we started with a detailed analysis of the map of the activities carried out by the Hera Group, identifying those that fall within the description of economic activities included in attachments I and II of the delegated act 2021/2139. To allocate the amounts relating to turnover, CAPEX, and OPEX to the aligned and non-aligned eligible activities, the information present in the Group's accounting systems relating to general, analytical, and regulatory accounting was used as a priority, representing the primary source for both quantitative and qualitative information. In some cases, to better describe the extent to which the company's activities are associated with the economic activities considered eligible under Articles 3 and 9 of this Regulation 852/2020, appropriate drivers also had to be used to better identify the relevant values. In any case, the Group's analytical accounting system, which governs the allocation and disbursement of each accounting amount, ensures the non-duplication of the KPI numerator values in the various economic taxonomy activities.

As regards the determination of the KPI denominator, this value is always calculated in line with the aggregates present in the numerator but refers to the perimeter of the Hera Group's total consolidated economic activities, excluding all intragroup relations and activities carried out for internal consumption within the Group.

The accounting principles adopted to calculate the KPI illustrated below and applied for the first two environmental objectives may evolve and change in future years in light of regulatory developments in the taxonomy or established practices regarding its reporting.

The Taxonomy KPIs were calculated as follows:


- **Turnover:** the portion of eligible aligned and non-aligned turnover, as defined in Article 8(2)(a) of European Regulation 852/2020, is identified as the portion of the consolidated net revenue generated from the sale of products or services, including intangible products or services, associated with economic activities eligible for the taxonomy/total net revenue. Net revenues are consistent with the values in the Group's consolidated financial statements, prepared in accordance with international accounting standards and refer to paragraph 82(a) of IAS 1, adopted by EC Regulation No. 1126/2008. In particular, in calculating the indicator, the items included under production for revenues from sales and services were considered, excluding other revenues and increases in fixed assets from internal work.
- **CAPEX:** the portion of aligned and non-aligned eligible CAPEX as defined in Article 8 paragraph 2 (b) of European Regulation 852/2020 is calculated as the portion of capital expenditures associated with eligible activities and is determined in accordance with the criteria set out in paragraph 1.1.2.2 of the Delegated Act / the total of CAPEX from the Group's consolidated financial statements defined in accordance with the criteria set out in paragraph 1.1.2.1 of the Delegated Act. Specifically, capital expenditures generating the increases in assets relating to tangible fixed assets, investment property and intangible fixed assets of the financial year considered before depreciation and any write-down or revaluation, excluding investments in financial holdings, shall be taken into account, including grants. There were also no "CAPEX plans" expenses as defined in paragraph 1.1.2.2 of Attachment I to Delegated Regulation (EU) 2021/2178. In May 2022, the Hera Group issued a Green Bond. The funds it raised are earmarked for the integrated water cycle (Sustainable water and wastewater management, aligned with SDGs 6, 13 and 14), circular economy & pollution prevention and control (Circular Economy & Pollution prevention and control, aligned with SDGs 11, 12 and 13), energy efficiency and infrastructure (Energy Efficiency and Energy Infrastructure, aligned with SDGs 7, 11 and 13) and, therefore, are also a source of funding for certain investments that fall within the CAPEX of the taxonomy aligned economic activities. For further information, see the information on the green bond and the Hera Group's Green Financing framework reported under "[Hera green bonds](#)" in this Sustainability Report.
- **OPEX:** the portion of eligible OPEX as defined in Article 8(2)(b) of European Regulation 852/2020 is calculated as the portion of non-capitalised expenditure associated with eligible activities and is determined according to the criteria set out in paragraph 1.1.3.2

of the Delegated Act / the total OPEX from the consolidated financial statements of the Group defined according to the criteria set out in paragraph 1.1.3.1 of the Delegated Act. In particular, this KPI includes the costs associated with research and development, building renovations, short-term leases, maintenance and repairs, as well as other direct costs relating to the daily ordinary maintenance of the tangible assets necessary to ensure the continuous and efficient functioning of these assets, whether performed internally or outsourced to third-party companies, presented in the income statement in the Group's consolidated financial statements drawn up in accordance with IAS-IFRS standards. Said costs, therefore, include portions of labour costs, external costs for services, and costs for the purchase of materials which are directly attributable to this ordinary maintenance.

The Hera Group also decided to provide the figure for EBITDA from the Group's taxonomy-eligible activities aligned with material environmental objectives. This information is not prescribed by the EU Regulation 2020/852 requirements and subsequent delegated acts. Still we believe it is important, including for reconciling this "EBITDA Taxonomy" with the "shared value EBITDA" that the Group has been reporting for several years. The Taxonomy EBITDA is calculated in line with EBITDA (see the definition of alternative performance indicators in the financial statements) taken from the Group's consolidated financial statements and includes all operating costs, not limited, therefore, to the cost aggregates encompassed in the OPEX. The numerator shows the portion of EBITDA relating to the aligned activities, At the same time, the Group's total EBITDA appears in the denominator.

The table below details the results of the analysis described above. In particular, for each taxonomy-eligible activity, the following items are listed in the column: the business area of reference and the relevant activity, the numerical **code**, the **abbreviation** of the objective to which the activity may contribute and the **title** of the eligible activity (followed by a breakdown based on the Group's business). The **qualitative rationale supporting compliance or non-compliance with the technical criteria** required to establish alignment (CVT and DNSH) is also provided. The grey cross-banded background, where relevant, details **any overlaps** with activities having similar descriptions that may contribute to the achievement of different objectives. Finally, the [✓] icon indicates those activities selected for KPI calculation purposes, allowing the Group to **optimise the KPI valuation of the contribution to the Regulation's objectives**.


ELIGIBLE ALIGNED AND NON-ALIGNED HERA GROUP ACTIVITIES

Area	Group activity	Code and description of the activity defined by the EU Taxonomy	Overall CVT and DNSH compliance
	Aqueduct	<input checked="" type="checkbox"/> 2.1 WTR Water supply Water supply	<p>Aligned: The Group's entire water supply business complies with the alternative criterion relating to water losses, calculated according to the Resolution ARERA 917/17 (RQTI) requirements, see macro indicator M1¹. Water is used based on derivation concessions issued by the competent authorities. Overall DNSH compliance for the applicable objectives.</p> <p>Not aligned: -</p>
<p>Overlapping: The activity overlaps with Activity 5.1 CCM - Construction, extension, and operation of water collection, treatment and supply systems and Activity 1.1 WTR - Manufacture, installation and associated services for leakage control technologies enabling leakage reduction and prevention in water supply systems (the latter for the operation of water supply systems).</p>			

¹ In accordance with Article 4 of Directive (EU) 2020/2184 of the European Parliament and Council

	5.1 CCM	Construction, extension, and operation of water collection, treatment and supply systems Construction, extension, and operation of water collection, treatment and supply systems.	Aligned: The collection, adduction, distribution, and metering systems for the aqueduct networks and plants considered for Hera Spa and AcegasApsAmga comply with the consumed energy threshold of 0.5 kWh/m ³ . The Marche Multiservizi system complies with the alternative criterion relating to water losses, calculated according to the Resolution ARERA 917/17 (RQTI) requirements, ref. macro indicator M1 ² . Overall DNSH compliance for the applicable objectives. Not aligned: -
	1.1 WTR	Manufacture, installation and associated services for leakage control technologies enabling leakage reduction and prevention in water supply systems Leakage control activities in water supply systems	Aligned: All of the Group's leakage control technologies comply with requirements (including pressure control valves, pressure transmitters, flow meters, etc.) and environmental degradation risks related to water quality preservation and water stress prevention are identified and addressed. Overall DNSH compliance for the applicable objectives. Not aligned: -
Sewage and water treatment <input checked="" type="checkbox"/>	2.2 WTR	Urban Waste Water Treatment Urban Waste Water Treatment	Aligned: Compliant for AcegasApsAmga, Hera Spa and Marche Multiservizi insofar as the networks and plants are operated under authorisations (in particular, discharge authorisations) and compatibility assessments are considered positive when authorisations are issued by Public Administrations. All AcegasApsAmga, Hera Spa, and Marche Multiservizi plants with a capacity equal to or exceeding 100,000 p.e. (excluding those listed in the "not aligned" section) have a wastewater treatment system that stabilises sludge through anaerobic digestion. The proportion of population equivalent (p.e.) covered by plants with a capacity >100,000 p.e. with anaerobic digestion amounts to 90% of the Group's total. Overall DNSH compliance for the applicable objectives. Not aligned: A portion of Hera Spa (Sassuolo, Faenza and Cesenatico) and Marche Multiservizi (Borgheria) plants with a capacity of 100,000 p.e. or more do not have anaerobic digestion. The portion of population equivalents (p.e.) covered by plants with a capacity >100,000 p.e. with anaerobic digestion amounts to 10% of the Group's total. Marche Multiservizi's three agglomerations in EU infringement do not meet the requirements on the good status of the water bodies concerned.
Overlapping: the activity overlaps with activity 5.3 CCM - Construction, extension and operation of wastewater collection and treatment.			
	5.3 CCM	Construction, extension and operation of waste water collection and treatment Construction, extension and operation of centralized wastewater systems, including	Aligned: The wastewater collection and treatment systems with any level of treatment (including primary) considered for Hera Spa and Marche Multiservizi (except for what is reported in the "non-aligned" section) comply with the net energy consumption thresholds. Overall DNSH compliance for the applicable objectives.

² Ibid.

			collection (sewer system) and treatment.	
				<p>Not aligned: The wastewater collection and treatment systems with any level of treatment (including primary) of AcegasApsAmga and Borgheria (Marche Multiservizi) do not comply with the net energy consumption thresholds; within the Marche region, there are also three agglomerations in violation of the purification legislation, not compliant with the DNSH prevention and reduction of pollution.</p>
Power to gas	5.6 CCM	<p>Anaerobic digestion of sewage sludge</p> <p>Construction and management of plants for the treatment of processing sludge through anaerobic digestion, with the consequent production and use of biogas and chemical products.</p>	<p>Aligned: The Inrete plant considered digests the sewage sludge, producing biogas, which is transformed into biomethane to be injected into the natural gas network. A plan is in place to monitor methane leaks.</p> <p>Overall DNSH compliance for the applicable objectives.</p>	<p>Not aligned: -</p>
 Plastic recycling	3.17 CCM	<p>Manufacture of plastics in primary form</p> <p>Fabrication of resins, plastics and non-curing thermoplastic elastomers, custom blending of custom resins, as well as production of non-custom synthetic resins.</p>	<p>Aligned: Aliplast's washing and regeneration plants manufacture plastic in primary form entirely through the mechanical recycling of plastic waste. Overall DNSH compliance for the applicable objectives.</p>	<p>Not aligned: -</p>
	1.1 CE	<p>Manufacture of plastic packaging goods</p> <p>Fabrication of resins, plastics and non-curing thermoplastic elastomers, custom blending of custom resins, as well as production of non-custom synthetic resins.</p>	<p>Aligned: Aliplast's PE film products have an average recycled plastic content of 85%. The plastic packaging material attains the minimum target recycling rate for plastic packaging waste set by Directive 94/62/EC. Overall DNSH compliance for the applicable objectives.</p>	<p>Not aligned: -</p>
Non-hazardous separate waste collection	<input checked="" type="checkbox"/> 5.5 CCM	<p>Collection and transport of non-hazardous waste in fractions separated at the source</p> <p>Separate collection and transport of non-hazardous waste in single or mixed fractions intended for preparation for reuse or recycling.</p>	<p>Aligned: All non-hazardous waste collected separately and transported by Hera Spa, AcegasApsAmga, Marche Multiservizi, and Alibardi are separated at the source and destined for preparation for reuse or recycling. Overall DNSH compliance for the applicable objectives.</p>	<p>Not aligned: -</p>
<p>Overlapping: The activity overlaps with activity 2.3 EC - Collection and transport of non-hazardous and hazardous waste for the portion regarding the collection and transport of non-hazardous waste.</p>				
Collection and transport of hazardous waste	<input checked="" type="checkbox"/> 2.1 PPC	<p>Collection and transport of hazardous waste</p> <p>Collection and transport of hazardous waste</p>	<p>Aligned: Hazardous waste managed by Hera Spa, Herambiente Servizi Industriali, Recycla and Vallortigara is separated at the source and collected separately from non-hazardous waste to avoid cross-contamination. Appropriate measures are taken to ensure that hazardous waste is not mixed or diluted with other hazardous waste categories or other wastes, substances or materials during separate waste collection and transport. The proportion of vehicles minimally compliant with the Euro V standard used was 83% for transport. Overall DNSH compliance for the applicable objectives.</p>	

Not aligned: The Marche Multiservizi vehicles used for waste collection are not compliant with the EURO V standard as a minimum. The companies Hera Spa, Herambiente Servizi Industriali and Recycla also use vehicles that are not compliant with the Euro V standard as a minimum. In these companies, the overall proportion of Group vehicles noncompliant with the Euro V standard as a minimum and used for the collection and transport of hazardous waste that do not comply is 17%.

Overlapping: The activity overlaps with activity 2.3 EC - Collection and transport of non-hazardous and hazardous waste for the portion regarding the collection and transport of non-hazardous waste.

Collection and transport of non-hazardous and hazardous waste

2.3
CE

Collection and transport of non-hazardous and hazardous waste
Collection and transport of non-hazardous and hazardous waste

Aligned: AcegasApsAmga, Hera Spa., Herambiente Servizi Industriali, Marche Multiservizi, Vallortigara and Recycla use some Euro V or higher vehicles for the transport of municipal waste (hazardous and non-hazardous) and non-municipal waste. The waste is collected and transported separately and is prepared for re-use or recycling. Curbside and controlled streetside collection are prevalent (>50%) for all companies, except for AcegasApsAmga, for which this method is prevalent only in the Padua area for non-hazardous municipal waste and in the Padua and Trieste areas for hazardous municipal waste. Overall DNSH compliance for the applicable objectives.

Not aligned: The waste A.C.R. manages is not exclusively designated for disposal. Furthermore, in A.C.R., glass and wood are mixed with other waste in some instances. In the Trieste area, AcegasApsAmga mainly carries out non-hazardous municipal and non-municipal waste collection activities by road. The AcegasApsAmga, Hera S.p.A., Herambiente Servizi Industriali, Marche Multiservizi, Vallortigara and Recycla companies also use vehicles non-compliant with the Euro V standard as a minimum for collection and transport.

Anaerobic digestion



2.5
CE³

Recovery of bio-waste by anaerobic digestion or composting
Recovery of bio-waste by anaerobic digestion or composting

Aligned: The organic waste fed into the anaerobic digestion systems originates from the separate waste collection of the wet fraction from canteen and kitchen waste; the waste delivered to the plant comes mainly in compostable plastic bags certified in accordance with EN 13432:2000. For Herambiente's Sant'Agata, Rimini, Cesena and Voltana plants, organic waste from separate waste collection constitutes at least 70% of the waste entering anaerobic digestion as an annual average, with percentages varying between 75 and 85%. Overall DNSH compliance for the applicable objectives.

Not aligned: In Herambiente's Spilamberto plant, organic waste from separate waste collection accounts for 57% to 68% of the total raw material input.

³ Activity 2.5 CE was selected for calculating KPIs only with reference to those concerning the Spilamberto plant.

Overlapping: the activity overlaps with activity 5.7 CCM - Anaerobic digestion of organic waste and with activity 4.13 - Manufacture of biogas and biofuels for use in transport and of bioliquids.



4.13
CCM⁴

Production of biogas and biofuels for transport and bioliquids

Production of biogas or biofuels for transport and bioliquids.

Aligned: The two Herambiente Group biomethane plants considered produce biomethane for transport, guaranteeing a reduction in greenhouse gas emissions of at least 65% compared to the emissions of the related reference fossil fuel. No agricultural or forest biomass is used for the production, and the process satisfies criteria 1 and 2 of section 5.7. CO₂ capture and storage is not envisaged. Overall DNSH compliance for the applicable objectives.

Not aligned: -

5.7
CCM

Anaerobic digestion of organic waste

Construction and management of dedicated plants for the treatment of organic waste collected separately through anaerobic digestion, with the consequent production and use of biogas and digestate and/or chemical products.

Aligned: Through the process of separately digesting the collected municipal waste, the Herambiente Group's three anaerobic digestion plants produce: 1) biogas, using it directly for electricity generation; 2) digestate, used as fertiliser. A monitoring and emergency plan is in place to minimise plant methane losses. Overall DNSH compliance for the applicable objectives.

Not aligned: -

Composting

5.8
CCM

Composting of bio-waste

Construction and management of dedicated plants for the treatment of organic waste collected separately through composting (anaerobic digestion), with the consequent production and use of compost.

Aligned: The two Herambiente Group composting plants produce compost from organic waste collected separately. The compost produced is used as a fertilizer in accordance with EU and Italian legislation. Overall DNSH compliance for the applicable objectives.

Not aligned: -

Municipal and industrial waste sorting plants



5.9
CCM

Recovery of materials from non-hazardous waste

Construction and operation of facilities for the sorting and transformation of separately collected non-hazardous waste streams into secondary raw materials involving mechanical reprocessing, except for backfilling purposes.

Aligned: A.C.R.'s inert crushing plant, the Soil Washing plant in Pisa, and five of the Herambiente Group's seven municipal waste and special non-hazardous waste sorting plants convert at least 50% of their waste into secondary raw materials or send more than 70% of their outgoing waste for recovery (safety threshold chosen to ensure compliance with the 50% conversion of secondary raw materials). Overall DNSH compliance for the applicable objectives.

Not aligned: The Marano plant of Vallortigara, the Santacroce Platform of Herambiente Servizi Industriali, the Ferrara sorting plant, and the Carbon Fibre plant of the Herambiente Group do not convert at least 50% of their waste into

⁴ Activity 4.13 CCM was selected for the calculation of KPIs only with reference to those concerning the Spilamberto plant.

secondary raw materials or do not send more than 70% of their outgoing waste for recovery.

Overlapping: The activity overlaps with activity 2.7 EC - Sorting and material recovery of non-hazardous waste.

2.7 CE Sorting and material recovery of non-hazardous waste

Construction and operation of facilities for the sorting and transformation of separately collected non-hazardous waste streams into secondary raw materials involving mechanical reprocessing, except for backfilling purposes.

Aligned: A.C.R.'s, Herambiente's, Herambiente Servizi Industriali's, Recycla's, and Vallortigara's non-hazardous waste raw materials originate mainly from collected and transported sorted waste. For materials for which separate waste collection is mandatory, the activity converts at least 50%, by weight, of the separately collected non-hazardous waste into secondary raw materials suitable for the substitution of primary raw materials in production processes (except for the "not aligned" section). Overall DNSH compliance for the applicable objectives.

Not Aligned: with reference to Herambiente, only paper and board waste is converted by at least 50% into secondary raw materials suitable for replacing primary raw materials in production processes.

Landfill capture and utilisation

gas and

5.10 CCM

Landfill gas capture and utilisation

Installation and operation of infrastructures for the capture and use of landfill gas in permanently closed landfills or landfill cells, using new or additional dedicated engineering and equipment installed during or after the closure of the landfill or of the landfill cell.

Aligned: No permanently closed landfills have come into operation after 8 July 2020. The landfill gas produced is used to generate electricity or heat in the form of biogas. Methane emissions from landfills and leakages from landfill gas collection and utilization facilities are subject to the control and surveillance procedures set out in Attachment III of Council Directive 1999/31/EC. Overall DNSH compliance for the applicable objectives.

Not aligned: -

Remediation

2.3 PPC

Remediation of legally non-conforming landfills and abandoned or illegal waste dumps

Remediation of legally non-conforming landfills and abandoned or illegal waste dumps

Aligned: The operator who caused the pollution or a waste producer or a person acting on behalf of that operator does not carry out A.C.R.'s remediation activities; the relevant contaminants are removed, controlled, contained or reduced so that the contaminated area no longer presents a significant risk of causing harmful effects for human health and the environment. The activity is prepared and carried out in line with industry best practices. Overall DNSH compliance for the applicable objectives.

2.4 PPC

Remediation of contaminated sites and areas

Remediation of contaminated land and industrial areas

Aligned: ACR's clean-up activity shall not be undertaken by the polluter or waste producer or by a person acting on behalf of that operator, the relevant contaminants shall be removed, controlled, restricted or reduced so that the contaminated area no longer presents a significant risk of causing harmful effects to human health and the environment. The activity is prepared and carried out in line with industry best practices. The requirement that at least 70% of non-hazardous construction, demolition or other waste generated at the remediation site is prepared for reuse, recycling and other types of material recovery shall be met, including filling operations using waste to replace other materials. Overall compliance with DNSH criteria for applicable objectives.

Not aligned: -

Hazardous treatment



2.2
PPC

Treatment of hazardous waste
Treatment of hazardous waste

Aligned: Herambiente and Herambiente Servizi Industriali, and Recycla carry out this activity in accordance with the requirements set out in the conclusions of Best Available Techniques (BAT) for waste treatment or waste incineration. Receiving facilities are available with a laboratory for on-site sample analysis and documented standard operating procedures for analysis, with the option to subcontract analysis to accredited external laboratories under contract, documented sampling procedures, analysis of physical-chemical parameters relevant to treatment, and a dedicated area for quarantined storage of waste as well as written procedures for handling unaccepted waste. The dissolved organic carbon (DOC) limit for outgoing waste is met. The proportion of hazardous waste treated in compliance with the technical criteria is 87% of the total hazardous waste treated by the Group. Overall compliance with DNSH criteria for applicable objectives.

Not aligned: A.C.R. has neither an in-house laboratory nor a sampling procedure and does not conduct a documented analysis of the physical-chemical parameters relevant to the treatment. A.C.R. and Vallortigara do not comply with the dissolved organic carbon (DOC) limit for outgoing waste. The portion of hazardous waste these companies treat is 13% of the total hazardous waste treated by the Group.

Overlapping: The activity overlaps with activity 2.4 EC - Treatment of hazardous waste.

2.4
CE

Treatment of hazardous waste
Treatment of hazardous waste

Aligned: Herambiente Servizi Industriali's and Recycla's activities consist of the recovery of secondary raw materials from source-separated hazardous waste. Recovered materials comply with industry specifications and replace primary raw materials including critical raw materials, or chemicals in production processes. Overall DNSH compliance for the applicable objectives.

Not aligned: at Herambiente Servizi Industriali's Via Malpasso platform, waste leaves the plant with operation code "R" without being classified as waste. No secondary raw materials are produced in Herambiente Servizi Industriali's Pozzilli purification plant.



Photovoltaic energy production

4.1
CCM

Electricity generation using solar photovoltaic technology
Construction or management of plants for the production of electricity using photovoltaic solar technology.

Aligned: Vallortigara's Marano plant, Recycla's two Maniago plants, the plants of Hera Spa's Business Unit "Production of Renewable Energy", HSE's Ducati plant, and Herambiente's plants produce electricity using photovoltaic solar technology. Overall DNSH compliance for the applicable objectives.

Not aligned:



Electricity distribution


4.9
CCM

Transmission and distribution of electricity
Construction and operation of transmission systems that transport electricity in the extra high and high voltage interconnected system.
Construction and operation of distribution systems that carry electricity in high, medium and low voltage distribution systems.

Aligned: Inrete's and AcegasApsAmga's electricity distribution networks are part of an interconnected European system. The activity includes the installation of intelligent metering systems, as defined by the standard and the installation of equipment to specifically allow the exchange of renewable electricity between users. Overall DNSH compliance for the applicable objectives.

