

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*
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. 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). >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).	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. 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)	4,8	
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.	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 indexes. (see page170)	5	

Resilience and adaptation

Resilience and adaptation to climate change: <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). 70% of district-based network by 2026 and predictive algorithms to reduce dispersions.	Interventions in the area of resilience and adaptation to climate change, including: <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 page184) 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
Innovation and digitalisation 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. 45% of customers using online billing by 2027 group wide. Create a new single App by 2024 by unifying existing ones, implementing new features and services.	- 11,12,17
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.	8
Strengthen the collaboration model and promote ways of interacting with external partners with a view to open innovation in the creation of innovative solutions.	8
Economic growth and social inclusion Supplier selection: continue to promote the employment of disadvantaged people in waste management services.	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:

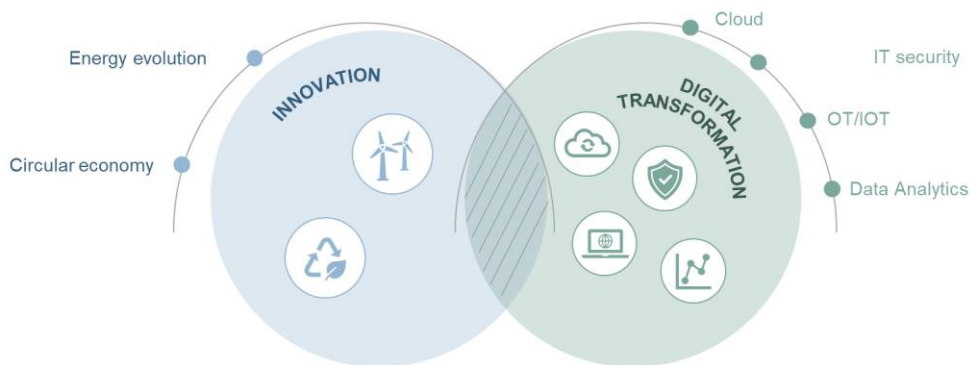


environmental transition aimed at shifting towards the use of more efficient and renewable energy sources and to the optimisation of materials, and maximising the recovery of waste and scrap;



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 	Environmental 	Economic 	Technological 
	The company’s relationship with people and society	The connection between digital technologies and the physical environment	Responsible management of the economic impacts of digital technologies	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 Bologna 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		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). Guarantee of responsible use of the new technologies introduced thanks to a competence centre dedicated to overseeing the solutions created.

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:

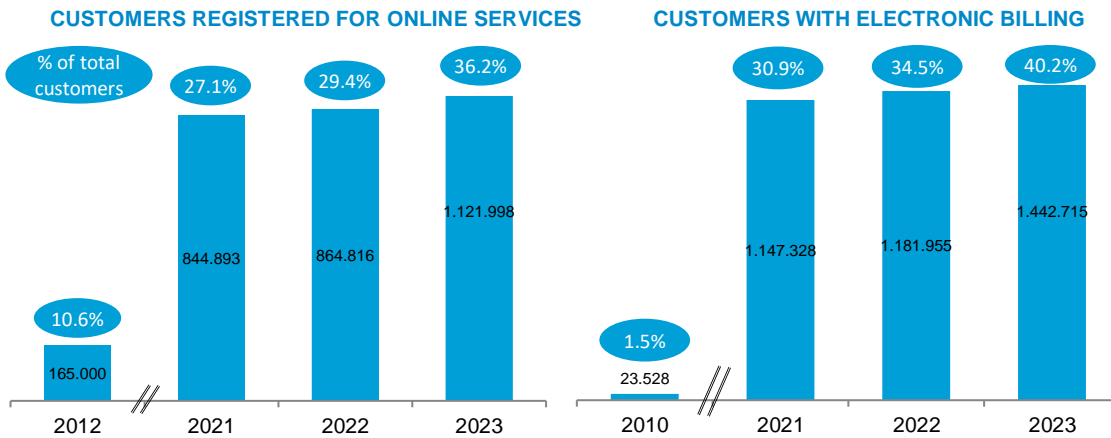
- market: the **technological evolution of customer branches** continued, in line with the restyling and implementation programme for new customer branches. Of particular importance was the activation of the "Virtual Guard" service for five EstEnergy branches in the provinces of Treviso and Vicenza.
- 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 an 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