Not aligned: -

	Electrical mobility	7.4 CCM	Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) Installation, maintenance and repair of charging stations for electric vehicles in buildings ((and parking spaces attached to buildings)).	Aligned: The activity consists in the installation, maintenance or repair of charging stations for electric vehicles. Overall DNSH compliance for the applicable objectives. Not aligned: -
	Gas network management and maintenance (compatible with low carbon gas)	4.14 CCM	Transmission and distribution networks for renewable and low carbon emissions Conversion, change of use, or upgrading of gas networks for the transmission and distribution of renewable and low-carbon gases. Construction or operation of transmission and distribution pipelines for the transport of hydrogen or other low-carbon gases.	Aligned: The upgrading of the gas distribution networks of Inrete, AcegasApsAmga and Marche Multiservizi enables hydrogen and other low-carbon gases to be integrated into the network, in line with the Ministerial Decree of 3 June 2022, which sets a maximum hydrogen blending threshold of 2%. The evaluation was confirmed by the first national experience of injecting hydrogen into the gas distribution network carried out by Inrete. The three Group companies conduct leak detection and repair of existing pipelines and other network components to reduce methane losses. Overall DNSH compliance for the applicable objectives. Not aligned:
	Cogeneration	4.30 CCM	High efficiency cogeneration of heat, cooling, and energy from gaseous fossil fuels Construction, renovation, and operation of combined heat/cooling and electricity plants using gaseous fuels. This activity does not include high efficiency cogeneration of heat/cooling and electricity from the exclusive use of renewable non-fossil gaseous and liquid fuels, and of biogas and bio-liquid fuels.	Aligned: - Not aligned: The HSE cogeneration plants, the industrial cogeneration plant, and the Imola cogeneration plant do not comply with the 100gCO2/kWh threshold for greenhouse gas emissions in the cogeneration life cycle.
	Smart meter gas	7.5 CCM	Installation, maintenance, and repair of instruments and devices for measuring, regulating, and controlling the energy performance of buildings Installation, maintenance, and repair of instruments and devices for measuring, regulating, and controlling the energy performance of buildings.	Aligned: Inrete, AcegasApsAmga, and Marche Multiservizi conduct the installation, maintenance and repair on smart meters for gas, heating, cooling, and electricity. Overall DNSH compliance for the applicable objectives. Not aligned: -
	District heating (distribution)	4.15 CCM	District heating/cooling distribution Construction, refurbishment and operation of pipelines and associated infrastructure for distribution of heating and cooling, ending at the sub-station or heat exchanger.	Aligned: 41% of the thermal energy distributed (and sold) through pipelines and related infrastructure for heating and cooling distribution is generated by district heating systems that comply with the EU definition of efficient district heating. Overall DNSH compliance for the applicable objectives. Non-aligned: 59% of the thermal energy distributed (and sold) through pipelines and related infrastructure for heating and cooling distribution is

generated by systems that do not comply with the EU definition of efficient district heating.			
District heating (produced with geothermal power)	4.22 CCM	Production of heat/cooling from geothermal energy Construction or management of plants that produce heat/cold from geothermal energy.	<p>Aligned: The Ferrara geothermal plant produces heat and cooling while respecting the threshold of 100gCO₂e/kWh of greenhouse gas emissions in the life cycle. Overall DNSH compliance for the applicable objectives</p> <p>Not aligned: -</p>
District heating (production from cogeneration and thermal boilers)	4.31 CCM	Production of heat/cooling from fossil gaseous fuels in an efficient district heating and cooling system Construction, renovation, and operation of heat generation plants producing heat/cooling using gaseous fuels related to efficient district heating and cooling pursuant to Article 2(41) of Directive 2012/27/EU of the European Parliament and Council. This activity does not include the production of heat/cooling from efficient district heating and from the exclusive use of non-fossil renewable gaseous and liquid fuels and biogas and bio-liquid fuels.	<p>Aligned: -</p> <p>Not aligned: One of the four efficient district heating plants considered, which partially uses gaseous fossil fuel boilers, does not meet the 100gCO₂/kWh GHG emissions threshold for the heat generation/cooling life cycle. Data is not available for the remaining three plants.</p>
	Company fleet	6.5 CCM	<p>Transport by motorbikes, passenger cars and light commercial vehicles Purchase, financing, rental, leasing, and operation of vehicles belonging to category M1, N1, both of which fall within the scope of Regulation (EC) no. 715/2007 of the European Parliament and of the Council, or L (vehicles with two or three wheels and quadricycles).</p> <p>Aligned: Uniflotte purchases, leases, and manages light electric vehicles belonging to the M1 and N1 categories, which comply with the emission thresholds of 50gCO₂/km (until 2025) and 0gCO₂/km (from 2026). Overall DNSH compliance for the applicable objectives.</p> <p>Not aligned: All non-electric light vehicles that Uniflotte purchases, leases, and manages, belonging to the M1 and N1 category, do not comply with the emission thresholds of 50gCO₂/km (until 2025) and 0gCO₂/km (from 2026).</p>
		6.6 CCM	<p>Freight transport services by road Purchase, financing, leasing, rental, and operation of N1, N2, or N3 category vehicles falling within the scope of the EURO VI standard, stage E or later, for road haulage services.</p> <p>Aligned: -</p> <p>Not aligned: Uniflotte purchases, leases, and manages vehicles used for the transport of goods and belonging to categories N2 and N3 with a mass not exceeding 7.5 tonnes, which do not comply with the definition of "zero-emission heavy vehicle" as defined by EU legislation.</p>
	Energy efficiency interventions and renewable energies	7.3 CCM	<p>Installation, maintenance and repair of energy efficiency equipment Individual renovation measures consisting of the</p> <p>Aligned: HSE and Hera Comm carry out the activities of adding insulation to the components of the existing envelope, replacing existing windows with new energy-efficient windows, installing and replacing energy-efficient light sources, heating systems, ventilation, and air conditioning. Overall DNSH compliance for the applicable objectives.</p>

		installation, maintenance or repair of energy efficiency devices.	Not aligned: -
	7.6 CCM	Installation, maintenance and repair of renewable energy technologies Installation, maintenance and on-site repair of renewable energy technologies.	Aligned: Inrete, HSE, and Hera Comm carry out on-site installation, maintenance, and repairs of photovoltaic solar systems, solar panels for hot water, heat pumps, electrical or thermal energy storage units, micro-cogeneration plants, recovery systems/heat exchangers. Overall DNSH compliance for the applicable objectives. Not aligned: -
Demolition and dismantling of industrial plants	3.3 CE	Demolition and wrecking of buildings and other structures Demolition of buildings, roads, plants, tanks, stacks	Aligned: - Not aligned: A.C.R.'s activity does not fulfil the criterion that at least 90% (by mass in kilograms) of the non-hazardous construction and demolition waste generated on-site, excluding backfill, be prepared for re-use or be recycled.
Data Centre	8.1 CCM	Data processing, hosting and related activities Storing, manipulating, managing, moving, controlling, displaying, switching, interchanging, transmitting, or processing data through data centres, including edge computing.	Aligned: - Not aligned: Acantho carries out the activity of management, movement, control, display, switching, interchange, transmission, or processing of data through data centres that do not comply with the expected practices contained in the European code of conduct on energy efficiency of data centres.

Sustained shared value	Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Governance and creating value	Customers	People	Suppliers

Models for the Key Performance Indicators

PORTION OF TURNOVER FROM PRODUCTS OR SERVICES ASSOCIATED WITH ECONOMIC ACTIVITIES ALIGNED WITH THE TAXONOMY⁵

Financial Year n,	2023			Criteria for the substantial contribution						DNSH Criteria ("Do Not Significant Harm")									
Economic Activities	Activity Code	€ Total Turnover (millions of)	Share of turnover	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Minimum safeguards	Share of Turnover aligned or eligible for taxonomy year N-1	enabling activity	Transitional activity
Text		€	%	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	A	T
A. Activities eligible for Taxonomy																			
A.1. Eco-sustainable activities (aligned to Taxonomy)																			
1.1 Manufacture of plastic packaging	1.1 CE	23,7 €	0,2%	N/EL	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-
2.1 Collection and transport of hazardous waste / 2.3 Collection and transport of non-hazardous and hazardous waste	2.1 PPC / 2.3 CE	3,8 €	0,0%	N/EL	N/EL	N/EL	Yes	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-
2.1. Water supply / 5.1 Construction, expansion and management of water collection, treatment and supply systems	2.1 WTR / 5.1 CCM	470,0 €	3,1%	Yes	N/EL	Yes	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	2,4%	-	-
2.2 Treatment of hazardous waste / 2.4 Treatment of hazardous waste	2.2 PPC / 2.4 CE	15,7 €	0,1%	N/EL	N/EL	N/EL	Yes	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-
2.2 Treatment of urban waste water / 5.3 Construction, expansion and management of waste water collection and treatment systems	2.2 WTR / 5.3 CCM	268,5 €	1,8%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	1,3%	-	-

⁵ **Legenda:**

Yes – The activity is eligible for taxonomy and aligned with the taxonomy regarding the relevant environmental objective.

No – The activity is eligible for taxonomy but not aligned with the taxonomy regarding the relevant environmental objective.

N/EL – Not eligible; the activity is not eligible for taxonomy for the relevant objective.

EL – Eligible; activity is eligible for the relevant objective.

Bold – If the economic activity contributes substantially to more than one environmental objective, the contribution to the environmental objective used for the calculation of the KPIs shall be indicated in bold, avoiding double counting.

N-1 – In case of selection of an activity contributing to the new environmental objectives (WTR, EC and PPC) and overlapping with a Group activity contributing to the climate change mitigation objective, the share of N-1 relating to the overlapping activity already analysed in the Group's information for the year 2022. In case of selection of an activity contributing to the new environmental objectives and not overlapping with an activity of the Group contributing to the first two climate objectives, the share of N-1 because the activity was not analysed in the Group's information for the year 2022.

Sustained shared value	Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Governance and creating value	Customers	People	Suppliers

Financial Year n,	2023			Criteria for the substantial contribution						DNSH Criteria ("Do Not Significant Harm")						Minimum safeguards	Share of Turnover aligned or eligible for taxonomy year N+1	enabling activity	Transitional activity
Economic Activities	Activity Code	€ Total Turnover (millions of)	Share of turnover	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity		%	A	T
Text		€	%	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N			
2.3 Remediation of non-compliant landfills and abandoned or illegal waste dumps	2.3 PPC	0,5 €	0,0%	N/EL	N/EL	N/EL	Yes	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-
2.4 Remediation of contaminated sites and areas	2.4 PPC	69,9 €	0,5%	N/EL	N/EL	N/EL	Yes	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-
2.5 Recovery of organic waste by anaerobic digestion or composting / 4.13. Production of biogas and biofuels / 5.7. Anaerobic digestion of organic transport waste and bioliquids	2.5 CE / 4.13 CCM / 5.7 CCM	16,7 €	0,1%	Yes	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	0,1%	-	-
3.17. Manufacture of plastics in primary forms	3.17 CCM	100,8 €	0,7%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,7%	-	T
4.1. Production of electricity by photovoltaic solar technology	4.1 CCM	1,2 €	0,0%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%		
4.9. Transmission and distribution of electricity	4.9 CCM	81,0 €	0,5%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,6%	A	-
4.13. Production of biogas and biofuels for transport and bioliquids / 2.5 Recovery of organic waste by anaerobic digestion or composting	4.13-CCM / 2.5 CE	3,8 €	0,0%	Yes	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	0,1%	-	-
4.14. Low carbon and renewable gas transmission and distribution networks	4.14 CCM	170,5 €	1,1%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,9%	-	-
4.15. Distribution of district heating/cooling	4.15 CCM	2,6 €	0,0%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%	-	-
4.22. Production of heat/cold from geothermal energy	4.22 CCM	10,1 €	0,1%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%	-	-
5.5. Collection and transport of non-hazardous waste in separate fractions at source / 2.3 Collection and transport of non-hazardous and hazardous waste	5.5 CCM / 2.3 CE	293,8 €	2,0%	Yes	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	1,7%	-	-
5.6. Digestion of sewage sludge	5.6 CCM	0,0 €	0,0%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%	-	-
5.9. Recovery of materials from non-hazardous waste / 2.7 Sorting and recovery of materials from non-hazardous waste	5.9 CCM / 2.7 CE	0,2 €	0,0%	Yes	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	0,2%	-	-
5.10. Capture and use of landfill gas	5.10 CCM	3,4 €	0,0%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%	-	-
6.5. Transport by motorcycles, passenger cars and light commercial vehicles	6.5 CCM	0,1 €	0,0%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%	-	T
7.3. Installation, maintenance and repair of energy efficient devices	7.3 CCM	990,0 €	6,6%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	2,6%	A	-
7.4. Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking spaces belonging to buildings)	7.4 CCM	1,1 €	0,0%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%	A	-

Financial Year n,	2023			Criteria for the substantial contribution						DNSH Criteria ("Do Not Significant Harm")						Minimum safeguards	Share of Turnover aligned or eligible for taxonomy year N+1	enabling activity	Transitional activity
Economic Activities	Activity Code	€ Total Turnover (millions of)	Share of turnover	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Y/N	%	A	T
Text		€	%	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N			
7.5. Installation, maintenance and repair of instruments and devices for measuring, adjusting and controlling the energy performance of buildings	7.5 CCM	34,4 €	0,2%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,2%	A	-
7.6. Installation, maintenance and repair of renewable energy technologies	7.6 CCM	82,9 €	0,6%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,4%	A	-
Turnover of eco-sustainable activities (aligned with taxonomy) (A.1)		2.644,7	17,7%	11,9%	0,0%	4,9%	0,1%	0,3%	0,0%	Y	Y	Y	Y	Y	Y	Y	11,2%		
Enabling		1.189,4 €	7,9%	7,9%	0,0%	0,0%	0,0%	0,0%	0,0%	Y	Y	Y	Y	Y	Y	Y	-	A	
Transitional		100,9 €	0,7%	0,7%						Y	Y	Y	Y	Y	Y	Y	-		T
A.2. Activities eligible for Taxonomy but not eco-sustainable (activities not aligned with Taxonomy)																			
2.1 Collection and transport of hazardous waste / 2.3 Collection and transport of non-hazardous and hazardous waste	2.1 PPC / 2.3 CE	0,8 €	0,0%	N/EL	N/EL	N/EL	EL	EL	N/EL								-		
2.2 Treatment of hazardous waste / 2.4 Treatment of hazardous waste	2.2 PPC /2.4 CE	13,0 €	0,1%	N/EL	N/EL	N/EL	EL	EL	N/EL								-		
2.2 Treatment of urban waste water / 5.3 Construction, expansion and management of waste water collection and treatment systems	2.2 WTR / 5.3 CCM	32,0 €	0,2%	EL	N/EL	EL	N/EL	N/EL	N/EL								0,3%		
3.3. Demolition of buildings and other structures	3.3 CE	4,3 €	0,0%	N/EL	N/EL	N/EL	N/EL	EL	N/EL								-		
4.15. Distribution of district heating/cooling	4.15 CCM	5,8 €	0,0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0,3%		
4.30. High heat/cold efficiency cogeneration and electricity from fossil gaseous fuels	4.30 CCM	57,5 €	0,4%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0,5%		
4.31. Production of heat/cooling from gaseous fossil fuels in an efficient district heating and cooling system	4.31 CCM	2,4 €	0,0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0,0%		
5.9. Recovery of materials from non-hazardous waste / 2.7 Sorting and recovery of materials from non-hazardous waste	5.9 CCM / 2.7 CE	0,2 €	0,0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								13,6%		
6.5. Transport by motorcycles, passenger cars and light commercial vehicles	6.5 CCM	22,1 €	0,1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0,1%		
6.6 Freight transport services by road	6.6 CCM	32,9 €	0,2%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0,2%		
8.1. Data processing, hosting and related activities	8.1 CCM	6,0 €	0,0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0,0%		
Turnover of assets eligible for taxonomy but not eco-sustainable (activities not aligned with taxonomy) (A.2)		177,1 €	1,2%	0,8%	0,0%	0,2%	0,6%	0,0%	0,0%								1,5%		

Sustained shared value	Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Governance and creating value	Customers	People	Suppliers

Financial Year n,	2023			Criteria for the substantial contribution						DNSH Criteria ("Do Not Significant Harm")									
Economic Activities	Activity Code	€ Total Turnover (millions of)	Share of turnover	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Minimum safeguards	Share of Turnover aligned or eligible for taxonomy year N+1	enabling activity	Transitional activity
Text		€	%	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	A	T
Turnover of assets eligible for taxonomy (A.1+A.2)		2.821,8 €	18,8%	12,7%	0,0%	5,1%	0,7%	0,3%	0,0%								12,7%		
B. Activities not eligible for Taxonomy																			
Turnover of assets not eligible for Taxonomy		12.155,0 €	81,2%																
Total		14.976,8 €	100,0%																

	Share of turnover/Total turnover	
	Aligned to Taxonomy by Objective	Eligible for Taxonomy by Objective
CCM	11,9%	12,7%
CCA	0,0%	0,0%
WTR	4,9%	5,1%
CE	0,3%	0,3%
PPC	0,6%	0,7%
BIO	0,0%	0,0%
TOT	17,7%	18,8%

Sustained shared value	Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Governance and creating value	Customers	People	Suppliers

PORTION OF OPEX ARISING FROM PRODUCTS OR SERVICES ASSOCIATED WITH ECONOMIC ACTIVITIES ALIGNED WITH THE TAXONOMY⁶

Financial Year n,	2023			Criteria for the substantial contribution						DNSH Criteria ("Do Not Significant Harm")									
Economic Activities	Activity Code	Total Turnover (millions of €)	Share of turnover	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Minimum guarantee safeguards	Share of Opex aligned or eligible to taxonomy, year N+1	Enabling Activity	Transitional Activity
Text		€	%	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes; No; N/EL	Yes; No; N/EL	Yes; No; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	A	T
A. Activities eligible for Taxonomy																			
A.1. Eco-sustainable activities (aligned to Taxonomy)																			
1.1 Manufacture of plastic packaging	1.1 CE	1,1 €	0,4%	N/EL	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-
2.1 Collection and transport of hazardous waste / 2.3 Collection and transport of non-hazardous and hazardous waste	2.1 PPC / 2.3 CE	0,5 €	0,2%	N/EL	N/EL	N/EL	Yes	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-
2.1. Water supply / 5.1 Construction, expansion and management of water collection, treatment and supply systems	2.1 WTR / 5.1 CCM	39,5 €	14,3%	Yes	N/EL	Yes	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	12,0%	-	-
2.2 Treatment of hazardous waste / 2.4 Treatment of hazardous waste	2.2 PPC /2.4 CE	4,3 €	1,6%	N/EL	N/EL	N/EL	Yes	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-
2.2 Treatment of urban waste water / 5.3 Construction, expansion and management of waste water collection and treatment systems	2.2 WTR / 5.3 CCM	28,1 €	10,2%	Yes	N/EL	Yes	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	5,8%	-	-
2.4 Remediation of contaminated sites and areas	2.4 PPC	0,7 €	0,3%	N/EL	N/EL	N/EL	Yes	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-
2.5 Recovery of organic waste by anaerobic digestion or composting / 4.13. Production of biogas and biofuels / 5.7. Anaerobic digestion of organic waste for transport and bioliquids	2.5 CE / 4.13 CCM / 5.7 CCM	3,7 €	1,4%	Yes	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	0,7%	-	-

⁶Legenda

Yes – The activity is eligible for taxonomy and aligned with the taxonomy regarding the relevant environmental objective.

No – The activity is eligible for taxonomy but not aligned with the taxonomy regarding the relevant environmental objective.

N/EL – Not eligible; the activity is not eligible for taxonomy for the relevant objective.

EL – Eligible; activity is eligible for the relevant objective.

Bold– If the economic activity contributes substantially to more than one environmental objective, the contribution to the environmental objective used for the calculation of the KPIs shall be indicated in bold, avoiding double counting.

N-1 – In case of selection of an activity contributing to the new environmental objectives (WTR, EC and PPC) and overlapping with a Group activity contributing to the climate change mitigation objective, the share of N-1 relating to the overlapping activity already analysed in the Group's information for the year 2022. In case of selection of an activity contributing to the new environmental objectives and not overlapping with an activity of the Group contributing to the first two climate objectives, the share of N-1 because the activity was not analysed in the Group's information for the year 2022.

Financial Year n,	2023			Criteria for the substantial contribution						DNSH Criteria ("Do Not Significant Harm")									
Economic Activities	Activity Code	Total Turnover (millions of €)	Share of turnover	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Minimum safeguards	Share of Opex aligned or eligible to taxonomy, Year N-1	Enabling Activity	Transitional Activity
Text		€	%	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	A	T
3.17. Manufacture of plastics in primary forms	3.17 CCM	4,1 €	1,5%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	1,1%	-	T
4.1. Production of electricity by photovoltaic solar technology	4.1 CCM	0,9 €	0,3%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%	-	-
4.13. Production of biogas and biofuels for transport and biofuels / 2.5 Recovery of organic waste by anaerobic digestion or composting	4.13-CCM / 2.5 CE	0 €	0,2%	Yes	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	0,6%	-	-
4.14. Low carbon and renewable gas transmission and distribution networks	4.14 CCM	16,7 €	6,1%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	4,7%	-	-
4.15. Distribution of district heating/cooling	4.15 CCM	0,2 €	0,1%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,1%	-	-
4.22. Production of heat/cold from geothermal energy	4.22 CCM	2,0 €	0,7%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,3%	-	-
4.9. Transmission and distribution of electricity	4.9 CCM	10,0 €	3,6%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	3,1%	A	-
5.5. Collection and transport of non-hazardous waste in separate fractions at source / 2.3 Collection and transport of non-hazardous and hazardous waste	5.5 CCM / 2.3 CE	2,0 €	0,7%	Yes	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	6,8%	-	-
5.8. Composting of organic waste	5.8 CCM	0,3 €	0,1%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%	-	-
5.9. Recovery of materials from non-hazardous waste / 2.7 Sorting and recovery of materials from non-hazardous waste	5.9 CCM / 2.7 CE	2,7 €	1,0%	Yes	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	0,7%	-	-
5.10. Capture and use of landfill gas	5.10 CCM	0,0 €	0,0%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,1%	-	-
6.5. Transport by motorcycles, passenger cars and light commercial vehicles	6.5 CCM	0,1 €	0,0%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%	-	T
7.5. Installation, maintenance and repair of instruments and devices for measuring, regulating and controlling the energy performance of buildings	7.5 CCM	5,4 €	1,9%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	1,5%	A	-
7.6. Installation, maintenance and repair of renewable energy technologies	7.6 CCM	26,9 €	9,8%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	8,0%	A	-
Opex of eco-friendly activities (aligned to taxonomy) (A.1)		149,9 €	54,4%	26,1%	0,0%	24,6%	1,7%	1,8%	0,0%	Y	Y	Y	Y	Y	Y	Y	45,5%		
Enabling		42,3 €	15,4%	15,4%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	-	A	
Transitional		4,1 €	1,5%	1,5%						Y	Y	Y	Y	Y	Y	Y	-		T

Financial Year n,	2023			Criteria for the substantial contribution						DNSH Criteria ("Do Not Significant Harm")									
Economic Activities	Activity Code	Total Turnover (millions of €)	Share of turnover	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Minimum safeguards	Share of Opex aligned or eligible to taxonomy, Year N-1	Enabling Activity	Transitional Activity
Text		€	%	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes; No; N/EL	Yes; No; N/EL	Yes; No; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	A	T
A.2. Activities eligible for Taxonomy but not eco-sustainable (activities not aligned with Taxonomy)																			
2.1 Collection and transport of hazardous waste / 2.3 Collection and transport of hazardous waste	2.1 PPC / 2.3 CE	0,2 €	0,1%	N/EL	N/EL	N/EL	EL	EL	N/EL								-		
2.2 Treatment of hazardous waste / 2.4 Treatment of hazardous waste	2.2 PPC /2.4 CE	0,6 €	0,2%	N/EL	N/EL	N/EL	EL	EL	N/EL								-		
2.2 Treatment of urban waste water / 5.3 Construction, expansion and management of waste water collection and treatment systems	2.2 WTR / 5.3 CCM	3,5 €	1,3%	EL	N/EL	EL	N/EL	N/EL	N/EL								0,8%		
4.15. Distribution of district heating/cooling	4.15 CCM	0,5 €	0,2%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0,1%		
4.30. High heat/cold efficiency cogeneration and electricity from fossil gaseous fuels	4.30 CCM	7,7 €	2,8%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								5,8%		
4.31. Production of heat/cooling from gaseous fossil fuels in an efficient district heating and cooling system	4.31 CCM	0,0 €	0,0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0,0%		
5.9. Recovery of materials from non-hazardous waste / 2.7 Sorting and recovery of materials from non-hazardous waste	5.9 CCM / 2.7 CE	0,5 €	0,2%	EL	N/EL	N/EL	N/EL	AM	N/EL								0,2%		
6.5. Transport by motorcycles, passenger cars and light commercial vehicles	6.5 CCM	15,2 €	5,5%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								2,8%		
6.6 Freight transport services by road	6.6 CCM	23,9 €	8,7%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								6,6%		
8.1. Data processing, hosting and related activities	8.1 CCM	3,5 €	1,3%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								1,2%		
Opex of assets eligible for taxonomy but not eco-sustainable (activities not aligned with taxonomy) (A.2)		55,8 €	20,2%	18,7%	0,0%	1,3%	0,6%	0,0%	0,0%								17,5%		
Opex of assets eligible for taxonomy (A.1+A.2)		205,7 €	74,7%	44,7%	0,0%	25,8%	2,3%	1,8%	0,0%								63,0%		
B. Activities not eligible for Taxonomy																			
Opex of activities not eligible for Taxonomy		69,9 €	25,3%																
Total		275,6 €	100,0%																

Sustained shared value	Pursuing carbon neutrality	Regenerating resources and closing the circle	Enabling resilience and innovating
Governance and creating value	Customers	People	Suppliers

	Share of Opex/Opex total	
	Aligned to Taxonomy by Objective	Eligible for Taxonomy by Objective
CCM	26,1%	44,7%
CCA	0,0%	0,0%
WTR	24,6%	25,8%
CE	1,8%	1,8%
PPC	2,0%	2,3%
BIO	0,0%	0,0%
TOT	54,4%	74,7%

PORTION OF CAPEX ARISING FROM PRODUCTS OR SERVICES ASSOCIATED WITH ECONOMIC ACTIVITIES ALIGNED WITH THE TAXONOMY⁷

Financial Year n,	2023			Criteria for the substantial contribution						DNSH Criteria ("Do Not Significant Harm")									
Economic Activities	Activity Code	Total Turnover (millions of €)	Share of turnover	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Minimum guarantee safeguards	Share of Capex aligned or eligible to taxonomy, year N-1	Enabling Activity	Transitional Activity
Text		€	%	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	A	T
A. Activities eligible for Taxonomy																			
A.1. Eco-sustainable activities (aligned to Taxonomy)																			
1.1 Manufacture of plastic packaging	1.1 CE	1,1 €	0,1%	N/EL	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-

⁷ Legenda

Yes – The activity is eligible for taxonomy and aligned with the taxonomy regarding the relevant environmental objective.

No – The activity is eligible for taxonomy but not aligned with the taxonomy regarding the relevant environmental objective.

N/EL – Not eligible; the activity is not eligible for taxonomy for the relevant objective.

EL – Eligible; activity is eligible for the relevant objective.

Bold– If the economic activity contributes substantially to more than one environmental objective, the contribution to the environmental objective used for the calculation of the KPIs shall be indicated in bold, avoiding double counting.

N-1 – In case of selection of an activity contributing to the new environmental objectives (WTR, EC and PPC) and overlapping with a Group activity contributing to the climate change mitigation objective, the share of N-1 relating to the overlapping activity already analysed in the Group's information for the year 2022. In case of selection of an activity contributing to the new environmental objectives and not overlapping with an activity of the Group contributing to the first two climate objectives, the share of N-1 because the activity was not analysed in the Group's information for the year 2022.

Financial Year n,	2023			Criteria for the substantial contribution						DNSH Criteria ("Do Not Significant Harm")									
Economic Activities	Activity Code	Total Turnover (millions of €)	Share of turnover	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Minimum safeguards	Share of Capex aligned or eligible to taxonomy, Year N+1	Enabling Activity	Transitional Activity
Text		€	%	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes; No; N/EL	Yes; No; N/EL	Yes; No; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	A	T
2.1 Collection and transport of hazardous waste / 2.3 Collection and transport of hazardous waste	2.1 PPC / 2.3 CE	0,3 €	0,0%	N/EL	N/EL	N/EL	Yes	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-
2.1. Water supply / 5.1 Construction, expansion and management of water collection, treatment and supply systems	2.1 WTR / 5.1 CCM	123,8 €	15,2%	Yes	N/EL	Yes	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	16,1%	-	-
2.2 Treatment of hazardous waste / 2.4 Treatment of hazardous waste	2.2 PPC / 2.4 CE	19,7 €	2,4%	N/EL	N/EL	N/EL	Yes	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-
2.2 Treatment of urban waste water / 5.3 Construction, expansion and management of waste water collection and treatment systems	2.2 WTR / 5.3 CCM	76,2 €	9,3%	Yes	N/EL	Yes	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	8,8%	-	-
2.4 Remediation of contaminated sites and areas	2.4 PPC	1,2 €	0,2%	N/EL	N/EL	N/EL	Yes	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	-	-	-
2.5 Recovery of organic waste by anaerobic digestion or composting / 4.13. Production of biogas and biofuels / 5.7. Anaerobic digestion of organic transport waste and bioliquids	2.5 CE / 4.13 CCM / 5.7 CCM	6,3 €	0,8%	Yes	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	0,2%	-	-
3.17. Manufacture of plastics in primary forms	3.17 CCM	10,8 €	1,3%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	1,1%	-	T
4.1. Production of electricity by photovoltaic solar technology	4.1 CCM	5,5 €	0,7%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%	-	-
4.9. Transmission and distribution of electricity	4.9 CCM	53,1 €	6,5%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	6,4%	A	-
4.13. Production of biogas and biofuels for transport and bioliquids / 2.5 Recovery of organic waste by anaerobic digestion or composting	4.13-CCM / 2.5 CE	3 €	0,4%	Yes	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	1,9%	-	-
4.14. Low carbon and renewable gas transmission and distribution networks	4.14 CCM	75,4 €	9,2%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	10,1%	-	-
4.15. Distribution of district heating/cooling	4.15 CCM	3,4 €	0,4%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,3%	-	-
4.22. Production of heat/cold from geothermal energy	4.22 CCM	1,4 €	0,2%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%	-	-
5.5. Collection and transport of non-hazardous waste in separate fractions at source / 2.3 Collection and transport of non-hazardous and hazardous waste	5.5 CCM / 2.3 CE	31,2 €	3,8%	Yes	N/EL	N/EL	N/EL	Yes	N/EL	Y	Y	Y	Y	Y	Y	Y	4,4%	-	-
5.6. Digestion of sewage sludge	5.6 CCM	1,4 €	0,2%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,1%	-	-
5.8. Composting of organic waste	5.8 CCM	0,7 €	0,1%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	S	S	S	S	S	S	0,0%	-	-
5.9. Recovery of materials from non-hazardous waste / 2.7 Sorting and recovery of materials from non-hazardous waste	5.9 CCM / 2.7 CE	4,9 €	0,6%	Yes	N/EL	N/EL	N/EL	Si	N/EL	Y	Y	Y	Y	Y	Y	Y	0,4%	-	-

Financial Year n,	2023			Criteria for the substantial contribution						DNSH Criteria ("Do Not Significant Harm")									
Economic Activities	Activity Code	Total Turnover (millions of €)	Share of turnover	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Minimum safeguards guarantee	Share of Capex aligned or eligible to taxonomy, year N+1	Enabling Activity	Transitional Activity
Text		€	%	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	A	T
5.10. Capture and use of landfill gas	5.10 CCM	0,1 €	0,0%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,1%	-	-
6.5. Transport by motorcycles, passenger cars and light commercial vehicles	6.5 CCM	0,0 €	0,0%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,0%	-	T
7.3. Installation, maintenance and repair of energy efficient devices	7.3 CCM	1,2 €	0,1%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,2%	A	-
7.4. Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking spaces belonging to buildings)	7.4 CCM	0,8 €	0,1%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,1%	A	-
7.5. Installation, maintenance and repair of instruments and devices for measuring, adjusting and controlling the energy performance of buildings	7.5 CCM	30,7 €	3,8%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	4,5%	A	-
7.6. Installation, maintenance and repair of renewable energy technologies	7.6 CCM	2,2 €	0,3%	Yes	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0,1%	A	-
Capex of eco-friendly activities (aligned to taxonomy) (A.1)		454,7 €	55,7%	27,7%	0,0%	24,5%	2,4%	0,9%	0,0%	Y	Y	Y	Y	Y	Y	Y	54,7%		
Enabling		88,1 €	10,8%	10,8%	0,0%	0,0%	0,0%	0,0%	0,0%	Y	Y	Y	Y	Y	Y	Y	-	A	
Transitional		10,8 €	1,3%	1%						Y	Y	Y	Y	Y	Y	Y	-		T
A.2. Activities eligible for Taxonomy but not eco-sustainable (activities not aligned with Taxonomy))																			
2.1 Collection and transport of hazardous waste / 2.3 Collection and transport of non-hazardous and hazardous waste	2.1 PPC / 2.3 CE	0,0 €	0,0%	N/EL	N/EL	N/EL	EL	EL	N/EL								-		
2.2 Treatment of hazardous waste / 2.4 Treatment of hazardous waste	2.2 PPC /2.4 CE	1,3 €	0,2%	N/EL	N/EL	N/EL	EL	EL	N/EL								-		
2.2 Treatment of urban waste water / 5.3 Construction, expansion and management of waste water collection and treatment systems	2.2 WTR / 5.3 CCM	7,8 €	1,0%	EL	N/EL	EL	N/EL	N/EL	N/EL								0,8%		
4.15. Distribution of district heating/cooling	4.15 CCM	4,3 €	0,5%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0,1%		
4.30. High heat/cold efficiency cogeneration and electricity from fossil gaseous fuels	4.30 CCM	7,3 €	0,9%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								5,8%		
4.31. Production of heat/cooling from gaseous fossil fuels in an efficient district heating and cooling system	4.31 CCM	0,6 €	0,1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0,0%		
5.9. Recovery of materials from non-hazardous waste / 2.7 Sorting and recovery of materials from non-hazardous waste	5.9 CCM / 2.7 CE	4,7 €	0,6%	EL	N/EL	N/EL	N/EL	EI	N/EL								0,2%		
6.5. Transport by motorcycles, passenger cars and light commercial vehicles	6.5 CCM	3,5 €	0,4%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								2,8%		

Financial Year n,	2023			Criteria for the substantial contribution						DNSH Criteria ("Do Not Significant Harm")									
Economic Activities	Activity Code	Total Turnover (millions of €)	Share of turnover	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Mitigation	Adaptation	Water	Pollution	Circular Economy	Biodiversity	Minimum safeguards guarantee	Share of Capex aligned or eligible to taxonomy, Year N-1	Enabling Activity	Transitional Activity
Text		€	%	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Yes;No;N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	A	T
6.6 Freight transport services by road	6.6 CCM	5,7 €	0,7%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								6,6%		
8.1. Data processing, hosting and related activities	8.1 CCM	1,6 €	0,2%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								1,2%		
Capex of assets eligible for taxonomy but not eco-sustainable (activities not aligned with taxonomy) (A.2)		36,9 €	4,5%	3,4%	0,0%	1,0%	0,3%	0,0%	0,0%								5,8%		
Capex of assets eligible for taxonomy (A.1+A.2)		491,6 €	60,3%	31,1%	0,0%	25,5%	2,8%	0,9%	0,0%								60,5%		
B. Activities not eligible for Taxonomy																			
Capex of activities not eligible for Taxonomy		324,2 €	39,7%																
Total		815,8 €	100,0%																

	Share of capex/capex total	
	Aligned to Taxonomy by Objective	Eligible for Taxonomy by Objective
CCM	27,7%	31,1%
CCA	0,0%	0,0%
WTR	24,5%	25,5%
CE	0,9%	0,9%
PPC	2,6%	2,8%
BIO	0,0%	0,0%
TOT	55,7%	60,3%

NUCLEAR AND FOSSIL-GAS RELATED ACTIVITIES

Further information on electricity generation from nuclear and gas activities

	Nuclear energy-related activities	
1	The company carries out, finances or has exposure to the research, development, demonstration and construction of innovative power generation plants that produce energy from nuclear processes with a minimum amount of fuel cycle waste.	NO
2	The company carries out, finances or has exposure to the construction and safe operation of new nuclear power plants for the generation of electricity or process heat, including for district heating purposes or for industrial processes such as hydrogen production and improvements in their safety, using the best available technology.	NO
3	The company carries out, finances or has exposure to the safe operation of existing nuclear power plants that generate electricity or process heat, including for district heating or industrial processes such as the production of hydrogen from nuclear energy, and improvements to their safety.	NO
	Fossil-gas related activities	
4	The company carries out, finances or has exposure to the construction or operation of power generation plants using gaseous fossil fuels.	NO
5	The company carries out, finances or has exposure to the construction, upgrading and operation of combined heat/cool and power generation plants using gaseous fossil fuels.	YES
6	The company carries out, finances or has exposure to the construction, upgrading and operation of heat generation plants that produce heat/cooling using gaseous fossil fuels.	YES

NUCLEAR AND FOSSIL GAS-RELATED ECONOMIC ACTIVITIES ELIGIBLE FOR BUT NOT ALIGNED WITH THE TAXONOMY

Row	Economic activities	Amount and portion (present information in monetary figures and percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptations (CCM)	
		amount (mn€)	%	amount (mn€)	%	amount (mn€)	%
Turnover							
(...)							
5	Amount and portion of economic activity conforming to the taxonomy of section 4.30 of Attachments I and II of the Delegated Regulation 2021/2139 in the turnover denominator	57.5	0.0	57.5	0.0	-	0.0
6	Amount and portion of economic activity conforming to the taxonomy of section 4.31 of Attachments I and II of the Delegated Regulation 2021/2139 in the turnover denominator	2.4	0.0	2.4	0.0	-	0.0
(...)							
7	Amount and portion of other economic activities eligible for but not aligned with the taxonomy and not indicated in rows 1 to 6 above in the turnover denominator	117.1	0.0	117.1	0.0	-	0.0
8	Total amount and percentage of economic activities eligible for but not aligned with the turnover denominator	177.1	0.0	177.1	0.0	-	0.0
CAPEX							
(...)							
5	Amount and portion of economic activity conforming to the taxonomy of section 4.30 of Attachments I and II of the Delegated Regulation 2021/2139 in the turnover denominator	7.3	0.0	7.3	0.0	-	0.0
6	Amount and portion of economic activity conforming to the taxonomy of section 4.31 of Attachments I and II of the Delegated Regulation 2021/2139 in the turnover denominator	0.6	0.0	0.6	0.0	-	0.0
(...)							
7	Amount and portion of other economic activities eligible for but not aligned with the taxonomy and not indicated in rows 1 to 6 above in the turnover denominator	29.0	0.0	29.0	0.0	-	0.0
8	Total amount and percentage of economic activities eligible for but not aligned with the turnover denominator	36.9	0.0	36.9	0.0	-	0.0
OPEX							
(...)							
5	Amount and portion of economic activity conforming to the taxonomy of section 4.30 of Attachments I and II of the Delegated Regulation 2021/2139 in the turnover denominator	7.7	0.0	7.7	0.0	-	0.0
6	Amount and portion of economic activity conforming to the taxonomy of section 4.31 of Attachments I and II of the Delegated Regulation 2021/2139 in the turnover denominator	0.0	0.0	0.0	0.0	-	0.0
(...)							
7	Amount and portion of other economic activities eligible for but not aligned with the taxonomy and not indicated in rows 1 to 6 above in the turnover denominator	48.0	0.2	48.0	0.2	-	0.0
8	Total amount and percentage of economic activities eligible for but not aligned with the turnover denominator	55.8	0.2	55.8	0.2	-	0.0

GRI Content Index

The GRI content index contains only those indicators relevant to the material topics identified by the Group's materiality analysis. Indicator 3-3 (Management of material topics) is only reported once within the following index, as the relationship between the relevant aspect and its respective management mode is already stated in the [Methodological guide](#) table.

Statement of use	The Hera Group's non-financial statement is reported with the "in accordance with" option of the GRI Standards for 2022
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI industry standards	No industry standard applicable

GRI standards and other indicators		Paragraph (Page)	Omissions	Reason and explanation
GENERAL INFORMATION				
The organization and its reporting practices				
GRI 2-1	Organisational details	Scope of reporting (4) Who we are (18) The composition of the shareholder structure (214)		
GRI 2-2	Entities included in the organization's sustainability reporting	Scope of reporting (4)		
GRI 2-3	Reporting period, frequency and contact point	Methodological guide (4) Management Review Committee and work group (6)		
GRI 2-4	Restatements of information	Methodological guide (6)		
GRI 2-5	External assurance	Auditing the report (347) Auditor's Report (347)		
Activities and workers				
GRI 2-6	Activities, value chain and other business relationships	Who we are (17) Services managed (17) Suppliers (277)		
GRI 2-7	Employees	The Hera Group's workforce (253)		
GRI 2-8	Workers who are not employees	Supplier-induced employment (168)		
Governance				
GRI 2-9	Governance structure and composition	Corporate governance (187) Managing sustainability (192) Site: Internal contacts Site: Board Directors		
GRI 2-10	Nomination and selection of the highest governance body	2023 Corporate Governance Report: Board of Directors - Appointment and Replacement Site: Governance Report		
GRI 2-11	Chair of the highest governance body	2023 Corporate Governance Report: Board of Directors - Functioning of the Board of Directors; Role of the Executive Chairman of the Board of Directors		

GRI standards and other indicators		Paragraph (Page)	Omissions	
			Requirement omitted	Reason and explanation
GRI 2-12	Role of the highest governance body in overseeing the management of impacts	Stakeholders and materiality analysis (7) Corporate governance (187) The Ethics and Sustainability Committee (187) Risk management (188) Managing sustainability (192)		
GRI 2-13	Delegation of responsibility for managing impacts	Corporate governance (187) The Ethics and Sustainability Committee (187) Managing sustainability (192) 2023 Corporate Governance Report: Board of Directors - Executive Directors		
GRI 2-14	Role of the highest governance body in sustainability reporting	Methodological guide (4) Stakeholders and materiality analysis (8)		
GRI 2-15	Conflicts of interest	2023 Corporate Governance Report: Board of Directors - Functioning of the Board of Directors Site: Governance Report		
GRI 2-16	Communication of critical concerns	The Ethics and Sustainability Committee (187) Main activities and results achieved (191)		
GRI 2-17	Collective knowledge of the highest governance body	2023 Corporate Governance Report: Board of Directors - Role of the Executive Chairman of the Board of Directors Site: Governance Report		
GRI 2-18	Evaluation of the performance of the highest governance body	2023 Corporate Governance Report: Self-assessment and succession of directors Site: Governance Report		
GRI 2-19	Remuneration policies	The incentives also depend on sustainability (262) 2023 Remuneration Report Site: Remuneration and incentives policies		
GRI 2-20	Process to determine remuneration	Remuneration and incentives (261) 2023 Remuneration Report Site: Remuneration and incentives policies		
GRI 2-21	Annual total compensation ratio	Remuneration and incentives (261)		
Strategy, policies and practices				
GRI 2-22	Statement on sustainable development strategy	Letter to stakeholders (3)		
GRI 2-23	Policy commitments	Environmental impact assessments submitted during the year (99) The Code of Ethics (193)		
GRI 2-24	Embedding policy commitments	The Code of Ethics (193) Web site: Code of Ethics		
GRI 2-25	Processes to remediate negative impacts	Stakeholders and materiality analysis (8) The Ethics and Sustainability Committee (187) Compliance system for corruption and fraud prevention (189) The Code of Ethics (193) Web site: Code of Ethics		

GRI standards and other indicators		Paragraph (Page)	Omissions	
			Requirement omitted	Reason and explanation
GRI 2-26	Mechanisms for seeking advice and raising concerns	Compliance system for corruption and fraud prevention (189)		
GRI 2-27	Compliance with laws and regulations	Pending legal proceedings (214) Relations with the Italian regulatory and supervisory authorities (216) Litigation with customers (247) Litigation with Suppliers (294) Penalties imposed on the Group (218) Litigation with workers (275)		
GRI 2-28	Membership associations	Our commitment to sustainability in national and international networks (35) Associations in which Hera participates (213)		
Stakeholder engagement				
GRI 2-29	Approach to stakeholder engagement	Stakeholders and materiality analysis (7) Communications and consultation initiatives (208)		
GRI 2-30	Collective bargaining agreements	Remuneration and incentives (261)		
Information on material topics				
GRI 3-1	Process to determine material topics	Materiality analysis and definition of contents (7)		
GRI 3-2	List of material topics	Breakdown of the information required by Italian Legislative Decree No. 254/2016 and material topics in order of priority (8)		
GRI 3-3	Management of material topics	Breakdown of the information required by Italian Legislative Decree No. 254/2016 and material topics in order of priority (8)		
TOPIC STANDARDS				
Energy transition				
GRI 201-2	Financial implications and other risks and opportunities due to climate change	Risks and opportunities resulting from climate change (65)		
GRI 305-1	Direct (Scope 1) GHG emissions	Total emissions of the Hera Group (70)		
GRI 305-2	Energy indirect (Scope 2) GHG emissions	Total emissions of the Hera Group (70)		
GRI 305-3	Other indirect (Scope 3) GHG emissions	Total emissions of the Hera Group (70) Greenhouse gases: metrics and objectives (379)		
GRI 305-4	GHG emissions intensity	Carbon intensity indices (72)		
GRI 305-5	Reduction of GHG emissions	Emissions avoided, offset or absorbed (76)		
Green Bond 2019	GHG emissions avoided by selling recycled plastic and with district heating [in thousands of tonnes of CO ₂ e]	Aliplast measures the carbon footprint of its products (354) District heating: a response to protect air quality (126)		
Green Bond 2019 and 2022	Direct (scope 1) and indirect emissions (scope 2 + scope 3 from sales of electricity and downstream gas) in total	Greenhouse gas emissions and "science-based" reduction targets" (73)		

GRI standards and other indicators		Paragraph (Page)	Omissions	
			Requirement omitted	Reason and explanation
GRI 302-1	Energy consumption within the organisation	The Hera Group's primary energy consumption (41)		
GRI 302-2	Energy consumption outside the organisation	The Hera Group's primary energy consumption (42)		
GRI 302-3	Energy intensity	Energy efficiency within the Hera Group (43)		
GRI 302-4	Reduction of energy consumption	Energy efficiency within the Hera Group (43)		
Green Bond 2019	Public lighting points using LEDs (%)	Energy efficiency in public lighting (49)		
Green Bond 2022	Biomethane produced by FORSU	Biomethane development (56)		
Resilience and adjustment				
GRI 303-1 (2018)	Interactions with water as a shared resource	Resilient management of aqueducts and water sources (179)		
GRI 203-1	Infrastructure investments and services supported	Shared-value investments (31)		
IF-EU-550a.2	Grid resiliency	Electric distribution service safety and continuity ²³⁹		
IF-WU-450a.4	Network resiliency and impacts of climate change	Resilient management of aqueducts and water sources (179) Interventions in gas and electricity networks to deal with hydrogeological instability (184) Electricity grid resiliency (184)		
Circular economy				
GRI 306-1	Waste generation and significant waste-related impacts	Circularity within the Hera Group (101; 104)		
GRI 306-2	Management of significant waste-related impact	Circularity within the Hera Group (103; 104)		
GRI 306-3	Waste generated	Circularity within the Hera Group (101;)		
GRI 306-4	Waste diverted from disposal	Circularity within the Hera Group (102;)		
GRI 306-5	Waste directed to disposal	Circularity within the Hera Group (103;)		
Green Bond 2019 and 2022	Waste sent for recovery out of total waste treated in the selection plants [%]	Recovery of materials and energy in Herambiente's sorting plants (110)		
Green Bond 2019 and 2022	Amount of plastic recycled by Aliplast	The Hera Group's commitment to the new plastics economy (355)		
Green Bond 2022	Reusable purified wastewater (%)	The recovery of purification water for the benefit of local areas (106)		
Air and soil protection				
GRI 302-5	Reductions in energy requirements of products and services	Environmental benefits of district heating (128)		
GRI 305-7	Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant emissions	Atmospheric emissions from waste-to-energy plants (121) Emissions into the atmosphere from district heating (128) Emissions from the Imola cogeneration plant (129)		
Green Bond 2019	Atmospheric emissions of the waste-to-energy plants with respect to the regulatory limits [%]	Atmospheric emissions from waste-to-energy plants (121)		

GRI standards and other indicators		Paragraph (Page)	Omissions Requirement omitted	Reason and explanation
Quality, cost of waste collection and city integrity service				
GRI 417-1	Information requirements and labeling of products and services	Drinking water controls (120)		
GRI 417-2	Incidents of non-compliance in information and labeling of products and services	The relationship with national regulatory and supervisory authorities The sanctions imposed on the Group		
GRI 417-3	Casi di non conformità riguardanti comunicazioni di marketing	La relazione con le autorità nazionali di regolazione e controllo (214) Le sanzioni comminate al Gruppo (216)		
Green Bond 2019 and 2022	Separate waste collection [%]	Separate waste collection (81)		
Safety, cost and continuity of services				
GRI 416-1	Assessment of the health and safety impacts of product and service categories	Drinking water quality 113) Safety and continuity of the service (239)		
GRI 416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Drinking water quality 113)		
Green Bond 2019 and 2022	Electronic gas meters installed (number)	Electronic meters (235)		
Green Bond 2019	Average number of power outages per customer [number]	Electric distribution service safety and continuity239		
Sustainable management of water resources				
GRI 303-1 (2018)	Interactions with water as a shared resource	Commitment to reduce consumption by household and business customers (111) Water supply sources (112)		
GRI 303-2 (2018)	Management of water discharge-related impacts	Purification quality (116)		
GRI 303-3 (2018)	Water withdrawal	Water supply sources (112)		
Green Bond 2019 and 2022	Treated water quality [%]	Purification quality (116)		
Green Bond 2019 and 2022	Urban areas >2000 inhabitant equivalents adjusted to wastewater purification regulations (% of inhabitant equivalents)	Purification quality (116)		
Green Bond 2022	Annual volume of wastewater treated [m³]	The recovery of purification water for the benefit of local areas (106)		
Green Bond 2022	Reduction of internal water consumption [%]	Reducing consumption within the Group (109)		
Training and professional development, remuneration and incentives				
GRI 404-1	Average hours of training per year per employee	Training initiatives (256)		
GRI 404-2	Programs for upgrading employee skills and transition assistance programs	Training initiatives (256) Scuola dei Mestieri [trades school] and the knowledge management system (258) HerAcademy: the Hera Group's corporate university (259)		

GRI standards and other indicators		Paragraph (Page)	Omissions	
			Requirement omitted	Reason and explanation
GRI 404-3	Percentage of employees receiving regular performance and career development reviews	The development process (259)		
Occupational Health and Safety				
GRI 403-1	Occupational health and safety management system	The quality, safety, environmental, and social responsibility management system (193)		
GRI 403-2	Hazard identification, risk assessment, and incident investigation	Health and safety (265)		
GRI 403-3	Occupational health services	Health and safety (269)		
GRI 403-4	Worker participation, consultation, and communication on occupational health and safety	Health and safety (270)		
GRI 403-5	Worker training on occupational health and safety	Training initiatives (256) Health and safety (271)		
GRI 403-6	Promotion of worker health	Welfare (264)		
GRI 403-7	Prevention and mitigation of occupational health and safety impacts within business relationships	Evaluation and control of suppliers (283)		
GRI 403-8	Workers covered by an occupational health and safety management system	The quality, safety, environmental, and social responsibility management system (193) Hera's commitment to quality, safety, environment and social responsibility certification (194)		
GRI 403-9	Work-related injuries	Monitoring of supplier accidents at work (293) Health and safety (267)		
GRI 403-10	Occupational diseases		Entire disclosure	Information not available. The Group plans to introduce the disclosure in future reports, in line with the ESRS S1-14 standard.
Supply Chain Management				
GRI 204-1	Proportion of spending on local suppliers	Focus on the economic value distributed to suppliers (156)		
GRI 308-1	New suppliers that were evaluated using environmental criteria	The supplier qualification procedure (279)		
GRI 308-2	Negative environmental impacts in the supply chain and actions taken	Evaluation and control of suppliers (283)		
GRI 403-9	Work-related injuries	Monitoring of supplier accidents at work (293)		
GRI 414-1	New suppliers that were screened using social criteria	The supplier qualification procedure (279)		
GRI 414-2	Negative social impacts in the supply chain and actions taken	Evaluation and control of suppliers (283)		
Local development and social inclusion				
GRI 201-1	Direct economic value generated and distributed	Economic value distributed to stakeholders (155) The production and allocation of added value (195)		

GRI standards and other indicators		Paragraph (Page)	Omissions	
			Requirement omitted	Reason and explanation
GRI 203-2	Significant indirect economic impacts	Focus on the economic value distributed to suppliers (155) Placement under supply contracts with social cooperatives (163)		
GRI 204-1	Proportion of spending on local suppliers	Focus on the economic value distributed to suppliers (156)		
GRI 207-1	Approach to tax	Tax strategy and model (197)		
GRI 207-2	Tax governance, control and risk management	Tax strategy and model (197)197)		
GRI 207-3	Stakeholder engagement and management of concerns related to tax	Tax strategy and model (197)		
GRI 207-4	Country-by-country reporting	Tax strategy and model (199)		
GRI 401-1	New employee hires and employee turnover	Stable employment and turnover (165)		
GRI 401-3	Parental leave	Diversity and inclusion (174)		
GRI 413-1	Operations with local community engagement, impact assessments, and development programs	HeraLAB, a tool for listening to the local communities (211)		
GRI 415-1	Political contributions	Focus on distributed economic value with donations and sponsorships (214)		
Commercial relations with customers				
Hera specific indicator	Customer relations	Customer relations (244)		
Local development and social inclusion				
GRI 201-1	Direct economic value generated and distributed	Economic value distributed to stakeholders (155) The production and allocation of added value (195)		
GRI 203-2	Significant indirect economic impacts	Focus on the economic value distributed to suppliers (155) Placement under supply contracts with social cooperatives (163)		
GRI 204-1	Proportion of spending on local suppliers	Focus on the economic value distributed to suppliers (156)		
GRI 207-1	Approach to tax	Tax strategy and model (197)		
GRI 207-2	Tax governance, control and risk management	Tax strategy and model (197)197)		
GRI 207-3	Stakeholder engagement and management of concerns related to tax	Tax strategy and model (197)		
GRI 207-4	Country-by-country reporting	Tax strategy and model (199)		
GRI 401-1	New employee hires and employee turnover	Stable employment and turnover (165)		
GRI 401-3	Parental leave	Diversity and inclusion (174)		
GRI 413-1	Operations with local community engagement, impact assessments, and development programs	HeraLAB, a tool for listening to the local communities (211)		
GRI 415-1	Political contributions	Focus on distributed economic value with donations and sponsorships (214)		
Diversity				
GRI 401-1	New employee hires and employee turnover	Stable employment and turnover (165)		
GRI 401-3	Parental leave	Diversity and inclusion (174)		
GRI 405-1	Diversity of governance bodies and employees	Diversity and inclusion (171) Corporate governance (187) Site: Board of Director		

GRI standards and other indicators	Paragraph (Page)	Omissions	
		Requirement omitted	Reason and explanation
GRI 405-2	Ratio of basic salary and remuneration of women to men	Diversity and inclusion (173)	
Innovation and digital transformation			
GRI 203-1	Infrastructure investments and services supported	Shared-value investments (31) Investments in innovation (143) Investments (197)	
GRI 418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	IT security (153)	
Corporate Culture			
GRI 205-1	Operations assessed for risks related to corruption	Legislative Decree 231 risk assessment activities (190)	
GRI 205-2	Communication and training about anti-corruption policies and procedures	The compliance system for the prevention of corruption and fraud (200) The training initiatives (270) The vendor management and supplier qualification system (293)	
GRI 205-3	Confirmed incidents of corruption and actions taken	Legislative Decree 231 risk assessment activities (191) (Management and prevention of fraud (191)	
GRI 206-1	Legal actions for anticompetitive behavior, antitrust and monopolistic practices	The relationship with national regulatory and supervisory authorities (227) The sanctions imposed on the Group (228)	

[2-5]

Independent auditor's report



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Independent auditors' report on the consolidated non-financial disclosure in accordance with Art 3., par. 10 of Legislative Decree 254/2016 and with Art. 5 of Consob Regulation adopted with Resolution n. 20267 of 18 January 2018

To the Board of Directors of
Hera S.p.A.