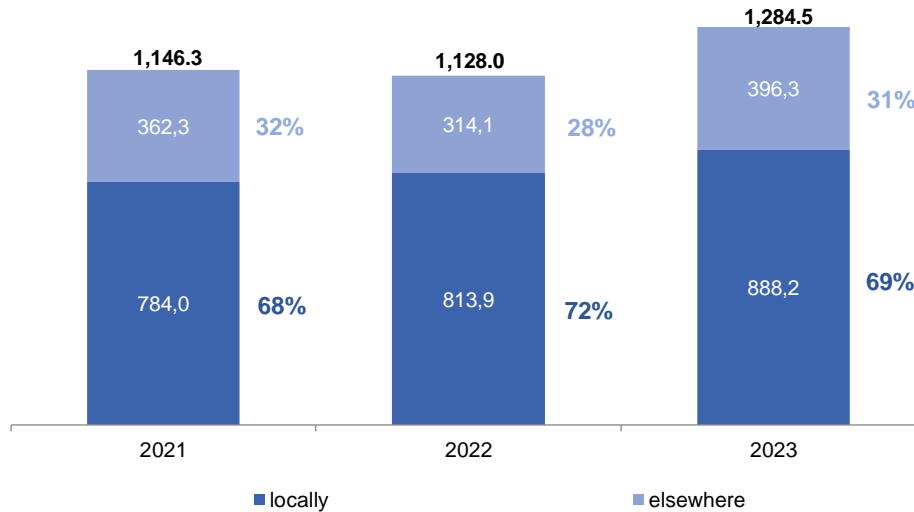
Based on the calculation of distributed added value (see paragraph “[The production and distribution of added value](#)”) it is possible to calculate the share distributed to local stakeholders only (workers, local government, local public administrations and the local community)

In 2023, the **added value distributed to local stakeholders** amounted to 888.2 million euro (+9% from 2022).

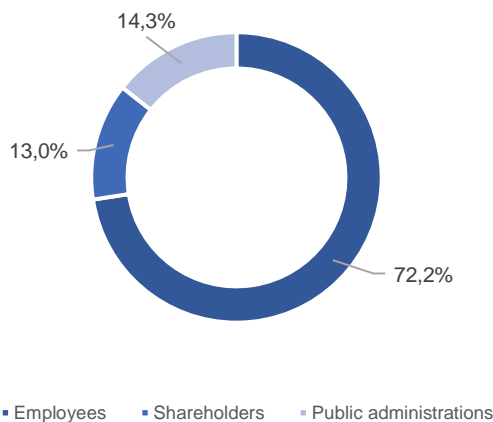
This can be broken down as follows:

- 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).

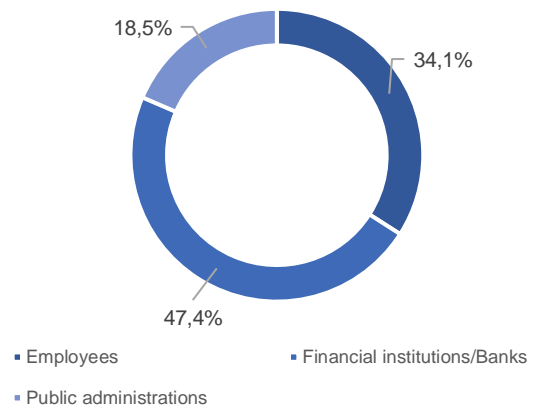
ADDED VALUE DISTRIBUTED (MILLION EURO)



ALLOCATION OF ADDED VALUE TO STAKEHOLDERS (2023)



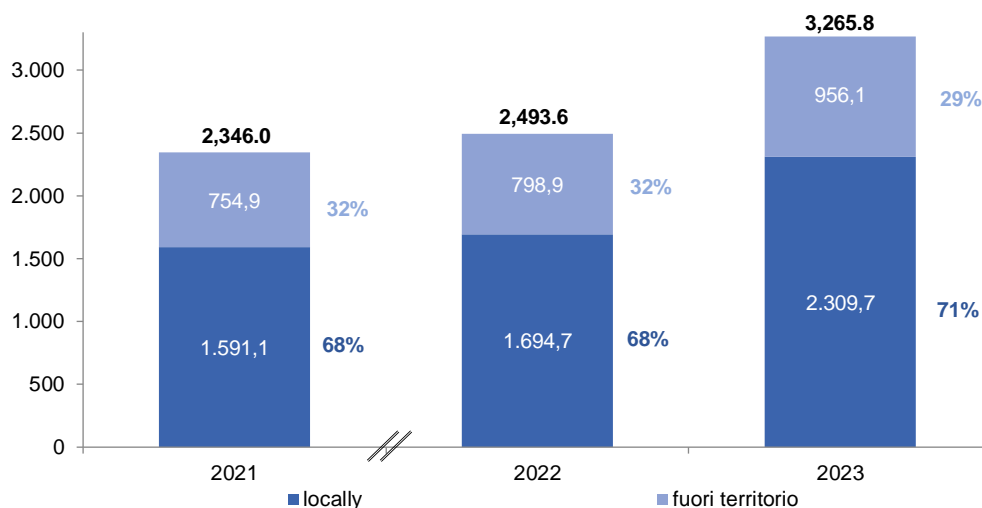
ALLOCATION OF ADDED VALUE TO STAKEHOLDERS (2023)