We have been appointed to perform a limited assurance engagement pursuant to Article 3, paragraph 10, of Legislative Decree 30 December 2016, n. 254 (hereinafter "Decree") and Article 5 of Consob Regulation adopted with Resolution 20267/2018, on the consolidated non-financial disclosure of Hera S.p.A. and its subsidiaries (hereinafter the "Group or "Hera Group") for the year ended 31 December 2023, in accordance with Article 4 of the Decree and approved by the Board of Directors on 26 March 2024 (hereinafter the "NFD"). Our limited assurance engagement does not cover the information required by article 8 of the European Regulation 2020/852, included in the paragraph *Information on eco-sustainable economic activities -EU Regulation 2020/852* of the NFD.

Responsibility of the Directors and the Board of Statutory Auditors for the NFD

The Directors are responsible for the preparation of the NFD in accordance with the requirements of Articles 3 and 4 of the Decree and the "Global Reporting Initiative Sustainability Reporting Standards" issued by GRI - Global Reporting Initiative (hereinafter "GRI Standards"), which they identified as the reporting standards.

The Directors are also responsible, within the terms provided by law, for that part of the internal control they consider necessary to allow the preparation of the NFD that is free from material misstatement, caused by fraud or unintentional behaviors or events.

The Directors are responsible for identifying the content of the NFD, within the matters mentioned in article 3, paragraph 1, of the Decree, considering the activities and characteristics of the Group and to the extent deemed necessary to ensure the understanding of the Group's business, its trends, its results, and related impacts.

The Directors are responsible for defining the management and organisational business model of the Group and, with reference to the matters identified and reported in the NFD, for the policies adopted by the Group and for the identification and management of risks generated or incurred by the Group.

The Board of Statutory Auditors is responsible, within the terms provided by the law, for overseeing the compliance with the requirements of the Decree.

Auditor's independence and quality control

We are independent in accordance with the principles of ethics and independence disclosed in the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which are based on the fundamental principles of integrity, objectivity, competence and professional diligence, confidentiality, and professional behavior. Our audit firm applies the International Standard on Quality Control 1 (ISQC Italy 1) and, accordingly, maintains an overall quality control system, that includes documented policies and procedures for the compliance with ethical and professional standards and with applicable laws and regulations.

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Auditor's Responsibility

It is our responsibility to express, based on the procedures performed, a conclusion about the compliance of the NFD with the requirements of the Decree and of the GRI Standards. Our work has been performed in accordance with the principle "International Standard on Assurance Engagements ISAE 3000 (Revised) - Assurance Engagements Other than Audits or Reviews of Historical Financial Information" (hereinafter "ISAE 3000 Revised"), issued by the International Auditing and Assurance Standards Board (IAASB) for limited assurance engagements. The principle requires that we plan and perform procedures to obtain a limited assurance that the NFD is free from material misstatements. The procedures performed in a limited assurance engagement are less in scope than those performed in a reasonable assurance engagement in accordance with ISAE 3000 Revised ("reasonable assurance engagement") and, consequently, do not provide us with a sufficient level of assurance to become aware of all significant facts and circumstances that would be identified in a reasonable assurance engagement.

The procedures performed on the NFD were based on our professional judgment and included inquiries, primarily with the Group's personnel responsible for the preparation of information included in the NFD, in the analysis of documents, recalculations and other procedures to obtain evidence considered appropriate.

In particular, we carried out the following procedures:

1. analysis of the relevant topics reported in the NFD relating to the activities and characteristics of the Group, to assess the reasonableness of the selection process applied, in accordance with the provision of Article 3 of the Decree and considering the reporting standards applied;
2. analysis and assessment of the criteria for identifying the consolidation area, to assess its compliance with the Decree;
3. comparison of the economic and financial data and information reported in the NFD with those included in the Hera Group's Consolidated Financial Statements;
4. understanding of the following matters:
 - business and organisational model of the Group, with reference to the management of the topics specified by article 3 of the Decree;
 - policies adopted by the Group with reference to the topics specified by article 3 of the Decree, actual results, and related key performance indicators;
 - main risks generated or incurred by the Group, with reference to the topics specified by article 3 of the Decree.

With reference to such matters, we obtained the documentation supporting the information disclosed in the NFD and performed the procedures described under point 5, letter a) below.

5. understanding of the processes underlying the preparation, detection and management of the significant qualitative and quantitative information included in the NFD.

In particular, we had meetings and we conducted interviews with the management and with the personnel of Hera S.p.A., Hera Comm S.p.A., INRETE Distribuzione Energia S.p.A., Herambiente S.p.A., Hestambiente S.r.l., HERAtech S.r.l., Hera Servizi Energia S.p.A., Hera Luce S.r.l., Acantho S.p.A., Aliplast S.p.A., Uniflotte S.r.l., AcegasApsAmga S.p.A., Marche Multiservizi S.p.A., Vallortigara Servizi Ambientali S.p.A., and we performed limited analysis and validation procedures, in order to collect information about the processes and procedures that support the collection, aggregation, processing and submission of non-financial information to the management responsible for the preparation of the NFD.



Moreover, for significant information, considering the activities and characteristics of the Group:

- at parent company's and subsidiaries' level:
 - a) with reference to the qualitative information included in the NFD, and to the business model, the policies adopted and main risks, we carried out inquiries and obtained supporting documentation to verify its consistency with the available evidence;
 - b) with reference to quantitative information, we performed analytical procedures and limited assurance procedures, to assess, on a sample basis, the proper consolidation of the information.
- for the following companies and sites, which we selected based on their activities, their contribution to the performance indicators at consolidated level and their location, we carried out site visits and remote interviews, during which we had discussion with management and obtained supporting evidence regarding the appropriate application of the procedures and calculation methods used for the performance indicators: Hera S.p.A. Bologna, Modena, Imola (BO) offices, the Imola cogeneration plant, Hera Comm S.p.A., INRETE Distribuzione Energia S.p.A., Herambiente S.p.A., HERAtch S.r.l., AcegasApsAmga S.p.A., Marche Multiservizi S.p.A. office and the water treatment plant of Borgheria (PU), Vallortigara Servizi Ambientali S.p.A. and the waste management and recovery site of Marano Vicentino (VI).

Conclusion

Based on the procedures performed, nothing has come to our attention that caused us to believe that the NFD of the Hera Group for the year ended on 31 December 2022 has not been prepared, in all material respects, in accordance with the requirements of Articles 3 and 4 of the Decree and the GRI Standards.

Our conclusions on the NFD of the Hera Group do not extend to the information required by Article 8 of the European Regulation 2020/852, included in the paragraph *Information on eco-sustainable economic activities -EU Regulation 2020/852* of the NFD,

Bologna, 05 April 2024

Audirevi S.p.A.

Signed by

Antonio Cocco

Partner

This report has been translated into the English language solely for the convenience of international readers.

Attachments

CASE STUDIES

Energy - Pursuing carbon neutrality

Energy transition and renewables

The development of photovoltaics in landfills

In July 2023, the **new photovoltaic system in Galliera** (Bo) was commissioned, built on an exhausted landfill and made up of 2.5 thousand panels for a total installed power of **1 MW**. The expected electricity production is 1.4 GWh per year and will be **totally fed into the grid**, leading to an expected benefit of 600 tonnes of greenhouse gases avoided each year.

In addition, in the early months of 2024, Hera obtained authorisation for the construction and operation of another photovoltaic system on a closed and restored landfill in **Castel Maggiore**, which is also in the Bologna area. The new system will contain almost **6.5 thousand panels** for a total power of approximately **4.2 MW**, which is set to produce around 6.6 GWh of electricity per year, which is equivalent to around 3,000 tonnes of greenhouse gases avoided each year. The plant will be divided into two sections with a power of 3.2 MW and 1.0 MW (the latter may be dedicated to a **renewable energy community**).

Finally, the authorisation process is also underway for the construction of an additional **7.5 MW photovoltaic system** at the Ravenna landfill.

The construction of photovoltaic systems on exhausted landfills is promoted by the Emilia-Romagna region and by national legislation through incentives and simplifications since these projects also offer an opportunity **to avoid consuming soil**, given that they are developed on areas that are difficult to use for other purposes, for example for cultivation.

These initiatives are another example of how much the Hera Group strives to be a key driver on the path towards the energy transition and the electrification of consumption, with innovative tools for energy efficiency and self-production.

The development of photovoltaics in landfills contributes to the achievement of targets 7.2, 9.1, 9.2, 9.4 and 13.2 of the UN 2030 Agenda.

The development of energy parks and agrivoltaics

The **Energy park** project is an innovative model of sustainable development, which combines energy transition and attention to the environment in a single area, forming a single green infrastructure for the generation of renewable energy and the protection of biodiversity.

The project has four pillars:

- The production of renewable energy in synergy with agriculture using **agrivoltaic systems**;
- Safeguarding the ecosystem by protecting and expanding biodiversity;
- The conversion to sustainable agriculture by promoting best agricultural practices;
- The creation of an area for the community through the creation of an urban forest.

Energy park initiatives were launched in Bologna and Faenza during 2023.

A site for construction was identified in **Bologna** near via Stalingrado, which Hera has acquired. The project will use an area of 70 hectares and will see the installation of **20 thousand bifacial photovoltaic panels** with a total power of approximately 14MW which will allow the generation of over 20 GWh per year (consumption of 7,400 "typical" families), reducing Bologna's carbon footprint by approximately 9,000 tonnes of greenhouse gases and increasing the city's energy self-sufficiency.

In **Faenza**, the land owned by Società Agricola le Cicogne Srl, established by the Fondazione Banca del Monte e Cassa di Risparmio Faenza and by Crédit Agricole Italia, was acquired. The dimensions are similar to the Energy Park in Bologna.

The authorisation procedures prior to the operational and construction phase of the Energy parks are set to be launched in 2024.

In 2023, thanks to a **partnership with Orogel**, a Cesena cooperative leader in Italy in the production of fresh frozen vegetables, the **Horowatt** company was born to produce renewable energy and promote the energy transition.

Horowatt's first area of intervention concerns the construction of a 5.1 MW **agrivoltaic system** which will be built on approximately 13 hectares of land near the Orogel plant in Cesena and will be able to produce **approximately 8 GWh** each year, equal to 25% of the overall energy needs of the industrial sector.

The photovoltaic panels will be mounted on metal structures at a minimum height of 2.1 metres above the ground to allow agricultural activities to be carried out below. In addition, thanks to an integrated automation system with sensors on the land, **the panels can be oriented** not only to adapt to the position of the sun and guarantee maximum energy efficiency, but also to respond to specific agricultural needs, for the benefit of the crops underneath ("Agriculture 4.0").

The plant will pave the way for additional future initiatives aimed at **developing a new agriculture model**, which combines food production with energy production **without soil consumption** in a sustainable manner.

Authorisation to carry out the works and to then start constructing the plant should be obtained in 2024.

Thanks to these initiatives, Hera will be able to initiate concrete actions in the field of renewables and sustainability, pooling its best skills and experience to support residents, businesses and public administrations towards the energy and environmental transition.

The development of Energy parks and photovoltaics contributes to the achievement of targets 7.2, 9.1, 9.2, 9.4 and 13.2 of the UN 2030 Agenda.

The development of the hydrogen supply chain: hydrogen valleys

The Hera Group is implementing "**Hydrogen valley**" projects in Modena and Trieste where **hydrogen will be produced from renewable sources** to support decarbonisation in industrial sectors, SMEs and local transport and at the same time promote **the reuse of disused industrial areas**, thus contributing to the sustainable management of the area and promote the development of local economies.

In particular, the **IdrogeMO project in Modena**, carried out in conjunction with Herambiente and Snam, consists of:

- A **photovoltaic system with 6.3 MW** of power divided into 5.3 MW of ground-mounted photovoltaic units, which will be built on the slopes of the disused landfill in Via Caruso, and 1 MW of floating photovoltaic units, located on the body of water located north of the project site. This system will also come with a **battery electric energy storage system (BESS)**;
- A **green hydrogen production system** using a **2.5 MW** power electrolyser which will lead to the production of **approximately 400 tonnes per year** of green hydrogen per year (approximately 13 GWh) and from compression and loading systems in hydrogen tube trailers.

The overall cost of the work is 20.8 million euro, approximately 94% of which is financed by the funds of the National Recovery and Resilience Plan (NRRP) through financing line 3.1 ("Hydrogen production in abandoned industrial areas (Hydrogen valleys)") which falls under Mission M2 ("Green revolution and ecological transition") Component C2 ("Renewable energy, hydrogen, network and sustainable mobility"). Authorisation procedures are set to begin at the beginning of 2024, with the plant being commissioned in 2026.

In **Trieste**, AcegasApsAmga signed a partnership agreement with Hestambiente to also participate in the NRRP M2C2 Inv.3.1 tender.

The project, submitted to the Friuli-Venezia Giulia Region, involves the installation of a platform with an annual production capacity of **370 tonnes of renewable hydrogen** (approximately 12 GWh), of which approximately 116 tonnes are produced thanks to the energy of a dedicated photovoltaic system of at least **4.5 MW** of power which will be installed in a degraded area ("Ex-Esso") within the Trieste Site of National Interest, allowing an area with otherwise unused production potential to be maximised. The photovoltaic system will be equipped with an **electrical energy storage system**, suitably sized, which will allow maximum use of self-produced electrical energy during the hours of lower or no energy production.

The initiative also envisages **industrial symbiosis** between the hydrogen production platform and the waste-to-energy plant in Trieste which involves the reuse of the purge water from the evaporative cooling towers of the waste-to-energy plant as part of the renewable hydrogen production process.

For the project, a loan of 14 million euro was requested from the Region to partially cover the entire investment. The construction of the plant and its commissioning are expected to be completed by 2026. Letters of intent were also signed with Trieste Trasporti S.p.A., CoSELAG (Local Economic Development

Consortium of the Julian Area) and Adriafer S.r.l. to use renewable hydrogen mainly in the sectors of **local public transport, rail and road transport** in the port and dry port logistics of the port of Trieste and in **road transport** serving the industrial area of the province of Trieste.

For the construction of the portion of the plant intended solely for the production of renewable hydrogen, AcegasApsAmga also obtained financing amounting to 1.5 million euro from the European tender “HORIZON - JTI - CleanH2 - 2022-06-01: Hydrogen valleys”. AcegasApsAmga is a partner of the North Adriatic Hydrogen Valley (NAHV) consortium, financed by the aforementioned European tender, which aims to create an economic, social and industrial ecosystem based on the hydrogen supply chain. This ecosystem, thanks to the collaboration between companies, research institutes and public bodies from Friuli-Venezia Giulia, Slovenia and Croatia, aims to become the first cross-border hydrogen valley. In this context, AcegasApsAmga proposes, in addition to the initiative described above, an asset readiness study to evaluate the possibility of introducing a mixture of renewable natural gas and hydrogen with gradually increasing percentages of hydrogen into the current natural gas distribution network.

For both projects, participation in the NRRP tender was successful in 2023 with the entire available funding being awarded; the design of the hydrogen and photovoltaic systems, necessary **to start the authorisation process**, could therefore begin.

In 2024, the authorisation process should come to an end and the activities relating to the main works and supplies will start being awarded.

The development of the hydrogen chain contributes to the achievement of targets 7.2, 9.1, 9.2, 9.4 and 13.2 of the UN 2030 Agenda.

The development of smart grids

Hera and **Gridspertise**, an Enel Group company dedicated to the digital transformation of electricity grids, have signed a collaboration agreement aimed at **developing the smart grids of the future**.

This agreement concerns the trial of an **integrated system for collecting and measuring data** from Hera Group’s gas devices and Gridspertise’s smart meters for electricity grids. The multi-service gas-electricity integration tests will be carried out in Italy on the network managed by Inrete Distribuzione Energia, the Hera Group’s distribution company.

With this activity, the two companies will combine their expertise and achieve **technical synergies** in the area of **network digitisation**. In particular, Hera will be able to count on its experience in the field of **smart gas meters**, where it patented the advanced NexMeter, the first of its kind internationally in terms of technology and safety functions adopted, also in terms of reducing gas dispersion into the atmosphere. Gridspertise will provide its most innovative solutions for an integrated management of metering data to help develop **new smart and sustainable grids**, to accelerate the digital transformation of electricity infrastructures. In recent months, Gridspertise has signed agreements with the Hera Group for the supply of 435 thousand smart meters and concentrators, as well as an innovative remote management system that will be used in the trial; at the same time, Hera has made plans to install 310 thousand gas NexMeters by 2027, 250 thousand of which are already operational, and 449 thousand 2G electric meters, 149 thousand of which have already been installed.

The result is a package of network management solutions whose key element consists in facilitating the energy transition. Based on the results of the trial, the two companies will evaluate joint participation in future tenders, which will also be held outside Italy, in which hardware and software solutions for gas and electricity metering will be sold. This collaboration may also extend, at a later stage, to solutions concerning the integrated water cycle, in terms of both metering and smart water grids.

The results of this collaboration may also interest multi-utility companies **abroad**, thus extending the outstanding technology conceived and developed in our country to international markets.

In Trieste, **AcegasApsAmga** is performing interventions on the electricity distribution network to encourage the reduction of greenhouse gas emissions by **bringing about an increase in the electrification of final consumption** and increasing the “Hosting capacity” of the grids, i.e. the system’s ability to accommodate more energy electricity generated from renewable sources.

The proposed actions aim to guarantee a solid development basis for initiatives aimed at ports (cold ironing, advanced logistics platforms, integration of renewable energy sources) and the related integration into the urban fabric with its own requirements, all in conjunction with developments set out in Terna’s strategic plan for the reinforcement of the high voltage electricity grid in the Trieste area.

The characterisation of the smart grid has its origins in the adoption of innovative software solutions, guaranteeing the full effectiveness of the construction, adaptation and enhancement activities of the planned physical grid assets.

In 2023, the focus was on the design and procurement of the main plants and infrastructures, while in 2024 the work to lay the new medium voltage lines and upgrade the “Cacciatore” primary substation will begin.

In addition, 1,130 robotized secondary substations will be in operation by 2023 to support the electrification of consumption and the widespread generation of renewable energy. The target for 2027 is to robotize 1,260 secondary cabins.

The development of smart grids contributes to the achievement of targets 7.3, 9.1, 9.2, 9.4, 11.3 and 17.17 of the UN 2030 Agenda.

Climate change mitigation

Hera for Bologna carbon neutral city

The Hera Group is one of the main partners of the Municipality of Bologna in the commitment that the municipal body signed as part of the launch of the “Climate City Contract” with the aim of **achieving carbon neutrality in Bologna by 2030**.

To achieve this, various interventions have been discussed, which aim to contribute to the reduction of greenhouse gas emissions and which will be included in the Action Plan prepared by the Municipality.

Expansion of district heating networks through the interconnection of CAAB-Pilastro and Berti-San Giacomo systems: the project involves connecting four currently separate district heating systems by laying approximately 8.3 km of network and increasing the potential of the thermal generation section at the Frullo waste-to-energy plant for the power supply of the four interconnected systems. The project allows heat to be recovered so it can be used for district heating purposes for approximately 108 Gwh/year. The CAAB-Berti interconnection is expected to be commissioned by 2025. 53% of the project is financed by NRRP funds.

Power-to-gas (see [“The development of biomethane”](#)): the project involves the construction of an experimental plant at the Idar di Bologna purifier consisting of:

- a biological methanation reactor for the **production of biomethane** from green hydrogen produced in an electrolyser and from sewage sludge and biogas from the Idar digesters;
- a membrane upgrading system for the production of **more biomethane** from biogas still coming from the digesters.

Overall biomethane production is estimated at **1.1 million cubic metres each year**. The plant is set to be started up by 2025. 84% of the project is financed by NRRP funds and is carried out in partnership with the company Pietro Fiorentini.

Energy Park for the Tecnopolo Manifattura (see the case study [“The development of Energy parks and agrivoltaics”](#)): the project involves the construction of a 14 MW Energy park which includes:

- a shared area of land for both agriculture and agrivoltaic panels for virtuous and synergistic agricultural and energy production for the community;
- a wooded area for the absorption of carbon dioxide, the protection of biodiversity and a recreational space for residents.

The project is set to be completed by 2030.

Photovoltaic system at the San Vitale aqueduct plant in Calderara di Reno: the project involves the construction of a photovoltaic system of approximately 4 MW at the Hera aqueduct plant in San Vitale. Commissioning is expected by 2025.

Energy efficiency improvement in process sections: a series of energy efficiency interventions implemented between 2018 and 2022 at the Group’s plants, networks and offices such as:

- Idar purifier (electricity consumption reduced by 459.8 Mwh/year);
- Bologna’s primary aqueduct system (reduction in electricity consumption of 796.1 Mwh/year);
- Plants for district heating (reduction of 63.9 MWh/year in electricity consumption and of 440.6 thousand cubic metres/year in methane gas consumption);
- Installation of LED lamps at Hera offices (reduction in electricity consumption of 116.0 Mwh/year);
- Gas distribution networks (reduction in electricity consumption of 72.6 MWh/year and methane gas consumption of 36.4 thousand cubic metres/year).

Production of biofuels from used vegetable oils: circular economy project with the aim of collecting and giving a second life to used vegetable oils in order to produce biofuel of plant origin. The oil coming from urban collection and catering in the municipal area is transformed into HVO (Hydrotreated vegetable oil)

biofuel at the Eni Biorefinery in Porto Marghera (Ve). The initiative allows approximately 131 thousand litres/year of biofuel to be produced.

Production of biomethane from urban organic waste (also see "[The development of biomethane](#)"): production of biomethane (and quality compost) from the organic portion of solid urban waste in the Sant'Agata Bolognese plant, now active since 2018. The biomethane produced is introduced into the network and marketed as a transport fuel, to power public and private vehicles, including **some Hera waste collection vehicles** and the Tper public mobility fleet used in the Bologna area (including the shuttles that connect Bologna Airport with the City).

Hera for Bologna carbon neutral city contributes to the achievement of targets 7.2, 9.1, 9.2, 9.4, 11.3, 11.6, 12.2, 12.4, 12.5 and 13.2 of the UN 2030 Agenda.

In order to provide information on the carbon footprint of certain products, since 2018 Aliplast has been carrying out a broad calculation of the carbon footprint of five product types: PE granules, PE films, PET granules, PET plates, PET flakes.

Aliplast measures the carbon footprint of its products

Aliplast to commissioned this study in order to carry out research on the environmental **performance of these products**, as regards global warming, and to quantify the greenhouse gas emissions related to a functional unit of each product (set at one kilogram), in order to identify the phases of their life cycle showing the highest environmental criticalities and **intervene** so as to reduce their environmental impact. The European impact methodology EF v3.0, developed by the Joint Research Centre for the Product Environmental Footprint (PEF) initiative, was used. One of the outcomes of the LCA is the amount of CO₂ equivalent, whose calculation method is the IPCC 2013 Gwp 100, contained in EF v3.0.

The project involved **analysing the greenhouse gas emissions of Aliplast products and comparing them with those of the corresponding virgin products**. The result, expressed in kg of CO₂ equivalent, states that in 2023, with a production of approximately 100 thousand tonnes of PE granules, PE films, PET granules and regenerated PET sheets, the production of approximately 210 thousand tonnes of CO₂ equivalent was avoided, which is equal to over 500 thousand barrels of oil. The greenhouse gas savings achieved thanks to the contribution of suppliers and customers who choose Aliplast's recycled products is comparable to the emissions of approximately 120 thousand cars running on gas and travelling 10 thousand kilometres in a year.

Aliplast's activity for measuring the carbon footprint of its products contributes to achieving **UN 2030 Agenda target 11.6, 12.2, 12.4, 12.5 and 13.2**.

Environment - Regenerating resources and closing the circle

Transition to a circular economy

European package on circular economy: Hera anticipates the steps

Hera has confirmed its targets on packaging recycling and landfill reduction, showing that it is **ahead of both European targets for municipal waste**.

In the areas served by the Group, in fact, all 3 main European targets have been met, including those for: landfills (2.7% in 2023, against a target of a maximum of 10% by 2035), packaging (66% in 2022, against a target of 65% by 2025 and 70% by 2030) and the overall recycling rate (61% in 2022, against a target of 55% by 2025, 60% by 2030 and 65% by 2035). Data on the latter two targets will be updated to 2023 in the coming months and as usual published in the report "Tracking waste".

The report "Tracking waste", whose fourteenth edition was published in 2023, transparently and comprehensively certifies that the percentage of sorted waste actually recovered by the Group came to 89%, broken down into 78% of material recycling and 11% of energy recovery, the latter only in the plastic and green sectors. This project covered all main materials collected separately: compostable, paper, organic, glass, plastic, wood, iron and metals (aluminium, steel and tinplate packaging).

This report, which covers the entire area served by the Group, indicates a 95% recovery rate for compostable waste and 71% for plastic, as well as 89% material recycling for paper, 87% for organic waste, 93% for glass, 93% for wood, 99% for iron and 93% for metal.

Meeting and exceeding the European municipal waste targets contributes to achieving **UN 2030 Agenda goals 12.2, 12.4, 12.5**. Publishing the report "Tracking Waste" contributes to achieving **UN 2030 Agenda goal 12.8**.

The Hera Group's commitment to the new plastics economy

Hera is one of the 250 companies worldwide, and the only Italian multiutility company, that in 2018 signed the **New Plastics Economy Global Commitment**, launched by the Ellen MacArthur Foundation in collaboration with the UN Environment Programme (UNEP). The Foundation's initiative is ultimately aimed at tackling the problem of plastic pollution at its source and making the entire supply chain more circular: eliminating disposable products as much as possible, producing and using only recyclable, reusable or compostable packaging and promoting the use of recycled plastic. To this end, the Foundation has created a global movement, involving all players in the supply chain, such as plastic packaging manufacturers and companies that use them to pack their products, large-scale retailers and recycling companies, as well as governments and investors.

In March 2022, in light of the important commitments undertaken by the members of the Foundation, as well as the importance of the topic in the context of the introduction of a new business model based on the circular economy, the United Nations, and in particular UNEP (United Nations Environment Programme), started a process aimed at drafting an international treaty binding member states in order to reduce the use of plastic and contribute to the creation of an economic system based on circular production. Three plenary sessions have been held so far; in the last session, a draft of the final treaty was drawn up, which is set to be promulgated in 2025. Two further sessions have already been scheduled and will be held in 2024.

The Hera Group has committed **to increase by 2025** (compared to 2017):

- plastics collected in the municipalities served by 30%;
- plastics sorted and sent to be recycled by the Group's plants by 50%;
- plastic recycled by Aliplast by 70%.

To date, the Global Commitment has gathered more than 500 signatories around the world, including companies active in the different phases of the plastic packaging value chain (around 20% of the global packaging market), governments (over 1 billion people represented) and over 200 associations and institutions including National Geographic, WWF, the World Economic Forum, the Consumer Goods Forum, the International Union for Conservation of Nature (IUCN), universities and research bodies and financial institutions.

On 31 October 2023, the fifth Progress Report was published, containing data from 123 companies (out of 134 that set their own target when joining the Network) and 17 governments/administrations (out of 24 eligible for reporting). The momentum created around the circular economy of plastics was unprecedented and the early progress made by signatories is significant. Despite this, efforts to eliminate the problem of plastic waste pollution at source must progress to a more ambitious level. The data reported on this occasion by the Hera Group referred to 2022.

The Hera Group's data at the end of 2023 indicate that the path undertaken is the right one. With regard to the **plastics collected** in the municipalities served, the Group has reached the target set for 2025 three years in advance, partially thanks to the contribution made by residents who, in recent years, have been engaged and incentivised to improve collection in a rationale oriented towards recycling. With respect to the **plastics sorted and sent for recycling** in the Group's plants, there has also been progressive and positive progress compared to the target. However, as of 2023, the performance linked to this indicator will undergo a significant reduction due to the effect of Emilia-Romagna regional law no. 16 of 18 July 2017, which establishes that an amount coming to no less than 30% of municipal waste collected and sorted by type must be managed by an economic operator selected through a competitive procedure in which companies controlled by or connected to the concessionaire (in this case, the Group) cannot participate. In this regulatory context, the Group may only be responsible for managing 70% of the municipal waste collected and sorted by type by the Group itself, which will jeopardise achieving the target within 2025. With regard to **recycled plastic**, an increase in sales was recorded in 2023, with further growth forecast in the 2022-2027 industrial plan.

The same targets were presented by Hera in the context of the “**EU-wide pledging campaign for the uptake of recycled plastics**”, the campaign promoted by the European Commission to accelerate the uptake of recycled plastics and reach the European target of ten million tonnes of recycled plastics used for new products by 2025.

Achieving the targets on the plastics supply chain contributes to achieving **UN 2030 Agenda goals 12.2, 12.4, 12.5**.

Aliplast for Hera Group: recycled plastic products

In November 2019, an experimental circular economy project was launched by Hera and Aliplast, to increasing the reuse of reels made from post-consumer recycled plastic in the production of bags intended for sorted waste collection.

The ultimate goal was to “close the circle” of the lifecycle of these products, increasing their recycling and reuse, so as to increase economic sustainability and reduce their environmental impact as much as possible.

In October 2020, the experimental phase of the project ended and from November 2020 the actual industrialisation of the process began in all the regions managed by the Group with important results: between 2020 and 2023, 6,418 tonnes of reels were produced for bag production.

In addition to the figures, the “HERA Plastic Bags” project has achieved other results with a positive impact on the system itself:

- the quality of the bags is significantly improved as Aliplast itself guarantees technical requirements are met, except in the case of manipulation by the third-party supplier;
- the issue of disputes with third-party suppliers who did not respect product specifications was removed;
- the issue of traceable bags has been resolved;
- the service offered to Hera users has improved, with considerable return in terms of image.

The use of recycled plastic bags for waste collection contributes to **UN 2030 Agenda goals 9.4, 11.6, 12.2, 12.4 and 12.5**.

Innovative Carbon Fibre Recycling Plant

An agreement has been reached for the construction of the **first plant in Italy**, and among the first in Europe, to use an innovative pyrogasification process to produce recovered carbon fibre. It will be carried out by Herambiente and the project is the result of a collaboration with the Department of Industrial Chemistry of the University of Bologna and Curti Costruzioni Meccaniche.

Currently, carbon fibre waste is almost exclusively destined for landfills or energy recovery. The challenge involved in the project for the plant make it pioneering, because it aims to recover carbon through an innovative pyrogasification process while maintaining the lightness and strength of this fibre, a material that can potentially be recycled countless times.

The advantages of this new technological solution are clear, with a 75% saving on the environmental impact associated with the life cycle (LCA – Life Cycle Assessment) compared to traditional methods of carbon fibre treatment and disposal. In addition, it will result in **approximately 160 tonnes of recycled carbon fibre** with a 90% energy saving compared to virgin fibre production and a reduction in CO₂ emissions into the atmosphere coming to approximately 7,000 tonnes per year

The plant will be built in Imola (BO) and will operate through a complex process guaranteeing a completely clean and reusable outgoing product, ready to be rewoven and impregnated for reuse in the Hera Group – Sustainability Report 2023

sectors from which the waste comes: automotive, aerospace, nautical and wind energy, to name but a few, but more generally from a market that now shows a 9% annual increase in demand for carbon fibre, which today is almost entirely a virgin raw material.

Construction began in 2023 and will be fully operational in mid-2024. It will have a maximum overall treatment potential (on two lines) of 320 tonnes per year and will operate for approximately 7,000 hours per year; it is also designed to recover syngas from resins and additives: this gas will be reused to generate part of the thermal energy needed for the process in order to maximise energy recovery as well.

The carbon fibre recycling plant contributes achieving UN 2030 Agenda **goals 9.1, 9.2, 9.4, 11.6, 12.2, 12.4 and 12.5**, as well as - thanks to the partnership developed - to achieving **goal 17.17**.

**Hera and Eni:
partnership to
turn cooking oil
into biofuel**

As part of the transition to a circular economy promoted by the Group, the **collection of waste oils** has become increasingly visible and important, also leading to significant economic returns. A street collection service for cooking oils started in 2018, using attractive bins specifically designed to collect residual household cooking oil.

The results of this collection feed into a **virtuous circular economy project**. In fact, under a framework agreement stipulated with Eni, all discarded cooking oil collected by Hera, once processed in affiliated plants, is transported to the Eni bio-refinery in Porto Marghera (VE) where it is transformed into hydrogenated biofuel. Hera then uses this biofuel, by purchasing approximately 600,000 litres/year of ENI Diesel+ (containing 15% bio component) which is used to power 33 compactors for waste collection in the areas served. Starting from 2024, based on the new agreement, Hera will purchase the new HVOlution biofuel made up of 100% bio components to replace Diesel+.

The total number of bins for street collection of discarded vegetable oils in the area served by Hera Spa amounted to 868, distributed over 128 municipalities for a served population of roughly 2.4 million inhabitants. In 2023, used vegetable oils collected by the collection service reached 1,128 tonnes, a slight decrease compared to previous years. This data refers to the amount collected in the areas served by Hera Spa, Marche Multiservizi and AcegasApsAmga.

In addition to the volume from municipal collections, in 2023 Hera increased its collection of vegetable oils from commercial users in the area, which started in 2021. Over the years, in addition to restaurants and companies operating in the food sector, the project also contracted important groups in the catering sector such as Camst, Cirfood, Elixir, Road House and Chef Express. More than 1,380 catering outlets were involved in the project. The extension of the project made it possible, in 2023, to start producing hydrogenated biofuel at the ENI Bio-Refinery in Porto Marghera (VE) from an additional 1,236 tonnes of vegetable oils.

In total, the oil collected during 2023 amounted to 2,364 tonnes. This generated **significant positive environmental impacts**, as shown in the table below.

ENVIRONMENTAL BENEFITS PRODUCED BY THIS PROJECT

	2022	2023
Quantity of waste cooking oils collected (tonnes)	1,540	2,364
Quantity of hydrogenated biofuel produced (thousand litres)	1,700	2,435
Greenhouse gas emissions avoided (tonnes of Co2eq)	4,930	6,700
Primary energy saved (toe)	1,500	2,040

In 2023, Hera was re-certified by Bureau Veritas Italia for AFNOR XP X30-901 for its circular economy projects, already obtained in 2022. The French AFNOR standard is now the main international reference for implementing a management system for circular economy projects. More specifically, the waste cooking oil management project was selected and verified in accordance with the requirements of this standard, which includes, among others, a risk/opportunity analysis. This allowed the foundations of the project to be strengthened by assessments of possible criticalities, such as the risk of spillage and the maintenance of road containers, but also of the important benefits of the initiative, which push for its extension and promotion in the area, as well as on the possible future actions to be introduced in order to reduce risks and broaden opportunities.

AFNOR certification thus confirms that the reorganisation of the exhausted cooking oil recovery process in the areas served by the Hera Group has taken place in full respect of the circular economy, yielding important environmental and economic benefits.

The partnership between Hera and Eni contributes to achieving **UN 2030 Agenda goals 9.4, 11.6, 12.2, 12.4 and 12.5**, as well as - thanks to the partnership developed - to achieving **target 17.17**.

Important new partnerships signed to “close the circle”

In 2023, another two new strategic circular economy partnership agreements were signed with important national entities which, in addition to those signed in past years, make up a total framework of 10 active partnerships aimed at implementing environmental sustainability initiatives and projects.

The first of these two new partnership agreements was signed in January 2023 with **Sacmi Imola**, the company at the head of the Sacmi Group, world leader in the production and marketing of complete machines and systems for the ceramic, metal, packaging, food and beverage industry and for the production of plastic containers and advanced materials. In 2023, the first projects to exploit materials from a circular economy perspective were launched, including the recovery of used vegetable oil produced by the company canteen intended for the production of hydrogenated biofuel in partnership with Eni, in addition to the collection of glasses from vending machines for the specific recycling of polystyrene in partnership with Corepla through the RiVending project. Analyses aimed at optimising water resources and increasing energy efficiency have also been launched.

The partnership with Autogrill also began in June 2023, a national leader in catering for people on the road, with a dense and widespread network of points of sale located on motorways, stations, airports and also in urban centres throughout Italy. The objective of the agreement is the sharing and implementation of projects in the field of sustainable mobility, circular economy, sustainability and environmental communication, through innovative Business to Community to Consumer - B2C2C approaches, in line with the Sustainable Development Goals (SDGs) defined by the UN 2030 Agenda. The first area of intervention launched involves the identification of solutions to improve the efficiency of waste management, from the collection phase to the treatment phase.

During 2023, as part of the partnership with the **Italian Exhibition Group** signed in March 2022, the Hera Group's support continued in activities pivotal to maintaining the ISO 20121 Integrated System certification, relating to the implementation of sustainable event management systems. The certification had already been obtained in 2022 for the Rimini and Vicenza exhibition centres as well as for the organisation of the Ecomondo trade fair event. In addition, the Group provided its support to another IEG site, Palacongressi di Rimini, which also obtained ISO 20121 certification in December 2023.

The partnership with **Aeroporti di Roma** continues, also signed in April 2022. The Hera Group provides technical support to this company both in the waste sector, to guarantee traceability and increasingly sustainable management of all waste flows produced in the Fiumicino airport hubs and Ciampino, and in the field of the optimisation of water resources, to maximise reuse and make sure they are used efficiently.

In addition, the partnerships with the catering companies **Camst Group, Elicor and Cirfood** continue, by virtue of which the results of the project for the exploitation of used vegetable oils have been boosted and consolidated: from the cumulative collections of the three partners, over 144 thousand litres of biofuel have been produced with a saving of 410 tons of CO₂e. In addition, new areas for the exploitation of waste materials are being studied, including in an experimental form, with the aim of increasing the results already achieved in terms of environmental sustainability and circularity, starting with plastic packaging.

In 2023, the collaboration with **Aeroporto di Bologna** also continued with significant results. Thanks to the ongoing partnership between the Airport and Hera, the results already achieved in 2022 for the separation of waste produced at the airport have improved even more, consolidating the results to over 50% for separate collection, with an increase of more than double compared to the data from 2021, the period prior to the signing of the specific partnership. In the environmental information and awareness process aimed at everyone who produces waste at the airport, the last mile was created in 2023, actively involving passengers too, through little tabs placed near the catering points and in other sensitive points of the airport, in order to remind people to correctly separate waste when placing it in the appropriate containers.

Aimed at developing new paths featuring higher circularity, an ambitious experimental project for regenerating household appliance waste was launched together with **Dismeco**, which is active in the WEEE recovery sector, with a plant located in Marzabotto, in the province of Bologna. The project aims to test the feasibility of a new way of managing this waste, which allows the washing machines brought as waste to the Group's ecological stations to be regenerated; in practice, the best preserved washing machines are intercepted in this WEEE flow, in order to experiment with a repair process so they can be used again. The project, developed in agreement with the WEEE Coordination Centre (a consortium that

brings together the Collective Systems of electrical and electronic equipment manufacturers) and Dismeco, saw the collaboration of CNA Bologna with the innovative Academy launched at Cna Formazione in Marzabotto, a professional training course for those working in household appliance maintenance. At the same time, the project will therefore be a great opportunity for professional training and preparation and an opportunity to create potential new jobs to support and develop local communities in the Bologna area. In 2023, 109 washing machines were regenerated and donated to organisations and associations in the Bologna Metropolitan City area committed to supporting vulnerable segments of the population.

The project launched in 2019 between Herambiente and **Coprob** (Beetroot Producers Cooperatives), the only sugar producer in Italy based in Minerbio (BO), continues thanks to the supply of compost from the six Herambiente plants in Emilia-Romagna with quality certification. The compost, obtained exclusively from the separate collection of the organic portion combined with cuttings and pruning, is used in the fertilisation plans for the associated farms, to restore the organic content of soil, which is essential for maximum fertility. The flows managed in 2023 equalled 5,210 tonnes. Unfortunately, the figure decreased compared to 2022 due to the flood in May 2023 which made it impossible to harvest the crops and subsequently work the COPROB members' land, affected by the events, in time to use the compost.

The agreement between different production sectors with concrete experience in the circular economy offers a comprehensive response to environmental and production issues both in Herambiente plants, with biogas and biomethane production, and in the agricultural sector, confirming the production levels of crops, the quality of agricultural production and a significant improvement in the soil both from a biological and chemical-physical point of view.

In 2023, the Hera Group also continued to partner with **Federdistribuzione**, the federation representing Modern Distribution companies. Two partnership agreements are in the process of being drawn up, one relating to the circular economy and a second aimed at promoting energy efficiency actions among its own associated.

The partnership with **McDonald's** also continued, which, at the end of 2023, saw the creation of a new monitoring system for the separate collection of urban waste in the restaurants included in the scope of the project. The partnership agreement, which expires at the end of the year, has also been renewed for 2024, with plans to expand the partnership to areas relating to waste prevention, the identification of optimal solutions for the and traceability of waste from a circular economy perspective, as well as environmental awareness and communication initiatives aimed at McDonald's internal staff and customers, with the aim of promoting environmental sustainability and correct waste management.

The projects described here contribute to achieving **UN 2030 Agenda goals 12.2, 12.4, 12.5**, as well as - thanks to the partnerships developed - to achieving **goal 17.17**.

Production and use of compost from Herambiente plants

Herambiente's **compost** is an organic biofertiliser obtained by treating separately collected organic waste at six of its own facilities:

- 1 traditional aerobic composting plant with static heaps at Ostellato (FE), in which only mixed composted soil improver is produced;
- 4 anaerobic digestion plants with final composting of mixed composted soil improver (S. Agata Bolognese (BO), Voltana (RA), Rimini and Cesena plants);
- 1 traditional aerobic composting plant with static heaps at Ostellato (Fe), in which green composted soil improver is produced.

To summarise, the process used in all Herambiente plants involves processing and recovering the organic portion of sorted waste from which **soil improver** and **biogas** are produced; in the particular case of S. Agata alone, biomethane is produced, which is fed directly into the Snam network for use in motor vehicles.

In 2023 these plants produced approximately **35.9 thousand tonnes of mixed composted soil improver** (77.3% for extensive agriculture and fruit growing on **local farms**, 22.0% for the pellet and soil industry, 0.5% for small local gardeners and the remaining 0.2% for field experiments) and approximately **4.5 thousand tonnes of green composted soil improver** (98.5% for the **potting soil production** industry and the remainder for small local gardeners)

For years, Herambiente has carried out significant on-field trial activities aimed at researching and evaluating the performance of its biofertilisers. The study carried out with the University of Bologna and the Navarra Foundation, located in Ferrara, compares the organic fertilisers produced by the Group, both directly (soil improvers) and indirectly (liming materials), not only in terms of quantitative and qualitative production performance in extensive and specialised crops (fruit and floriculture), but also the impact that organic fertilisers have on the soil's microbiological composition and the soil/plant ratio. Following

the flood events that hit Romagna in May 2023, as part of the ongoing experiments, a specific experiment was included with the Cooperativa Agricola di Conselice to evaluate the possibility of recovering the land with the use of compost.

The results confirm **production equal to or higher than the one obtained with chemical fertilisation**, but with a significant increase in the organic substances present, leading to a qualitative improvement in production as well as significant resilience of the soil to climatic stress (drought) and other physiopathologies.

Producing compost through aerobic digestion, anaerobic digestion and composting processes in Herambiente's facilities contributes to achieving **UN 2030 Agenda goals 9.4, 11.6, 12.2, 12.4, 12.5**.

Evaluation and measurement of "circularity" in Hera Luce, Ase, Hse and in new water and gas connections

In 2017, Hera Luce developed a system for measuring the circularity of public lighting systems, considering their lifecycle based on an analysis of material flows (materials used in relation to their origin and end-of-life destination) and economic flows (costs/revenues at the beginning and end of the lifecycle).

This approach to measuring circularity was already aligned with the indications provided by the Ministry of the Environment (MATTM) at the time, and was later confirmed to be consistent with the most recent international methodological approaches, such as the Circulytics tool developed by the Ellen MacArthur Foundation. Hera Luce's circularity measurement system also anticipated the requirements of the Minimum environmental criteria (MEC) for the public lighting service, approved in March 2018, which introduce an obligation for the bidder to carry out a material analysis.

The measurement system designed acts as a fundamental strategic lever and, along with the awareness-raising process with suppliers, allows the Group to obtain higher scores in tenders and thus gain an advantage over its competitors.

Hera Luce, in order to proceed with measuring its material circularity, has prepared a measurement tool intended both for the actual calculation of material balances and for gathering the input data, providing access to the manufacturers/suppliers of the components used so that they can enter the material data of their products.

This activity made it possible to create a database containing the material data of all products used in the redevelopment projects, and to start raising awareness among suppliers with the aim of directing them towards more sustainable supply chains. The material balance measurement and reporting system was developed in accordance with the requirements set out in a specification for the creation of management systems for the implementation of material balances and was certified by a third party in 2022.

Hera Luce is the first public lighting service company to have obtained this certification at a national level.

The project was also extended to the companies HSE and ASE, which provide energy efficiency services for public administrations and private entities, in line with the Group's objectives with a view to sustainability and achieving the targets of the UN 2030 Agenda.

In 2020-2021, a circularity assessment model was applied to some simpler and more repetitive assets, in order to optimise them in terms of sustainability by redefining Standards and Procedures. This process consisted of the following steps:

- **Project circularity evaluation system:** implementation of calculation tools for evaluating the material circularity of networks and plants throughout their lifecycle, as previously foreseen for public lighting with the introduction of Minimum Environmental Criteria (MEC);
- **Process optimisation:** application of the previously codified analysis system to certain types of assets, with the objective of optimising processes in terms of choice of materials, construction technologies and maintenance methods, aimed at minimising the impact on material consumption and maximising the use of secondary raw materials;
- **Creation of new standards and procedures:** the results of the analyses developed will be transformed into new standards and procedures for the design, construction, operation and maintenance of the evaluated infrastructures.

During 2020, the material and economic circularity calculation tool was implemented, which was subsequently applied to the water connection typology (2020) and the polyethylene gas network typology in 2021.

In 2022, the analysis aimed at maximising circularity and minimising waste production was applied to the plant revamping typology with demolition of the existing one.

The assessment and measurement of "circularity" in Hera Luce, Ase, Hse and in new water and gas connections contributes to achieving **UN 2030 Agenda goals 12.2, 12.4 and 12.5**.

SCART®: the beautiful and useful side of waste

SCART® is the **Hera Group's art and communication project** that has been developing a combination of art and waste for twenty-five years. It is a corporate waste art project, created within one of Herambiente's industrial waste treatment and disposal plants. Today, SCART® is a trademark registered throughout the European Community, designed to **breathe new life into some of those many industrial waste products** that are disposed of as waste on a daily basis and, thanks to the creativity of the artists collaborating in the project, are transformed into unique, exclusive pieces of art in full respect of the circular economy. The aim is to encourage environmentally responsible behaviour, offering new stimuli to create artistic, design, fashion and performance objects using only and exclusively waste as a raw material. This has led to the creation of furniture, games, musical instruments, clothes, paintings, statues, as well as sets for shows and stage costumes. SCART® is an invitation to think about new intelligent, creative and above all sustainable lifestyles.

The numerous national and international initiatives include, for example, important conventions with the Fine Arts Academies in Florence, Bologna and Ravenna, Brera Milan, the Free Academy of Fine Arts of Rimini, and the Academy of Design of San Marino. A collaboration with the young people at the Sanpatignano Rehabilitation Community is also important in terms of social profile. The Scart Project, during 2023, involved over 100 students in seminars and workshops held at the SCART® laboratories located within the Herambiente plant complex in Santa Croce sull'Arno e Pisa. These artistic and educational initiatives focus on experimenting with the artistic use of industrial waste and involve not only enrolled students but also many artists specialised in trash art.

Since 2012, the SCART® project has been the exclusive partner for the production of costumes and stage components for Andrea Bocelli's concert at the Teatro del Silenzio in Lajatico (PI), the small Tuscan town where this great tenor was born. For the 2023 edition, around 150 stage costumes were created which were worn by performers, dancers, extras and the 80 members of the choir. In addition, six statues from the "Business man and woman" collection were permanently positioned on the stage where Bocelli duetted with internationally renowned singers, in front of over 20,000 people who came to Lajatico from all over the world over two evenings in July.

Over the years SCART® has also participated in numerous national exhibitions - Venice Film Festival, Rome at Palazzo Montecitorio and at the Colosseum, Pescara, Verona, Padua, Pisa, Florence, Milan to name a few - and international exhibitions (Berlin 2016 and Hong Kong 2021, Doha in Qatar in 2022).

A big event for the SCART Project, which took place in 2023, was the appearance on the "Viva Rai2" television programme hosted by Fiorello. On 18 March, for world Recycling day, all the sets as well as all the costumes worn by the dancers were taken from the Scart collection. The host mentioned and thanked the Scart Project several times for participating in the broadcast.

Also in 2023, several portraits of famous people were created and handed to them during events organised by the Project. Particularly memorable were those given to the singers Elisa and Emma, the actor Stefano Accorsi, the maestro Andrea Bocelli and the host Rosario Fiorello.

Finally, a Scart exhibition has been underway since the beginning of December in Pontedera (PI) in an exclusive location where 65 Scart works have been displayed. The exhibition is being met with enormous success mainly from schools throughout the province of Pisa and beyond. To date, over 1000 children have visited the exhibition on guided and organised tours, and it has received 4000 visitors during the exhibition's standard opening hours.