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

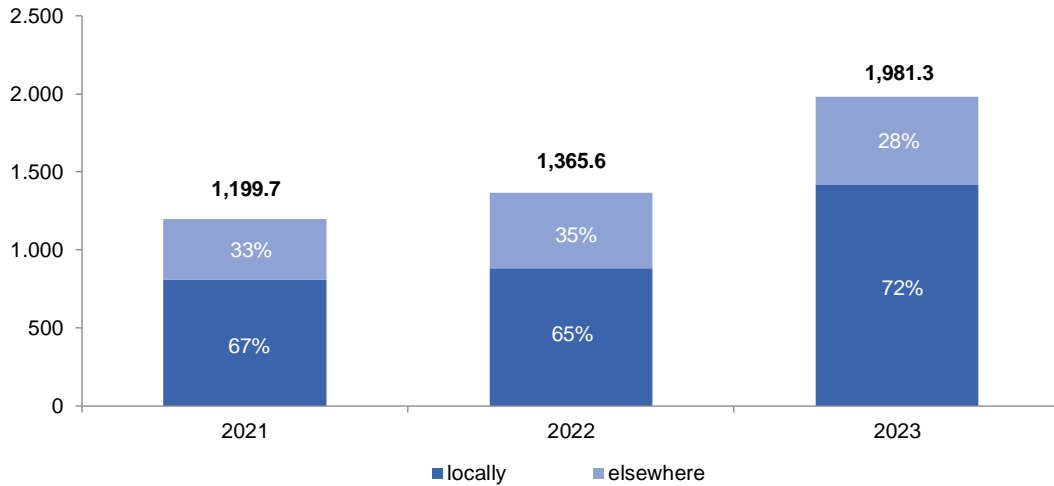
[203-2]

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]

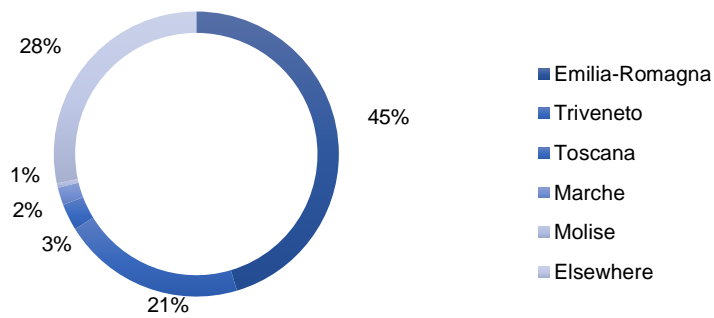
VALUE OF SUPPLIES BY GEOGRAPHIC AREA (MILLION EURO)



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 “**Jazzier**” 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>	303	882	1,279
<i>of which non-local</i>	121	313	51

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 amount 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

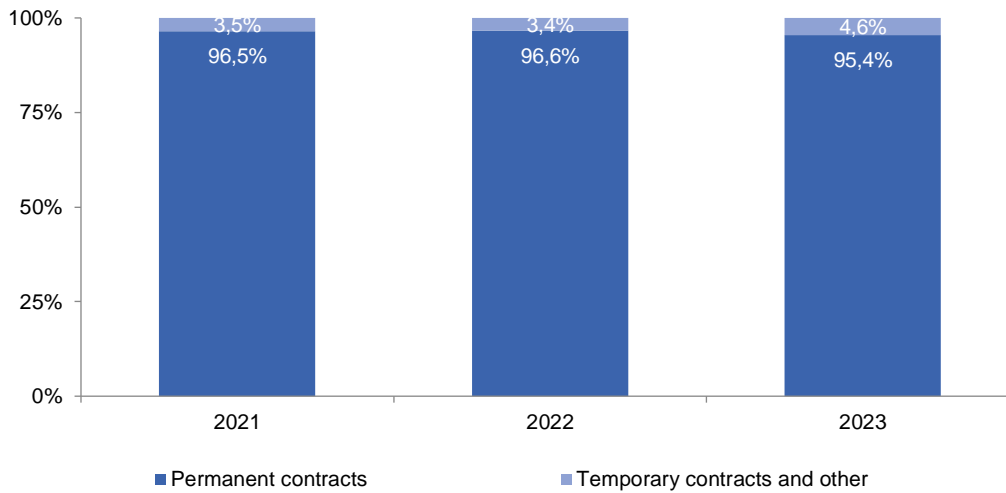
The importance attributed by the Hera Group to employment growth, as discussed in this paragraph, is not only reflected in the number of employees hired by the Company, but also in the creation of indirect employment and in the development of social responsibility initiatives in procurement procedures. 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.lli 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.
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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 is 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 seconds 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, Riolutato, 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.

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 geolocation, 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'botà 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.