Not only does Scart continue to amaze, it's also an effective tool to raise awareness of recycling times, sustainability and the circular economy. These are yet more emotions offered by Scart, which after many years of searching for beauty, continues to offer interesting projects.

The SCART® project contributes to **UN 2030 Agenda goals 12.2, 12.4, 12.5 and 12.8.**

Sustainable management of water resources

All the quality of tap water in one report: In good water

In 2023 Hera published the fifteenth edition of the **In buone acque** (in good waters report), dedicated to tap water. This report is still the first and only example of a specific report on tap water in Italy and its environmental and economic benefits. The report contains, region by region, analysis data on 29 parameters and non-standard parameters, such as emerging contaminants and asbestos fibres.

The report shows that drinking tap water is an environmentally sustainable choice and is also good for your wallet. In fact, tap water avoids the production, transport and disposal of 305 million plastic bottles and saves 480 euro per year for a family of three.+

In Buone Acque contributes to the achievement of targets 6.b and 12.8 of the UN 2030 Agenda.

For the full contents of the report: <http://www.gruppohera.it/report>.

Convention with the University of Bologna for the aqueduct

In 2023, the consultancy contract with the Department of Civil, Chemical, Environmental and Materials Engineering of the University of Bologna (UniBo) remained in place, with the aim of analysing the environmental impacts linked to the drinking water supply chain through the Life Cycle Assessment (LCA) methodology. . Through this collaboration with UniBo, the positive environmental contributions coming from the Group's various project initiatives will be measured, with efficiency and innovation as the primary targets, and which, based on the LCA analysis results, may be enhanced and extended to other Group companies. Indeed, the choice of materials with which to carry out renovations has strategic importance, and an awareness of the mechanical and environmental performance of different materials is increasingly becoming a lever to orient choices in planning.

In particular, the project initiatives falling under this collaboration that have already been launched include:

- An analysis for the selection of **different materials in the aqueduct** used for the construction, maintenance and renewal of pipelines. The LCA analysis will identify which materials have the greatest impact on the environment, considering their entire life cycle, from production to operation and maintenance. The analysis carried out revealed that, despite the type of material, the production phase has the biggest impact on the environment, while the maintenance phase has a very small impact.
- Project for the use of **ultrasound platforms for the prevention of algae** (first project in Italy) in the lagoon basins of the Pontelagoscuro plant. This technology, by inhibiting chlorophyll photosynthesis, makes it possible to reduce the subsequent use of chemical additives to remove algae, which, especially with the increase in temperature, tend to form in increasing quantities. The plant, active since spring 2023, saw positive results during the temperature increases detected during the year. In 2024, the positive environmental impact brought about by the reduction in the use of chemicals for algae removal will be evaluated in more depth, again in partnership with UniBo.
- Installation of **smart water metering**, a project under development within the Group, aimed not only at acquiring consumption data remotely but also at providing remote users with comparative information on their daily consumption trends and alerts relating, for example, to leakage in the internal system. The rapidity of these alerts and the availability of real consumption data will lead to savings in water resources, which the collaboration with UniBo will quantify. Metering through smart meters could lead to offers of value-added services, which from a LCA perspective can lead to benefits on consumed or lost volumes of water resources.
- Installation at the Pontelagoscuro water purification plant of an **experimental plant for the removal of potential emerging pollutants based on nanomaterials (graphene oxide)** and valuable membranes recovered from the biomedical sector. The plant, studied and designed as part of the partnership between **Hera, CNR and Medica**, was financed as a European LIFE project and was an important action following the development of the Water Safety Plan for the Pontelagoscuro supply area: in fact, it allows the potential risk of a possible presence of emerging microcontaminants in the raw water of the Po to be managed preventively, another element that strengthens the multi-barrier treatment approach that the water purification plant already has in place.

The partnership described above between Hera and Unibo contributes to achieving **UN 2030 Agenda goals 6.3, 9.1, 9.4 and 17.17**.

The Rimini seawater protection plan continues

The Rimini seawater protection plan was created in 2013 to eliminate bans on bathing following intense rainfall, by implementing structural measures on the sewage-purification system of the City of Rimini. Intense rainfall, in fact, causes the flow rate manageable by the sewage system to be exceeded, making an emergency discharge of untreated water into the environment necessary. The gradual implementation of the measures set out in the Plan will lead to a gradual reduction of critical elements and up to a 90% reduction of the polluting impact, measured in terms of COD not discharged into the environment, compared to the initial state of the system.

From the very beginning of the Plan, mathematical modelling of the sewage and purification system has played an essential role in identifying possible synergies between the interventions and systemically optimising works and management criteria. The modelling activities, in fact, since they can rely on an ever-increasing amount of data and the management feedback of the works as they were built, were able to significantly change the system structure as initially planned.

The evolution of the Plan, from its implementation start-up to the present, has made it possible to pursue not only the environmental protection of the coastline as initially foreseen, but also the hydraulic

protection of urban areas in the municipality of Rimini that were subject to flooding. More specifically, in 2014, the Plan included interventions referred to as “Mavone spillway”, “Via Santa Chiara pumping station”, “Ausa dorsal sewerage collector” (the latter financed with 8.5 million euro as part of the public investments related to hydrogeological instability in the initiative known as “Italia Sicura”), as well as the modification of rainwater management in the plant system serving the Fossa Ausa. Subsequently, in 2019 and 2020, the plant engineering systems serving the Colonnella and Rodella Ditches were further optimised, taking advantage of the possible synergies with the sewerage system, which reduced the storage volumes of the tanks, thus also reducing both the investment required and the implementation timeframe, while at the same time strengthening the hydraulic control of the area.

In particular, the construction of the Dorsale Sud was completed in 2022, which, with the implementation of the plant and the laying of new collectors, allows for a considerable improvement in the capacity to collect wastewater from southern Rimini to the purification plant. The completion of this intervention, in addition to improving the overall efficiency of an important sewage infrastructure of the city, introduces a further environmental improvement, essentially due to the increase in the volume of waste water that, in the event of rainfall, can be sent to purification, proportionally reducing the number of activations of the emergency drains of the Ausa and Colonnella I Ditches.

The Plan essentially consists of the ten measures originally planned, to which additional measures due to optimisations introduced have been added, **making a total of 14 measures.**

The ongoing optimisation of the Plan, with the design improvements made and the indispensable permitting steps required, has meant that achieving the environmental objectives initially planned for 2020 has been postponed to 2026. Note that by that year, the works necessary to reduce the city’s hydraulic risk will also be completed. The postponement in the Plan’s implementation schedule is strictly related to a substantial improvement in its impact on the city, which, as mentioned above, will benefit from a significant improvement in both hydraulic and environmental aspects compared not only to the pre-operational state of the sewage-depuration system, but especially compared to the one expected at the outset of the Plan.

The state of progress of the interventions does not reveal any major criticalities and allows the quality objectives fixed to be achieved.

The situation of the 14 measures is as follows:

Intervention	Status at 31 December 2023	Planned / actual year of completion	Motivations/benefits
1. Doubling the Santa Giustina purification plant	Concluded	2016	Improving the purification process
2. Conversion of the Rimini Marecchiese purification plant into a storage tank	Concluded	2018	Improving the purification process
3. Construction of the northern backbone to connect the Bellaria purification plant to the S. Giustina purification plant	Concluded	2016	Improving the purification process
4. Completion of sewer network separation in northern Rimini	First section concluded. Second Section divided into 7 Lots. Lots 1,2,4 and 7 completed. Lot 3 nearing completion. The works on Lots 5 and 6 have been awarded.	2025	Conversion of five sea outlets to white water discharge
5. Construction of the southern backbone	Concluded	2022	Reducing the number of openings of the Ausa and Colonnella I sea outlets
6. Completion of separation in the Roncasso and Pradella basins	Network separation completed. The works for the water-supply plant serving Pradella reservoir have been awarded	2025	Conversion of two sea outlets to white water discharge

Intervention	Status at 31 December 2023	Planned / actual year of completion	Motivations/benefits
7. Construction of submarine pipeline and hydro-swelling plant for AUSA basin and reservoirs	Concluded	2020	Reducing the number of openings of the AUSA sea outlets
8. Construction of hospital lamination tank	Concluded	2016	Reducing the number of openings of sea outlets Colonnella I
9. Construction of connection pipeline between Fossa Colonnella I and Fossa Colonnella II; Colonnella II tank and Rodella tank and submarine discharge pipeline	Tender for Section I published. Tender for Section II scheduled for 2024	2026	Reduction in the number of openings of the sea outlets Colonnella I, Colonnella II and Rodella
10. Sewerage rehabilitation island	Concluded	2014	Optimisation of the sewerage system
11. AUSA beach section	Concluded	2016	Improving the usability of the area and environmental conditions
12. AUSA backbone sewer	In progress	2025	Hydraulic risk reduction
13. Mavone spillway	Concluded	2018	Hydraulic risk reduction
14. Drainage of Via Santa Chiara	Concluded	2020	Hydraulic risk reduction

The interventions completed so far have resulted in significant environmental benefits, reducing the quantities of organic substances (COD/BOD) discharged into the sea during intense meteorological events. The intervention concluded in 2020 for the AUSA reservoir led to a considerable reduction in the pollutant load discharged near the shore, with benefits for the water quality of the coastline. This means that the bathing bans that occur if discharges are opened along a wide strip of the city's coastline, including both areas where the separation of the sewerage networks has been completed and the stretch of sea adjacent to Fossa AUSA, will no longer apply. From this point of view, to date, 7,000 metres of beach have been "released" from bathing bans, corresponding to almost 65% of the city's coastline.

Moreover, as a further proof of the Plan's strong links with the City of Rimini, note that a significant part of the planned works are being integrated with the urban redevelopment project promoted by the Municipality called Parco del Mare (Sea Park), so as to pursue synergies that can provide an overall improvement of the urban structure.

The Rimini seawater protection plan was included among the best practices in the SDG Industry Matrix report published by Global Compact and KPMG in 2017, which reports on business opportunities linked to the goals of the UN 2030 Agenda.

The RSPP, through its interventions to improve the water-sewerage system, reduce marine pollution, upgrade infrastructures and involve municipalities and residents in the project, contributes to achieving **UN 2030 Agenda goals 6.2, 6.3, 6.b, 9.1, 9.4 and 14.1.**

Protection of air, land and biodiversity

More than 24,000 trees planted by 2024

The Hera Group has carried out, and continues to carry out **tree planting projects** in various areas of the regions in which it operates, confirming its commitment to protecting biodiversity and air quality. **Since 2012, 23,057 trees have been donated** to the area between Emilia-Romagna, Veneto and Friuli-Venezia Giulia thanks to numerous initiatives involving employees, Hera Group customers and the residents served, equalling a total of **2,300 tonnes of carbon dioxide absorbed every year**. The plantings were the result of reward mechanisms associated with specific **virtuous behaviour**, such as delivering sorted waste to ecological stations or requesting electronic bills instead of paper bills.

For example, with the **"ECO Trees"** initiative, the Hera Group has joined the Emilia-Romagna Region's project "Planting roots for the future" aimed at planting 4.5 million trees (one per inhabitant of the region). In particular, in 2023 Hera **achieved the objective of 10,000 trees planted** by 2024 thanks to the partnership with municipalities and other entities participating in the project, by making resources, skills

and areas of the region available, and thanks to a financial commitment of 250 thousand euro. In this context, the **participation of residents** was key as it was their choices of efficient energy consumption and sustainable mobility that supported the initiative. In fact, Hera Comm offers its customers a wide range of services and products that allow them to reduce consumption and the related environmental impact, and by opting for these solutions they contribute to implementing the project: every four products purchased, including LED light bulb kits or smart thermostats, for example, corresponds to planting and care of one tree. The same applies to two boilers, two air conditioners or one boiler and one air conditioner, or two means of sustainable mobility such as scooters or electric bicycles.

Finally, the completed projects “**Let’s green Madagascar**” by Treedom through HeraSolidale, “**La Fabbrica dell’Aria**” (the creation of air) in the Triveneto area, “**Più alberi in città**” (more trees in cities) in the municipalities of Modena, Ferrara, Sassuolo and Rimini, “**Operazione più alberi**” (operation more trees) in Padua, and “**Regala un albero**” (gift a tree) in Emilia-Romagna, also thanks the active involvement of residents and customers, resulted in 12,870 trees being planted.

The Hera Group’s commitment to the environment does not end here: in fact, other projects to plant trees in the area are being drawn up.

Further details of the tree-planting initiatives are available at alberi.gruppohera.it/hera-per-patrimonio-naturale-e-la-biodiversita.

The reported projects contribute to achieving UN 2030 Agenda **goals 7.3, 11.3, 11.2, 11.6, 12.2, 12.4, 12.5 and 12.8**, as well as - thanks to the involvement of residents, municipalities and institutions - to achieving **goal 17.17**.

Environmental biomonitoring with bees

The “**Capiamo - To Bee Understanding**” project **uses bees as bio-indicators of environmental quality** near industrial facilities. These insects are particularly sensitive to environmental changes caused by pollutants, and are therefore able to signal the onset of any imbalances in biodiversity, the ecosystem and human health in general at an early stage, thus enabling corrective actions to be rapidly planned.

Bees are particularly well-suited for biomonitoring. They are, in fact, social insects that live in large colonies and are easy to breed. In addition, their hairy bodies and regular foraging activity (collecting nectar and pollen) allow individual colonies to take about **10,000 samples per day** from the air, water and soil with which they come into contact. A single bee normally moves over an area of 7 km² in the course of a day. Substances present in the environment thus accumulate within the hive, on the bees and their products (honey, propolis, wax, pollen and royal jelly), making it easy to recover **highly representative samples** for analysis. Bees, as bio-indicators, offers a lot of useful information in both the short and long term: honey, for example, can be used to assess pollution in the short term, since it is the first product in which contaminants can accumulate. Wax, on the other hand, can be used to assess pollution levels in the long term, since due to its lipidic nature it can absorb and retain non-volatile, lipophilic and persistent contaminants.

In spring 2020, **three beehives** were installed at the facilities of the **waste-to-energy plant in Pozzilli**, in order to monitor the area consisting of the eastern part of the Venafrò Plain, between the Meta and Matese mountains, where, in addition to the waste-to-energy plant, chemical industries, private health companies, abandoned construction sites and small inhabited agricultural centres are found. This initiative includes two sampling and analysis campaigns per year concerning the bee population, the three hives and their products, as well as medical-veterinary checks to verify their health and productivity, to limit swarming, and to position and remove the honeycombs. Samples collected from the hives (bees, honey and wax) are **subjected to chemical analyses** at accredited laboratories using certified methods. The information obtained makes it possible to know and quantify the possible effects of the impact of human activities on the environment.

The results obtained show an overall good state of environmental quality. Investigations on honey samples showed an **overall absence** of dioxins, PCBs and pesticides, while as far as anions (chlorides, sulphates and nitrates) are concerned, their presence is **in line with the average values** for Italian honey. Analyses on polycyclic aromatic hydrocarbons (PAHs), whose main source is the combustion of fossil fuels, waste incineration, energy production or asphalt and chemical products, show an environmental condition to which several emission sources contribute, such as traffic, industry, and biomass household heating, typical of the anthropisation of this area, **without a significant impact** from the waste-to-energy plant. The metals present are also due to the presence of abandoned construction sites, industry and infrastructure.

In 2021-2022, the project was also extended to the composting plant with biomethane production in **Sant’Agata Bolognese (Bo)**. In spring 2021, three beehives were installed in the plant’s facilities, with the aim of monitoring a larger and more complex area, located in the Bolognese plain bordering with the province of Modena, where large and small scale industrial and agricultural activities are located. This

project was carried out in the same way as in Pozzilli: **two sampling and analysis campaigns** were carried out on the bee population and their products (honey and wax), in addition to medical-veterinary checks on their health and productivity. The samples collected from the hives were then subjected to chemical analyses. The results obtained confirm a **state of environmental quality**: the honey produced is **free of heavy metals** such as cadmium and lead, polycyclic aromatic hydrocarbons and pesticides, and its pollen profile is typical of the lower Emilian Apennines.

In 2022, the project was launched with the same model at the **Serravalle Pistoiese landfill**, the results of which highlighted **good environmental quality** with the production of honey free from heavy metals and lead and free from pesticides. Activities continued in 2023 and the results of the analyses will be available in 2024.

In 2023 the project was also extended to the Padua **waste-to-energy plant** and the **Cordenons landfill**, in the province of Pordenone. At the moment the results are not yet available, but significant quantities of honey were produced at the Cordenons landfill.

This biomonitoring project contributes to achieving **UN 2030 Agenda goals 11.6 and 12.4**.

Local Areas (and Businesses) - Enabling resilience and innovation

Innovation and digitalisation

“Il Rifiutologo”,
the app for
sorting waste
(and more) gets
smarter

“Il Rifiutologo” (The Wasteologist) is a **free app with many useful features** available online both on Hera’s website and on App stores for smartphones and tablets. Since its launch in 2011 to 2023, it has seen over **1.2 million downloads** on Android and iOS operating systems. The municipalities where Rifiutologo was most used in 2023 were Modena (1.2 million log-ins and 73 thousand individual active users) and Bologna (almost 800 thousand total log-ins and 90 thousand users); followed by Faenza in terms of number of log-ins (618 thousand) and Ravenna in terms of number of users (32 thousand); Padua is also worth mentioning with 400 thousand log-ins and 24 thousand users.

Using the **Waste Search** function, users can check in real time where to take their waste and the door-to-door collections scheduled for their address, and even set a reminder alert for the day and time of each collection. The Waste Search is confirmed as the most used function, with over **3.6 million searches carried out** in the last year.

Using geolocalisation, Il Rifiutologo also shows the **nearest drop-off point**, with complete information on the waste types accepted, opening hours and any discounts offered by the municipality. It also provides additional information on **Points of Interest** for residents, i.e. special sorted waste collection, mobile collection points, material distribution points and underground drop-off points.

The **Environmental Reports** function makes it possible for residents to report problems related to, for example, abundant waste or damaged containers, sending photos in real time to Hera technicians. The App later informs the user when the problem has been solved, including through personalised push notifications. In 2023, reports concerning the **emptying of bins**, street cleaning and abandoned waste reached **approximately 240,000, up 23%** compared to the previous year. In 2023, the option of sending reports from the **Rifiutologo website** was also introduced, expanding the channels available to residents and customers.

Barcode scanning, another popular feature of Il Rifiutologo, allows materials to be **recognised by means of product barcodes**, indicating how to correctly dispose of each package, even if it is composed of different materials; by 2023 the archive contained **over 1.8 million barcodes** of the most popular products. If a code is not recognised, or if a product is missing, residents can report this via the specific function, so that it can be added to the system. In 2023, partially thanks to the **reports** sent by residents, 105,000 codes were added to the barcode database, while the number of **requests made** by scanning the barcode came to about 393,000. At present, the database covers almost the entire circulation in Italy.

Il Rifiutologo can also **communicate with Alexa**, the artificial intelligence created by Amazon to give voice to the smart devices we all own. Anyone who opens the Alexa app can add the Rifiutologo skill, thus ensuring the availability of a friendly voice from whom to ask for fundamental information on the collection service provided by the Hera Group in their municipality, such as: **checking door-to-door calendars** and setting voice **memos** to remind them of the collection days scheduled in the calendar, the **dove lo butto** (where can I throw it out) function, with which the skill can be asked how to dispose of waste in the areas served by Hera, and lastly information on **drop-off points** and how to have bulky items **collected at home**.

A very useful new feature was available from 2022: the option to book a **free bulky waste collection service from home** directly from the app. To book a pick-up at one’s own address, simply register and **with a few clicks** the items to be collected can be selected. The app will directly provide the date and time for the pick-up. In municipalities where the service is active, it is also possible to request home collection of **prunings** via the app. In 2023, more than **31 thousand** collection bookings were requested via the Il Rifiutologo app.

The information contained in Il Rifiutologo, the reports from customers and its use contribute to achieving **UN 2030 Agenda goals 11.3, 11.6, 12.2, 12.4, 12.5 and 12.8**, as well as - thanks to the involvement of residents - to achieving **goal 17.17**.

Digi and Lode,
for more digital
services and
schools

For the Hera Group, innovation and digitalisation are fundamental, starting with its own services: development of online services, creation of interactive apps for customers and residents, and promotion of dedicated digital channels and services.

The **Digi e Lode** project, now in its **seventh edition**, sees customers and the company working together to **digitalise local schools** thanks to the promotion of Hera’s digital services (such as signing up for #genHERAZIONI, the new Hera Group programme which rewards sustainable actions, electronic bill sending, online services, applications for tablets and smartphones, and the use of digital self-care areas).

under the patronage of 113 local municipalities. Digi e Lode consolidates the contribution that the Group wishes to bring to the area served, in continuity with the corporate strategies that identify innovation, sustainable development of local areas and the activation of partnerships as the central drivers for increasing shared value, in line with the objectives set out in the UN 2030 Global Agenda.

Since the 2023/2024 school year, the project has also been extended to schools in the provinces of Parma, Reggio Emilia, Piacenza, Ascoli Piceno, Macerata and Fermo (**covering the whole area of Emilia-Romagna, Marche and Abruzzo**) and also to the municipalities of Bassano del Grappa, Vigonza, Cittadella, Rubano and Camposampiero, where the Etra Energia company operates.

The project involves **all primary and secondary schools**, both public and private, in the areas in question located in Emilia-Romagna, Marche and Abruzzo, Veneto, Friuli-Venezia Giulia, Lombardy and Apulia. For the 2023/2024 school year, a total of 197,500 euro has been made available to fund digitisation projects, benefiting students in 79 schools. Since the project began in 2017, the Group has already donated .

In order to participate, customers must activate one or more free digital services offered by Hera Group companies: by doing so, they donate points that can be distributed equally among the schools in their municipality or can be allocated to a specific school (in this case, they are multiplied by five): the Hera Group rewards the schools in the area that achieve the highest score.

The Digi e Lode project contributes to achieving **UN 2030 Agenda goals 4.a and 12.8**, as well as - thanks to the involvement of residents and schools - to achieving **goal 17.17**.

Economic growth and social inclusion

CiboAmico:
roughly 138,000
complete meals
recovered in
Hera cafeterias
since the start of
the project

Launched in 2009 with the support of **Last Minute Market**, a social enterprise and accredited spin-off of the University of Bologna active in the fight against waste and in environmental sustainability, CiboAmico is a concrete initiative developed by the company that encourages an expansion of the circular economy, bringing together different entities in the local area to work towards a **shared social responsibility**, providing concrete help to those who most need it. There are nine company canteens where the project is active: Bologna, Granarolo dell'Emilia, Imola, Rimini, Ferrara, Ravenna, Modena, Forlì and Cesena. Modena and Forlì have been involved since 2023, Cesena since 2024. Recovered meals are donated to local non-profit organisations that provide hospitality and assist people in need on a daily basis.

In 2023 alone, more than **12 complete meals were recovered** in favour of six local non-profit organisations that assist about 220 people every day with these recovered meals, corresponding to more than 5.6 tonnes of food with an economic value of over 49,000 euro. This furthermore avoided the production of 5.6 tonnes of waste, corresponding to the capacity of over 12 bins, and the emission of over 21.3 tonnes of CO₂ into the environment. Furthermore, the waste of water, energy and land consumption that were necessary to package those meals was avoided.

Fifteen years after the start of the project, a total of around 138 thousand meals have been donated, worth around 570 thousand euro. This has avoided the production of over 61 tonnes of waste (corresponding to over 133 bins) and the emission of over 250 tonnes of CO₂.

Many non-profit organisations in the area are involved and help to guarantee increasingly important results such as: Fraternità Cristiana Opera di Padre Marella – Pronto Soccorso Sociale di Bologna, Fraternità Cristiana Opera Padre Marella Città Dei Ragazzi di San Lazzaro di Savena, Associazione Comunità Papa Giovanni XXIII in Rimini, Associazione Viale K di Ferrara, Cooperativa Sociale Mano Tesa in Imola, Cooperativa Sociale San Vitale di Ravenna, il Ceis Arte cooperativa sociale Onlus di Modena, Associazione Comunità Papa Giovanni 23° di Forlì and Il Cigno Cooperativa Sociale di Cesena. Numerous partner facilities take part in the initiative, where the meals are consumed: Pronto Soccorso Sociale in Bologna, Comunità terapeutica "Gemma Nanni Costa" in San Lazzaro di Savena, Capanna di Betlemme in Rimini, Casa della Donne, Casa Mambro and Mensa in via Gaetano Pesci in Ferrara, the Co-Housing facility for the elderly in via del Tiglio in Sesto Imolese and the cafeteria at the headquarters of the Cooperativa San Vitale in Ravenna, Faber Centro Socio Occupazionale in Modena, Comunità terapeutica di Forno and Il Villaggio della Gioia in Forlì and Il Gruppo Appartamento Il Faro in Cesena.

Moreover, at the end of 2017, CiboAmico went beyond company cafeterias to involve a **municipal market**. This initiative, proposed by **HeraLAB Modena**, was promoted together with the City of Modena, and carried out with the collaboration of the **Market Consortium**. While in the cafeterias the objective was to recover unconsumed meals, the collaboration between Hera and the Albinelli Market retailers, instead, aims to avoid the waste of fresh products which, at the end of the day, may remain in the stalls of the market, food which is still perfectly edible but which, for various reasons, can no longer be sold the following day. Food recoveries from individual shopkeepers take place every Wednesday and Friday when the Albinelli Market is open, and mainly consist in bread and bakery products, as well as fresh fruit and vegetables. For these products, which would otherwise be thrown away, there is a virtuous alternative thanks to the cooperation between Modena City Council, the Hera Group, Last Minute Market,

and the Market itself. The retailers, in fact, can choose to donate their unsold goods to the Ceis Foundation, which are then recovered and used to benefit people facing hardship. As of 2020, once again in agreement with the City of Modena, food surpluses have also been recovered at Agricola Prima Natura in Via Rainusso. This made it possible to extend the cooperation network to Caritas Diocesana di Modena, which carries out recoveries through its own local structures and parishes. In 2023, thanks to 10 participating retailers, a total of over 2,700 kg of products were collected and reused in Modena.

In 2022, the City of Imola's initiative "**Un s'bota veja gnet** - Nothing gets thrown away" was launched. This initiative is promoted by Hera and coordinated by Last Minute Market, and is aimed at recovering surplus food in the city and preventing food waste. In 2023, 18 thousand kg of food products were recovered, including 240 kg of ready meals, from local organisations that take care of people facing hardship. They have joined the initiative and regularly donate surplus food: Interspar Imola, Mensa Hera di Imola, Ecu Imola, CLAI with the Macellerie del contadino in Imola Pedagna and Imola Centro, Crai di Sesto imolese, TeaPack Srl SB, Pasticceria Dulcis caffè, and Autodromo di Imola.

The four local non-profit organisations currently involved are the Coop. Soc. Mano Tesa, the No Sprechi Odv Association, and the Italian Red Cross - Imola Committee and Caritas Diocesana di Imola, which distribute surplus food both at their facilities and to families facing hardship, disabled persons and the elderly.

Waste prevention initiatives such as CiboAmico contribute to achieving **UN 2030 Agenda goals 12.2, 12.4, 12.5**, as well as - thanks to partnerships with non-profit organisations - to achieving **goal 17.17**.

FarmacoAmico:
over 517,000
packages of non-
expired
medicines
recovered since
the start of the
project

FarmacoAmico is a project promoted by Hera to collect non-expired medicines and create a network of solidarity for reuse in the local area. Intact medicine, still valid for at least six months and in an adequate state of conservation, is reused by non-profit organisations operating in local or decentralised cooperation projects. The aim is to prevent waste production by spreading good practices in waste reduction and supporting organisations that assist the weaker members of the community.

Launched in 2013, in Bologna, FarmacoAmico is implemented in cooperation with Last Minute Market and now involves 33 municipalities in Emilia-Romagna, a region with over 1.6 million inhabitants (equivalent to 67% of the population to whom waste management services are provided in the Region).

In December 2023, the Memorandum of intent for the diffusion of the Farmaco Amico initiative across the territory was renewed by Hera, Last Minute Market and the Emilia-Romagna Region.

In 2023, over 65 thousand packages of medicine were sent for reuse, over 28% more than in 2022, for a total value of over 870 thousand euro. The centralised management of the collection, selection and destination of medicines has given excellent results and has made it possible to optimise shipments of medicines to beneficiary organisations.

In 2023, this project involved a total of 199 pharmacies, 39 more than 2022, and 36 non-profit organisations, some operating in Italy and others abroad, as well as various partners, institutions, trade associations and corporate bodies, amounting to a total of 53 parties.

Since the start of the project, more than **517,000 packages of medicine** with a total economic value coming to around **6.3 million euro** have been collected and sent for reuse, which partially and potentially corresponds to lower costs for the National Health System.

In 2024, some local meetings are set to be held with the project partners to enhance the initiative and the results achieved, and to expand the initiative.

Waste prevention initiatives such as FarmacoAmico contribute to achieving **UN 2030 Agenda goals 12.2, 12.4, 12.5**, as well as - thanks to the involvement of residents and municipalities - to achieving **goal 17.17**.

**The success of
Cambia il Finale
continues: 1,070
tonnes of bulky
waste collected
in 2023**

The Cambia il Finale (Change the Ending) project, now **in its tenth year**, makes it possible to collect all objects in good condition that would otherwise be disposed of as bulky and allow them to be reused, thanks to a network of non-profit organisations distributed over the area served, capable of giving new life to goods donated by residents. The project is linked to a specific Memorandum of Understanding between Atersir and Hera on the management of bulky waste, and is developed in cooperation with Last Minute Market. Goods can be donated by residents to a circuit of non-profit organisations in Emilia-Romagna that collect more or less bulky goods at their own premises or at home, allocating them to flea markets, using them in their own premises or donating them to people in need. All the Hera Group's communication tools promote the collection of goods carried out by non-profit organisations, in particular its call centre operators, who offer users the possibility of donating bulky items in good condition that they wish to dispose of.

This initiative promotes good habits related to reuse and generates positive social benefits thanks to the activities carried out by the non-profit organisations involved, in line with the Hera Group's principles of

social responsibility and environmental protection. Moreover, it responds to current developments in environmental legislation, which aims at management models based on the concepts of prevention and reuse.

Fifteen non-profit organisations were partners in the project at the end of 2023, distributed throughout the Emilia-Romagna region served by Hera, guaranteeing coverage of all main cities. During 2023, the organisations received 8,950 phone calls from residents willing to donate their bulky goods and carried out around 6,300 collections, totalling around **486,000 items and over 1,070 tonnes collected**. The majority of the goods donated were indeed reused, with an average percentage close to 73%. From January to December 2023, **around 775 tonnes** of bulky waste were thus avoided by this project.

Since the start of the project, **more than 5.8 thousand tonnes** of waste have been avoided, bringing great savings for the environment and lower waste collection costs.

Moreover, as part of the “Cambia il finale” project, **six “Reuse Areas”** have been installed in the municipalities of Cesena, Ferrara, Modena, Ravenna and Rimini. These are actual boxes inside Hera’s Collection Centres, where residents can bring furniture and small objects in good condition, which are then collected and sent for reuse by accredited non-profit organisations. In 2023, **702 donations** were made by residents, totalling 5,768 items and corresponding to **9,771 kg** of goods.

Waste prevention initiatives such as Cambia il finale contribute to achieving **UN 2030 Agenda goals 12.2, 12.4, 12.5**, as well as - thanks to citizen collaboration and partnerships with non-profit organisations - to achieving **goal 17.17**.

**Making
environmental
and social
sustainability go
hand in hand**

Hera continues to respect its commitment to initiatives dedicated to the support and social inclusion of people facing hardship and in difficult or disadvantaged conditions, through the following initiatives, which have proven to be effective.

The **Manolibera** (Hands Free) project was created in 2011 out of a collaboration between the Forlì prison, Hera and the Techne training institute, inspired by the idea of some artists who are particularly interested in respect for the environment, eco-sustainability and social rehabilitation. A large room within the Forlì prison was made available to create a workshop, in the form of an original artisan paper mill, where inmates work daily, for 20 hours a week, making greeting cards, Christmas cards, photo albums, photo frames, notebooks, large and small, and other paper artefacts having a high artistic value. The exclusive production methods - entirely handmade, following an ancient Arab-Chinese processing technique - and the refined decorations make these products unique, refined and imbued with a remarkable artistic, social and ecological value that make them particularly appreciated in the wedding planning field. In fact, the workshop has developed a wide range of products for weddings and important events, including elegant invitations and refined thank-you cards, photo albums complete with boxes, precious wedding favours, frames and paintings.

A collaboration with the national prison economy network “Freedhome”, the concept store dedicated to outstanding aspects of Italian prison economics, helps give the project considerable visibility.

The workshop is able to sustain its own operations and provide inmates with appropriate training thanks to the commitment of the social enterprise *altremani srl* which is tasked with monitoring and verifying the activities carried out in the workshop, while the commercial side is managed with the support of *Legatoria Editoriale Berti srl*. In 2023, a total of six prisoners were employed in the activity, while over 51 people have been involved since the start of the project.

The experience of the **Raee in carcere** project continues. This project, launched in 2008, aims to promote social and employment inclusion of disadvantaged people undergoing criminal punishment, with the intention of assisting them in their progress back into legal conditions and the civil life of the community.

The project is currently active at the prison of Ferrara, while the project at the prison in Bologna ended in July 2023.

The project involves the national WEEE Erion consortium, and the social cooperatives IT2 in Bologna and Il Germoglio in Ferrara, and also has the support of the Emilia-Romagna Region.

In appropriately equipped laboratories inside the prisons, inmates take turns in training and higher education activities, learning the skills and knowledge needed to disassemble large electrical and electronic equipment waste (WEEE R2 such as washing machines and dishwashers) coming from the collection managed by the Erion Consortium, which also include WEEE from the Hera Group’s collection centres. Since its beginning, this project has enabled **39 ex-convicts** to be trained and prepared for work in companies operating in the respective geographical areas, while a total of 117 inmates have benefited in various ways from internships and training courses leading to professional integration. The environmental benefits obtained since the start of this project are also considerable: over the entire period, the workshops have processed **roughly 6,299 tonnes of electrical and electronic equipment waste**, breaking it down into small fractions that were sent separately and entirely for recovery.

The projects described in this case study contribute to achieving **UN 2030 Agenda goals 8.5, 12.2, 12.4, 12.5 and 17.17.**

**Flooding in
Emilia-Romagna:
Hera's response
to the
emergency**

The flood which affected a large part of Emilia-Romagna from 1 to 3 May and from 16 to 17 May had a devastating impact on the region and some surrounding areas. The flood affected 44 Emilia-Romagna municipalities, mainly in the provinces of Ravenna, Forlì-Cesena, Rimini, Bologna, Modena and Reggio Emilia. The heavy rains caused 23 watercourses to overflow, resulting in the flooding of an area of 450 square kilometres, while the area of the Tuscan-Emilian and Tuscan-Romagnolo Apennines was affected by over 1,100 earthquakes and landslides. The catastrophic events also affected the northern provinces of the Marche region (Pesaro and Urbino, Ancona, Macerata and Fermo), as well as some municipalities in Tuscany (Fiorenzuola, Marradi, Palazzuolo sul Senio and Londa).

In response to this emergency, the Hera Group took immediate action to restore the services managed in the areas affected by the disaster to normal functionality as quickly as possible: gas distribution, electricity, district heating, public lighting and integrated water service, urban hygiene and waste disposal. In particular, continuous monitoring was guaranteed through the immediate establishment of a task force of over a thousand operators and 250 vehicles who intervened on the plant equipment and provided their support to the affected populations, working with the civil protection and law enforcement agencies.

Overall, around 100 thousand tonnes of waste were collected in the affected areas, almost entirely disposed of, generated as a result of the flooding, which is equivalent to the quantity normally collected in the same areas over a period of ten months. In addition, integrated water, gas distribution, district heating and public lighting services were restored for almost all customers. In particular, around 25 thousand users of the integrated water service found themselves without power, while there were 4,550 and 25 thousand damaged light points and gas meters respectively and 15 flooded thermal power plants.

At present, the estimate of the costs generated by the disaster, which takes into account both the first emergency interventions and the financial damage suffered to the plant equipment, amounts to 96.6 million euro, around half of which relates to network services and the rest for environmental services.

In response to the flood, the Group immediately opened its channels with associates, for example the regulatory authority (Arera), the area regulators (Egato), as well as the Emilia-Romagna Region, in order to organise interventions to support families and businesses, and to identify tools to recognise the costs indicated above and to maintain an economic-financial balance.

The Italian Government, with Legislative Decree 61 of 1 June 2023 (converted with amendments into Law of 31 July 2023, no. 100), provided for the suspension of the waste tax (TARI) payment deadlines between 1 May 2023 to 31 August 2023 for the affected municipalities and has asked Arera to regulate the temporary suspension of the deadlines of invoices issued, or pending issuance, or of payment notices becoming due in the above period, relating to gas, electricity, water and waste services. Subsequently, with resolution 390/2023/R/com of 03/08/2023, the deadline of 31 August was extended to 31 October.

In response to this decree, Arera intervened by setting the period for suspending the payment terms of bills as four months (starting from May), introducing the option of paying them automatically in instalments, without discrimination and without applying interest, without prejudice to the ability of customers to arrange to pay in a single instalment, or to pay the amounts due based on an instalment plan to be agreed with the supplier.

According to the various regulatory provisions, the Group promptly activated the **communication channels** necessary to distribute information relating to the interventions to support families and businesses as required by Arera. In the second half of 2023, over 200 thousand bill instalment plans were granted; in addition to those granted based on Arera's provisions, more than 5 thousand personalised plans were recognised on the initiative of the Group with different terms than the terms set by the Authority, so customers could plan their finances according to their needs. Starting from December 2023, following the new regulatory changes (Arera resolution 565/2023), an **additional information and self-certification collection campaign** was launched in order to grant the tariff concessions defined by Arera to the customers most affected by the unforeseen events.

To guarantee the economic-financial balance of operators, Arera also introduced a system of free advances, payable by Cassa per i Servizi Energetici e Ambientali (CSEA), with initial reporting starting from 10 July 2023. Subsequent reports were submitted by the 15th of each month until the end of October. To date, the credit for bills issued and overdue, but not yet collected, amounts to approximately 5.2 million euro for the Group.

With regard to **employee involvement**, the Group decided to implement a series of special initiatives:

- **donations** for the **affected areas** towards civil protection, with a special edition of HeraSolidale, and **towards the employees** directly involved. In both cases, employees were able to donate

through their pay slip and through the welfare system. The overall amount donated, including the amount donated by the company, was approximately 672 thousand euro;

- **special coverage for absences** caused by inconvenience related to the emergency with paid leave;
- **transfer of holiday hours**, by employees and the company, to employees directly affected by the emergency situation;
- **advance of severance pay** for duly justified expenses linked to the emergency situation;
- strengthening of the psychological support service available under the company welfare system;
- recognition of an **additional amount of remuneration to meet special service needs**;
- **information** regarding volunteering initiatives launched by companies.

By virtue of the Presidential Decree of 10 July 2023, Army Corps General Francesco Paolo Figliuolo was appointed Extraordinary Commissioner for Reconstruction. On 25 September 2023, the Commissioner issued Ordinance no. 6 which defined the extremely urgent interventions eligible for State funding and the related payment methods. In particular, Appendix A of this decree reports that 374 interventions were carried out by a company of the Hera Group as for a total estimated amount of approximately 75.5 million euro. The ordinance also provides the option to request:

- 40% of the amount as an advance;
- the balance if: a) an inspection certificate, or a compliance certificate, or substitute declaration can be produced, b) if a final works progress report (WPR) and discharged mandates/invoices are available.

As of 31 December 2023, it should be noted that all costs generated by interventions relating to environmental hygiene have been finalised and largely reported to the commissioner, for an amount equal to 29 million euro. Full economic coverage has already been recognised for these interventions.

With regard to the other services, expert assessment activities are underway to evaluate the necessary interventions and the related resources needed to cover them which will first have to come from the insurance policies stipulated by the Group and, second, from the commissioner's contribution, to make up the difference. In this regard, it is noted that, again at 31 December 2023, the Group received 10 and 16.5 million euro as an advance from the insurance company and the commissioner respectively (after issuing specific sureties by way of guarantee).

Lastly, on 5 February 2024, the Special Commissioner issued a second Ordinance (17/2024) aimed at financing additional safety interventions, including for the integrated water service (nine interventions costing around 13 million euro) and environmental services (an intervention worth approximately 0.3 million euro); as regards the gas distribution service, the safety measures (three interventions costing 3.6 million euro) are set to be financed by another ordinance soon to be issued.

These ordinances, together with Ordinance no. 6 mentioned above, will almost completely cover the estimated costs in relation to the damages suffered by the Group.

Job creation and development of new skills

With Riciclandino, we help the environment and schools

Riciclandino has been helping our children move towards greater environmental awareness for over eleven years. An environmental initiative dedicated to children and families, it involves all residents who have ties with schools, understood as institutions and communities of people. In this project, points are awarded for the sorted waste brought to drop-off stations, giving schools the opportunity to receive economic incentives. The students' families can use the Riciclandino card to take their waste to drop-off stations, obtaining a discount on their bills, as provided for by municipal regulations, and offering an incentive coming to the same amount to their child's school. The added value of this initiative consists in increasing interest towards the environment, and in a shared action that creates and strengthens the civic and social sense of the community. In the 2022-2023 school year, 9 municipalities in the Ravenna area joined the Riciclandino project, and 194 schools were involved, with a total of about 33,244 students. The participating schools were awarded a prize amounting to 43,608 euro for their activity. As part of the project, almost 400 tonnes of waste brought by students and their families were delivered to drop-off stations.

Students and families delivering sorted waste to drop-off stations contributes to achieving **UN 2030 Agenda goals 11.3, 11.6, 12.2, 12.4, 12.5 and 12.8**, as well as - thanks to the involvement of schools and residents - to achieving **goal 17.17**.

Plant visits for over twelve thousand people

Herambiente offers **guided tours of its waste treatment and recovery plants**, demonstrating its attention to environmental issues and an attempt to **promote an ecologically responsible mindset**. The guided tours, which can also be booked online from the Herambiente website, were created in order

to raise awareness of a **plant park that is among the most advanced in Europe** in terms of operational and quality standards and to give interested parties the opportunity to learn about the operating and management methods of the plants, in order to ensure the area is respected as much as possible using solutions with the lowest overall impact on the environment.

In 2023, 4,131 visitors visited the Herambiente plants over 181 days. Visits were made to the waste-to-energy plants (2,553 visitors), the selection and recovery plants (849 visitors), the composting and anaerobic digestion plants (630 visitors) and other plants (99 visitors). The data shows significant growth compared to the previous year and is close to the levels prior to the restrictions as a result of the health emergency. Additionally, **394 people** took part in the **virtual visits**.

In the 2022-2023 school year, a total of **1,799 young people visited Hera plants**. It was finally possible to re-introduce in-person visits, which had been suspended in the previous three years due to restrictions during the health crisis. The activity, always highly requested by students, offers a journey into the heart of the plants, accompanied by expert teachers and Hera technicians, to offer a first-hand discovery of the main technological cycles of water, energy and waste and Hera's innovative techniques to ensure the correct and sustainable management of resources.

Another 3,711 students participated in virtual visits to the plants, immersive virtual tours carried out in the classroom with the help of expert teachers. The figure for virtual visits is lower than the previous year due to the reintroduction of in-person visits.

Compared to the previous year, additional plants were added for class visits, including the Bufalini cogeneration plant in Cesena (47 visitors), the district heating plants in Ferrara (145 visitors) and various ecological stations (167 visitors), making a total of 359 visitors.

A new visit to the Cesena purifier was also introduced, in virtual mode with a live connection, to discover how waste water is treated and to talk about the agricultural recovery project as an example of circular economy (342 student visitors).

There were 1,556 and 152 **visits** to the **AcegasApsAmga** drinking water and purification plants respectively, while there were **350** visits to the **Marche Multiservizi** plants.

Plant visits contribute to achieving **UN 2030 Agenda goals 4.7, 6.b and 12.8**, as well as - through citizen involvement - to achieving **goal 17.17**.

Obtained the certification for gender equality

In 2023, certification for gender equality in application of UNI/PDR 125:2022 was obtained. A management system that involved 11 Group companies (Hera SpA, Inrete, Heratech, Hera Comm, Acantho, Herambiente, HASI, Acegasapsamga, Hera Luce, Hera Servizi Energia, Marche Multiservizi) where 81% of the Group's employees work. The certification involves the measurement, reporting and evaluation of a set of indicators in six areas: culture and strategy, governance, human resources processes, growth opportunities and inclusion of women in the company, pay equity between genders, parenting support and work/life balance. The aim is to fill any gaps that may exist and produce sustainable and lasting change over time, thanks to a specific strategic plan.

The Board of Directors of the Hera Group has approved the Gender Equality Policy which defines the Group's commitment in this area and has appointed a Steering Committee which ensures the effective adoption and constant monitoring thereof.

The certification brings to an end a process that was started some time ago. Some of the most significant events were the signing of the Charter for equal opportunities and equality at work, launched in Italy in 2009, and the establishment of a Diversity Management working group in 2011, formed by employees from different company areas, and the inclusion in the Bloomberg Gender Equality Index and in the first places worldwide in the Refinitiv Global Diversity & Inclusion Index.

Certification for gender equality contributes to the achievement of targets 5.1 and 5.5 of the UN 2030 Agenda.

Ferrara training center to train employees and suppliers

Following the inauguration in 2022, the Ferrara Training centre continued to evolve in 2023 as a structure created to promote integration between physical and virtual learning environments.

At the beginning of 2023, thanks to the partnership between Inrete Distribuzione Energia, ICIM Spa and Emerson, an industrial partner that operates in the area of gas distribution, the centre was qualified as a suitable location for the certification exams of professionals according to the UNI 11632- PdR 39-2018 standard (responsible for surveillance activities on natural gas distribution plants). In 2023, 12 gas operators were therefore certified, certifying that they possess the knowledge, skill and competence requirements relating to the professional activity of field surveillance activities on natural gas distribution systems, in order to maintain their safety and efficiency and to ensure continuity of service to end users. In addition, again in partnership with Emerson, training courses were developed with certification of the skills acquired, continuing the Hera Group's commitment in the field of employability and also supporting

related companies in the search for qualified resources, with particular reference to technical-operational profiles.

The centre was used as part of the Employability project, launched in partnership with the personnel selection company Manpower with the involvement of 30 operators with an operational profile. This important project for employability has provided the Hera Group with further key resources to overcome the challenges of the energy transition through a training course lasting 80 hours per capita.

In 2023, the planning of a pilot training project in the metaverse was also launched, which will involve the use of headsets for augmented reality simulations. Lastly, a challenging development project for the Training Centre was launched, which will involve the setting up of external spaces, near the current building, equipped with classrooms and teaching areas, for experimental simulation.

The Ferrara training centre contributes to the achievement of targets 4.3, 4.4, 8.3 and 17.17 of the UN 2030 Agenda.

Customers

#genHERAZIONI is the loyalty programme, which is free and open to all customers and residents, which rewards the sustainable actions of everyone who shares the goal of reducing their impact on the environment. It was launched in the summer of 2023 and had around 45 thousand members at the end of the year.

By becoming part of the community, users have the opportunity to play, participate in challenges and learn how to reduce their impact through small daily actions and more conscious behaviours.




By taking sustainable actions and by taking part in initiatives, users can earn coins (ECOcoin), points (PuntiAZIONE) and medals (ECObadge): for example, “**Play and learn**” gets users involved with weekly winnings, quizzes and challenges to test themselves on issues related to sustainability and efficient behaviours; the “**Storie di sostenibilità**” (sustainability stories) offer articles, videos and podcasts with interesting information, insights and food for thought; “**Mondo Hera**” (Hera world) discusses rewarding actions customers can take. Lastly, there are also specific competitions dedicated to special initiatives such as, for example, some which encourage people to pay attention to their own energy consumption using the Consumption Diary.

ECOcoins can be converted into rewards, while puntiAZIONE points measure the degree of user involvement in the community and allow them to level up. By learning to live in an increasingly green way, users can become sustainability “gurus”. Competitions are also held on the platform with the chance to win more prizes.

In addition, as an extension of the experimental initiatives developed previously to promote and incentivise sustainable behaviour, in 2023 research into implementing a Green community that gives residents the opportunity to purchase renewable energy or shares of photovoltaic panels from Energy parks in the process of being developed. This means residents can take advantage of the advantages of photovoltaics systems even if they are unable to install them on their own roof, while still seeing an economic benefit on their bills with a simple and transparent solution.

During 2024, together with the authorisation phases for the agrivoltaic plants at the Energy parks, this initiative will continue to be developed.

How does this initiative contribute to responsible digital transformation? Benefits obtained in the Corporate digital responsibility realm (see the dedicated paragraph entitled “Corporate Digital Responsibility”)

Social		Guarantee of privacy requirements, digital inclusion and transparency of processes towards customers.
Environmental		Creation of a community to reduce the environmental footprint of residents and the area.
Economic		Savings for customers who use renewable energy supply.

The green community contributes to the achievement of targets 12.8 and 17.17 of the UN 2030 Agenda.

People

Circularity, resilience and sustainability also at Hera Group premises

2023 began with the launch of the new integrated maintenance contract which also involved the implementation of the first efficiency projects required as a technical offer of the contract itself:

- construction of new air conditioning systems in various locations;
- introduction of electricity and fluid consumption meters for all main offices;
- projects to convert lighting fixtures from fluorescent to LED.

Work also continued on the modernisation and reuse/conversion of internal spaces for the Gaggio Montano (Bo) offices, where, after renovations were completed in April and all the staff had been transferred from the Porretta Terme offices (Bo) and Vergato (Bo), work began on setting up the new company car park.

At the Viale Berti Pichat office in Bologna, recovery work continued on an old warehouse of the former agricultural consortium for the construction of the new company training centre. During the course of the works, archaeological discoveries were made (around 60 tombs of various shapes) dating back to the Roman period as well as a section of a road also dating back to the Roman period. This intervention contributes to containing new buildings on virgin soil while keeping the waterproofed surface of the Group's properties unchanged.

Another significant event in terms of the environment was also the final commissioning of the surface water regulation works and the sewage system of the Molino Rosso office in Imola (activity completed at the end of 2022) which meant the unusual situation could be addressed without any damage from rainfall which, in May, caused floods and devastation in many locations in Romagna, thus preserving the physical location of the Acantho data centre and guaranteeing its full functionality.

In 2023, the new project for reorganising office spaces was also launched, given that with the introduction of remote working there was a clear decline in occupancy of company premises with average attendance rates of around 65% and with minimum occupancy of up to 35% on certain days of the week. This situation led to the need to review the ways company areas are used, to avoid unjustified waste in terms of land occupation and energy resources. During the year, many meetings were held and many comparisons were made with other companies (since the phenomenon is common to other companies) and, most importantly, internal tests were carried out with visits to some departments to evaluate the degree of operational functionality and employee satisfaction. The results were encouraging, as also demonstrated by the level reached in the opinions revealed by the climate survey carried out in 2023 with scores relating to work spaces exceeding 73/100.

In 2024 these methodologies will form the basis for the design of the new office spaces at the offices in Bologna at Viale Berti Pichat and the refitting of the offices in Forlì at Via Balzella.

The projects mentioned here contribute to the achievement of targets 6.4 and 7.3 of the UN 2030 Agenda.

58,000 euro raised by the fifth edition of HeraSolidale

HeraSolidale aims to promote solidarity and **support for social projects** with the **involvement of Hera Group employees and the company** itself.

The fifth edition of the project began in September 2023 and will end in March 2026. This latest edition saw the Group's employees choose by voting four of the ten Organisations selected by the company according to the following criteria: **popularity and transparency of the activities, contribution to one or more targets of the UN Agenda for 2030** and areas of intervention relating to Hera services (ancillary criterion). The four organisations chosen by the employees were **Fondazione Ant Italia Onlus, Ageop Ricerca, Fondazione Airc** and **Medici Senza Frontiere**. **Unhcr** was then added for continuing to collect in support of the Ukrainian people, given the continuing conflict.

The **projects** supported by each of the five organisations are summarised below:

- **Fondazione Ant Italia Onlus** - project **"Supporta il calendario dell'assistenza domiciliare di Fondazione Ant"** (Support the Ant Foundation's home care services): offers free assistance to cancer patients by providing them with suitable care at home and social-health care that is as comprehensive as possible, both for the patient and for their family. Collections will be channelled into the Emilia-Romagna, Marche and Triveneto regions.
- **Ageop Ricerca** - **"Oltre la malattia"** (after illness) project: provides, through activities supported by Ageop operators and psychologists, help and psychosocial rehabilitation to children and their families, after cancer, through activities and workshops aimed at rediscovering their potential, regaining self-esteem and relational skills.
- **Fondazione Airc** - **"In campo contro i big killer"** (fighting big killers) project: concentrates research efforts on the three types of tumours which claim the most victims: pancreatic, lung

and brain cancer. The objective of the project is to set up a multi-year scholarship to support young researchers.

- **Medici Senza Frontiere** – “**Donne al centro della nostra azione**” (women at the centre of what we do) project: supports projects dedicated to women’s health globally, focusing on three areas: obstetric care, assistance to victims of sexual violence and prevention and treatment of cervical cancer.

Each project is characterised by **clear and scalable economic objectives** that correspond to **concrete and measurable actions**.

Group **employees** can join either by making a monthly contribution deducted directly from their pay slip or through Hextra - the integrated company welfare system. New to this edition of HeraSolidale is the option of donating by occasional deductions from pay slips.

In addition, the **Hera Group makes an important contribution** acting through the companies Hera Comm, Hera Comm Marche and EstEnergy which donate one euro for every three new customers throughout the three years of the project.

To support the HeraSolidale project, in 2023 the Group also decided to involve employees in donating a symbolic fee when individual employees decide to redeem company mobile phones and tablets for personal use.

In just three months of the project, starting from September 2023, **around 58 thousand euro** were collected: around 23 thousand euro were donated by employees through payroll deductions and Hextra, and over 35 thousand euro were donated by Hera Comm, Hera Comm Marche and EstEnergy .

The projects mentioned here, through partnerships with interested organisations and public administrations, contribute to achieving **UN 2030 Agenda goal 17.17**.

Suppliers

The circular economy in the supply chain

Also in 2023, consistently with the “Resolve” model proposed by the **Ellen Mac Arthur Foundation**, the Hera Group applied the **four cardinal principles of circularity** (eco-efficiency, dematerialisation, renewability, recyclability) in its procurement, constantly seeking to reconcile them with the objectives of compliance with current regulations on procurement, equal treatment of suppliers, transparency, free competition and supplier rotation.

The principles of the circular economy were either translated into **technical reward criteria** within tenders using the most economically advantageous bid method, or were included in the technical specifications when planning requirements.

In 2023, a **reporting model** continued to be applied so as monitor the impact of the initiatives introduced. In particular, coherently with what had previously been done to monitor the use of sustainability criteria in contracting, the technical **criteria traceable to circular economy principles** were mapped.

In 2023, **circularity criteria were established for over 92% of the awarded tenders with the most economically advantageous offer**, an increase of 10 percentage points compared to 2022, with an average score of 10.2. The value generated by circular elements stands at 14.3% of the value of 2023 awarded tenders awarded with the most economically advantageous offer.

As of 2021, a **lowest-price circularity reporting methodology** has been progressively **extended** to all Hera Group purchases. Applying the new circularity reporting model, it is estimated that in the tenders awarded in 2023 with the lowest price, the value generated by circular elements amounted to more than 12 million euro (it was 10 million in 2022), equal to approximately 4% of the total value.

Overall, considering both most economically advantageous bid method tenders and tenders with the lowest price, the value attributable to circularity elements stands at over **10.5%** of the value of all tenders awarded in 2023.

The main tenders awarded at the **lowest price with elements of circularity** included in the technical specifications are as follows:

- In the private negotiation subject to NRRP financing concerning the reclamation of sections of the water network for the reduction of leaks in the aqueduct networks managed by AcegasApsAmga in the areas of Padua and Trieste, with a starting bid of 4.5 million euro, compliance with the CAM (minimum environmental criteria) for construction envisaged by the Ministry of Ecological Transition was set out in the special tender specifications. In addition, the Type III environmental product declaration (EPD) was required for the products used in the contract, as well as compliance with the Reach regulation relating to the environmental and human health dangers of chemical products. The recovery of material and end-of-life destination was set out, as well as the division of the origin of the material used into % of renewable source and non-renewable source. With regard to waste from construction and demolition, both preparation for the reuse of at least 70% (in terms of weight) and a management plan that addresses the end of life of the products have been taken into account.
- In the open procedure relating to the start-up service for the recovery of waste known as dehydrated sludge produced by the purifiers in the municipality of Trieste and Padua, with a starting price of approximately 5 million euro, the special tender specifications and/or the Tender Notice required possession of the UNI EN ISO 14001 Environmental Management System certification, declarations certifying the availability of sites involved in direct reuse in agriculture for the type of waste in addition to 40% (50% for composting) of the annual minimum quantity (as a technical capacity requirement, etc.) and for each treatment site, proof of the appropriate authorisations relating to the recovery/treatment operations for dehydrated sludge (CER 19.08.05) object of the service, declaration for agricultural sites certifying possession of a valid authorisation for use in agriculture (with reference to specific legal provisions) by agricultural companies authorised to receive and use such special waste in agronomic practices. In addition, it should be noted that the object of this procedure intrinsically involves a final product, which after treatment constitutes biodegradable and/or compostable material suitable for reuse for agricultural purposes, therefore “end of life” recycling.

See the section of this document dedicated to the [selection of suppliers](#) for an account of the technical reward criteria set out in the invitation letter for the main tenders awarded with the most economically advantageous bid method.

GREENHOUSE GASES: METRICS AND TARGETS

Criteria for calculating greenhouse gas emissions

The Ministry of the Environment's coefficient (expressed in CO₂e) for natural gas consumption in stationary plants, and the Defra 2023 coefficients (expressed in CO₂e) for fuel consumption for industrial purposes (diesel, LPG) and in vehicles (diesel, petrol, methane, LPG) were used to estimate the Scope 1 emissions.

Greenhouse gas emissions from landfills have been estimated by considering the methane contained in the biogas leaving the landfills and the carbon dioxide resulting from the combustion of the captured biogas, subtracting the amounts corresponding to the presence of biodegradable matter. For waste-to-energy plants, the estimate included the carbon dioxide resulting from the combustion of the non-biodegradable part of the waste (estimated following ENEA's guidelines) and other fuels used in the plant. Leaks from the gas network were estimated and considered to be fully dispersed into the atmosphere.

The global warming potential (GWP) considered for methane is 28 (Source: 5th Assessment Report of the IPCC).

To estimate electricity consumption emissions (Scope 2), Ipsra's "National Inventory Report 2023" coefficients were applied to the location-based method and AIB's "European residual mixes, results for the calendar year 2022" to the market-based method (expressed in CO₂e).

To estimate Scope 3 emissions, the Defra 2022 coefficients were used (expressed in CO₂e), with the exception of emissions from sales of non-renewable electricity, for which the coefficients from Ipsra's "National Inventory Report 2022" were used.

The entry "Sale of natural gas - downstream" considers emissions resulting from consumption by customers of the gas sold. The entry "sale of electricity" considers emissions resulting from the consumption of fuels for the generation of electricity sold to customers (net of the portion of renewable electricity). The entry "sale of natural gas - upstream" considers emissions from the production of gas sold to customers. The entry "emissions related to energy production and consumption" includes: (i) the production of gas consumed in industrial cogeneration plants installed at third-party premises; (ii) emissions produced by the joint venture plants of Tamarate, Teverola and Sparanise (downstream); (iii) electricity network losses (upstream); (iv) the production of fuels used to generate the electricity consumed internally (net of the portion of renewable electricity) (upstream); (v) the production of fuels consumed in Group vehicles (upstream). The entry "other indirect emissions" includes: (i) the use of vehicles by suppliers for waste collection (upstream); (ii) the use of vehicles by suppliers for waste transport (upstream); (iii) recycling operations for glass, plastic and paper sent for recovery and sold (downstream); (iv) bill printing (upstream).

With regard to greenhouse refrigerant gases, the companies Hera Spa, AcegasApsAmga, Hera Servizi Energia, Herambiente, HeraTech, InRete Distribuzione Energia, and Uniflotte provide for special monitoring and management methods by adopting specific operating instructions and procedures.

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INDIRECT GREENHOUSE GAS EMISSIONS

tonnes of CO ₂ e	2021	2022	2023
Emissions from the purchase of goods and services	173	205	197
Emissions related to fuel and energy consumption	4,332,535	4,575,924	4,960,813
Emissions from the use of leased assets	91,715	85,618	70,291
Total Scope 3 emissions - upstream	4,424,423	4,661,747	5,031,301
Emissions from treatment of products sold	409,862	451,680	386,161
Emissions from use of products and services sold	6,561,623	6,898,371	6,100,146
Emissions from investments made	327,561	239,345	174,888
Total Scope 3 emissions - downstream	7,299,047	7,589,396	6,661,194
Total indirect emissions - Scope 3	11,723,470	12,251,142	11,692,495

EMISSION INDICATORS

Indicator	2021	2022	2023	Target 2027	Target 2030
Direct emissions Scope 1 (kt CO ₂ e)	981,8	936,6	935,6	889	814
Eu-Ets Scope 1 emissions (% of total Scope 1)	15,1%	16,0%	13,6%	n.d.	n.d.
Indirect Scope 2 emissions from electricity consumption (market-based) (kt CO ₂ e)	46,6	0,0	0,0	0	0
Total emissions Scopes 1+2 (kt CO ₂ e)	1.028,4	936,6	935,6	889	814
Scope 1+2 emissions (% reduction vs. 2019)	-9%	-17%	-17%	-21%	-28%
Scope 3 indirect emissions from natural gas sales (downstream) (kt CO ₂ e)	6.373,8	6.112,9	5.307,6	4.753	4.385
Scope 3 indirect emissions from natural gas sales (downstream) (% reduction vs. 2019)	+2%	-2%	-15%	-24%	-30%
Scope 3 indirect emissions from electricity sales (kt CO ₂ e)	3.170,3	3.357,1	3.914,1	2.668	2.141
Scope 3 indirect emissions from electricity sales (% reduction vs. 2019)	-28%	-23,5%	-11%	-39%	-49%
Total emissions Scopes 1+2+3* (kt CO ₂ e) 2	10.572,5	10.406,6	10.157,4	8.310	7.422
Total emissions Scopes 1+2+3* (% reduction vs 2019)	-10%	-12%	-14%	-29%	-37%
Total avoided, offset or absorbed emissions (kt CO ₂ e)	1.486,2	1.680,0	1.917,8	n.d.	n.d.
<i>of which: avoided emissions</i>	902,6	913,3	974,5	n.d.	n.d.
<i>of which: offset emissions</i>	582,8	765,2	941,0	n.d.	n.d.
<i>of which: absorbed emissions</i>	0,8	1,5	2,3	n.d.	n.d.

*The Scope 3 value reported relates to the sale of natural gas (downstream) and the sale of electricity. The Scope 3 data relating to the sale of methane gas do not consider the transitory increases in volumes sold in last-resort services. The Scope 3 data relating to the sale of natural gas for 2021 have been aligned with the calculation methodology used for the 2022 data.

EMISSION INTENSITY INDICES

Indicator	2021	2022	2023	Target 2027	Target 2030
Carbon intensity index of electricity sales (t CO ₂ e from electricity sales / MWh electricity sold)	0,281	0,288	0,278	0,196	0,183
Carbon intensity index of electricity sales (t CO ₂ e from electricity sales/MWh electricity sold) (% reduction vs. 2019)	-23%	-21%	-24%	-46%	-50%
Carbon intensity index of production value (t CO ₂ e Scopes 1+2 / production value in mnEuro)	1.164,0	656,7	847,7	n.d.	n.d.
Ebitda carbon intensity index (t CO ₂ e Scopes 1+2 / Ebitda in mnEuro)	840	723	626	n.d.	n.d.
Carbon intensity index per resident served (CO ₂ e Scopes 1+2 / k residents)	243	223	223	n.d.	n.d.
Carbon intensity index per customer (CO ₂ e Scope 3 / k customers)	5,2	5,2	4,5	n.d.	n.d.

RISKS AND OPPORTUNITIES

Indicator	2021	2022	2023	Target 2027	Target 2030
Hera Ebitda aligned to EU Taxonomy (climate mitigation and adaptation) (% of eligible Ebitda)		88%	90%	n.d.	n.d.
Hera revenues aligned to EU Taxonomy (climate mitigation and adaptation) (% of eligible revenues)	-	88%	94%	n.d.	n.d.
Ebitda CSV Driver Energy (mnEuro)	225,1	216,0	282,1	n.d.	n.d.
Ebitda CSV Driver Waste management (mnEuro)	292,0	393,3	422,1	n.d.	n.d.

INVESTMENTS AND USE OF CAPITAL

Indicator	2021	2022	2023	Target 2027	Target 2030
Hera CapEx aligned to EU Taxonomy (climate mitigation and adaptation) (% of eligible CapEx)	-	90%	92%	n.d.	n.d.
Hera OpEx aligned to EU Taxonomy (climate mitigation and adaptation) (% of eligible OpEx)	-	72%	73%	n.d.	n.d.
CSV Driver Energy investments (mnEuro)	85,0	95,0	170,6	n.d.	n.d.
CSV Driver Environment investments (mnEuro)	164,3	259,8	356,0	n.d.	n.d.
CSV Driver Local areas (and businesses) investments - Resilience and adaptation (mnEuro)	105,7	31,9	223,0	n.d.	n.d.

REMUNERATION

Indicator	2021	2022	2023	Target 2027	Target 2030
Portion of BSC premium linked to CSV Energy drivers (% of total variable remuneration)	4%	7%	5%	n.d.	n.d.
Portion of BSC premium linked to CSV Environment drivers (% of total variable remuneration)	13%	9%	7%	n.d.	n.d.

OTHER METRICS – ENERGY

Indicator	2021	2022	2023	Target 2027	Target 2030
ISO 50001 Energy saving measures (% reduction vs base year)	-6,8%	-6,9%	-7,6%	-9%	-10%
Internal consumption of grid electricity from renewable sources (%)	82,3%	100%	100%	100%	100%
Electricity and gas contracts at the end of the year with at least one energy-saving solution (% of total free market household contracts)	32,1%	34,3%	35,7%	42%	43%

Indicator	2021	2022	2023	Target 2027	Target 2030
Renewable electricity sold to customers on the free market (% of total volumes sold on the free market)	45,5%	40,5%	42,8%	56%	50%
Natural gas with offsetting of gas emissions sold to free market customers (% of total volumes of gas sold on the free market)	11,2%	14,2%	20,4%	n.d.	n.d.
Energy production from renewable sources (GWh)	698,3	716,1	744,3	n.d.	n.d.
District heating energy mix from renewable, recovered or high efficiency sources (%)	66,9%	68,8%	66,2%	79%	n.d.
Housing unit equivalents served by district heating (no.)	91.410	96.825	97.135	n.d.	n.d.
Public and private charging points installed for electric transport (no.)	1.252	1.886	2.170	>5.100	n.d.

OTHER METRICS - RESOURCES

Indicator	2021	2022	2023	Target 2027	Target 2030
Waste sent for material and energy recovery in Herambiente's sorting plants (t)	344.360	349.444	378.300	n.d.	n.d.
Waste sent for material and energy recovery in Herambiente's sorting plants (%)	80,8%	80,6%	84,8%	n.d.	n.d.
Plastic recycled by Aliplast (thousands of tonnes)	80,9	79,2	84,6	120	149
Reduction in internal water consumption (% vs 2017)	-17%	-20,5%	-21,5%	-24%	-25%
Water network leakage (mc/km/day)	8,1	8,1	-	7,4	n.d.
Reusable purified wastewater (%)	6,0%	7,3%	10,1%	14%	18%
Water contracts with Consumption Log (% of total residential customers)	27%	35%	37,5%	77%	n.d.

CORRELATION OF MATERIAL TOPICS AND RISKS IDENTIFIED BY ERM ANALYSIS

Material Topics	Risks						
	Natural - catastrophic and climate change events	Operational security and ICT	Security and development of individuals	Strategic	Operating-financial	Competitive and regulatory	Regulations and compliance
Energy transition				✓	✓	✓	✓
Resilience and adjustment	✓	✓	✓	✓		✓	
Circular economy				✓		✓	✓
Protection of air and soil	✓	✓		✓			✓
Quality, cost of waste collection and city integrity service	✓	✓		✓		✓	
Safety, cost, and continuity of the service	✓	✓	✓	✓		✓	
Sustainable management of water resources	✓	✓		✓		✓	✓
Training and professional development, remuneration and incentives			✓				
Occupational Health and Safety	✓		✓				✓
Supply chain management				✓			
Local development and social inclusion	✓	✓		✓		✓	
Commercial relations with customers	✓	✓		✓			
Diversity			✓	✓			
Innovation and digital transformation		✓	✓	✓			✓
Corporate culture			✓	✓			✓

TABLES CORRELATING SASB INDICATORS

WASTE MANAGEMENT - SUSTAINABILITY DISCLOSURE TOPICS & ACCOUNTING METRICS

Topic	Accounting metric	Unit of measure	Page	Material Topics
Greenhouse gas emissions	IF-WM-110a.1 (1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	Metric tons (t) CO ₂ e, Percentage (%)	70	Energy transition
	IF-WM-110a.3 Discussion of long-term and short-term strategy or plan to manage Scope 1 and lifecycle emissions, emissions reduction targets, and an analysis of performance against those targets	-	62	Energy transition
Fleet fuel management	IF-WM-110b.1 (1) Fleet fuel consumed, (2) percentage natural gas, (3) percentage renewables	Gigajoules (GJ), Percentage (%)	129	Energy transition
	IF-WM-110b.2 Percentage of alternative fuel vehicles in fleet	Percentage (%)	129	Energy transition
Air quality	IF-WM-120a.1 Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	Metric tons (t)	120	Protection of air and soil
Management of leachate and hazardous waste	IF-WM-150a.1 (1) Total Toxic Release Inventory (TRI) releases, (2) percentage released to water	Metric tons (t), Percentage (%)	98	Circular economy
Labor practices	IF-WM-310a.1 Percentage of active workforce covered under collective bargaining agreements	Percentage (%)	261	Occupational Health and Safety
	IF-WM-310a.2 (1) Number of work stoppages and (2) total days idle	Number, Days idle	264	Occupational Health and Safety
Workforce health and safety	IF-WM-320a.1 (1) Total Recordable Incident Rate (TRIR), (2) fatality rate, and (3) Near Miss Frequency Rate (NMFR) for (a) direct employees and (b) contract employees	Rate	264	Occupational Health and Safety
Recycling and resource recovery	IF-WM-420a.1 (1) Amount of waste incinerated, (2) percentage hazardous, (3) percentage used for energy recovery	Metric tons (t), Percentage (%)	101	Circular economy
	IF-WM-420a.2 Percentage of customers receiving (1) recycling and (2) composting services, by customer type	Percentage (%)	81	Circular economy
	IF-WM-420a.3 Amount of material (1) recycled, (2) composted, and (3) processed as waste-to-energy	Metric tons (t)	98	Circular economy
	IF-WM-420a.4 Amount of electronic waste collected, percentage recovered through recycling	Metric tons (t), Percentage (%)	81	Circular economy

WASTE MANAGEMENT - ACTIVITY METRICS

	Activity metric	Unit of measure	Page	Material Topics
IF-WM-000.B	Vehicle fleet size	Number	129	Protection of air and soil
IF-WM-000.C	Number of: (1) landfills, (2) transfer stations, (3) recycling centres, (4) composting centres, (5) incinerators, and (6) all other facilities	Number	98	Circular economy

WATER UTILITIES AND SERVICES - SUSTAINABILITY DISCLOSURE TOPICS & ACCOUNTING METRICS

Topic		Accounting metric	Unit of measure	Page	Material Topics
Energy management	IF-WU-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)	41	Climate change, energy efficiency and renewables
Distribution network efficiency	IF-WU-140a.2	Volume of non-revenue real water losses	Thousand cubic metres (m ³)	101	Sustainable management of water resources
Water affordability and access	IF-WU-240a.2	Typical monthly water bill for residential customers for 10 CCF of water delivered per month	Presentation currency	228	Safety, cost, and continuity of the service to customers
	IF-WU-240a.3	Number of residential customer water disconnections for non-payment, percentage reconnected within 30 days	Number, Percentage (%)	233	Safety, cost, and continuity of the service to customers
Drinking water quality	IF-WU-250a.1	Number of (1) acute health-based, (2) non-acute health-based, and (3) non-health-based drinking water violations	Number	112	Sustainable management of water resources
	IF-WU-250a.2	Discussion of strategies to manage drinking water contaminants of emerging concern	-	112	Sustainable management of water resources
End-use efficiency	IF-WU-420a.2	Customer water savings from efficiency measures, by market	Cubic metres (m ³)	105	Circular economy
Water supply resilience	IF-WU-440a.1	Total water sourced from regions with High or Extremely High Baseline Water Stress, percentage purchased from a third party	Thousand cubic metres (m ³), Percentage (%)	112	Sustainable management of water resources
	IF-WU-440a.2	Volume of recycled water delivered to customers	Thousand cubic metres (m ³)	108	Circular economy
	IF-WU-440a.3	Discussion of strategies to manage risks associated with the quality and availability of water resources	-	112	Sustainable management of water resources
Network Resiliency & Impacts of Climate Change	IF-WU-450a.4	Description of efforts to identify and manage risks and opportunities related to the impact of climate change on distribution and wastewater infrastructure	-	179	Resilience and adjustment

WATER UTILITIES AND SERVICES - ACTIVITY METRICS

	Activity metric	Unit of measure	Page	
IF-WU-000.B	Total water sourced, percentage by source type	Cubic metres (m ³), Percentage (%)	112	Sustainable management of water resources
IF-WU-000.E	Length of (1) water mains and (2) sewer pipe	Kilometres (km)	115	Sustainable management of water resources

GAS UTILITIES AND DISTRIBUTORS - SUSTAINABILITY DISCLOSURE TOPICS & ACCOUNTING METRICS

Topic	Accounting metric	Unit of measure	Page	Material Topics
Energy affordability	IF-GU-240a.2 Typical monthly gas bill for residential customers for (1) 50 MMBtu and (2) 100 MMBtu of gas delivered per year	Presentation currency	226	Safety, cost, and continuity of the service to customers
	IF-GU-240a.3 Number of residential customer gas disconnections for non-payment, percentage reconnected within 30 days	Number, Percentage (%)	233	Safety, cost, and continuity of the service to customers
Integrity of gas delivery infrastructure	IF-GU-540a.3 Percentage of gas (1) transmission and (2) distribution pipelines inspected by length	Percentage (%)	236	Safety, cost, and continuity of the service to customers

GAS UTILITIES AND DISTRIBUTORS - ACTIVITY METRICS

Activity metric	Unit of measure	Page	Material Topics
IF-GU-000.C Length of gas (1) transmission and (2) distribution pipelines	Kilometres (km)	236	Safety, cost, and continuity of the service to customers

ELECTRIC UTILITIES AND POWER GENERATORS - SUSTAINABILITY DISCLOSURE TOPICS & ACCOUNTING METRICS

Topic	Accounting metric	Unit of measure	Page	Material Topics
Greenhouse gas emissions and energy resource planning	IF-EU-110a.1 (1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	Metric tons (t) CO ₂ e, Percentage (%)	70	Climate change, energy efficiency and renewables
	IF-EU-110a.2 Greenhouse gas emissions associated with power deliveries	Metric tons (t) CO ₂ e	70	Climate change, energy efficiency and renewables
	IF-EU-110a.3 Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	-	62	Climate change, energy efficiency and renewables
Air quality	IF-EU-120a.1 Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) particulate matter (PM ₁₀), (4) lead (Pb), and (5) mercury (Hg); percentage of each in or near areas of dense population	Metric tons (t), Percentage (%)	126	Protection of air and soil
Water management	IF-EU-140a.1 (1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic metres (m ³), Percentage (%)	126	Sustainable management of water resources
Energy affordability	IF-EU-240a.2 Typical monthly electric bill for residential customers for (1) 500 kWh and (2) 1,000 kWh of electricity delivered per month	Presentation currency	227	Safety, cost, and continuity of the service to customers
	IF-EU-240a.3 Number of residential customer electric disconnections for non-payment, percentage reconnected within 30 days	Number, Percentage (%)	233	Safety, cost, and continuity of the service to customers
Grid resiliency	IF-EU-550a.2 (1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency	Minutes, Number	239	Safety, cost, and continuity of the service to customers

Topic	Accounting metric	Unit of measure	Page	Material Topics
	Index (SAIFI), and (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days			

ELECTRIC UTILITIES AND POWER GENERATORS - ACTIVITY METRICS

	Activity metric	Unit of measure	Page	Material Topics
IF-EU-000.C	Length of transmission and distribution lines	Kilometres (km)	239	Safety, cost, and continuity of the service to customers
IF-EU-000.D	Total electricity generated, percentage by major energy source, percentage in regulated markets	Megawatt (MWh), Percentage (%)	54	Climate change, energy efficiency and renewables
IF-EU-000.E	Total wholesale electricity purchased	Megawatt (MWh)	56	Climate change, energy efficiency and renewables