2022
CONSOLIDATED FINANCIAL STATEMENT

The results of a multi-business strategy
and long-term value creation,
rising to tomorrow's challenges today

2022
CONSOLIDATED FINANCIAL STATEMENT

GRUPPO HERA

This document provides a version drafted for editorial purposes of the Annual Financial Report. It was not prepared in accordance with the provisions of Delegated Regulation (EU) 2019/815 of the European Commission concerning a single electronic reporting format (ESEF). The Annual Financial Report prepared in accordance with the provisions of the aforementioned Delegated Regulation is published and filed in accordance with the provisions of the law.

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HERA GROUP CONSOLIDATED FINANCIAL STATEMENTS

KEY

The Hera Group's 2022 financial report is set out in two chapters:

DIRECTORS' REPORT

This chapter examines the contexts in which the Group operated during the year and the scenarios that are expected to influence it in the future, the elements that give rise to the strategic approach adopted to respond to challenges, manage emerging risks and seize the opportunities that lie ahead. The operating and financial performance of each strategic business area is also analysed, including in terms of sustainability and shared value.

CONSOLIDATED FINANCIAL STATEMENTS

This overall report follows international standards in providing the economic results achieved and the financial position of the entire Group, with specific details about the individual figures in the financial statements and their respective valuation processes.

In order to facilitate a clear and coherent reading of the contexts, strategy, risks and results achieved, a number of icons are included in the report.

LINK

SR — Link to sustainability report

STR — Link to sustainability thematic reports

CG — Link to corporate governance

web — Link to information found on the website

CLIMATE CHANGE

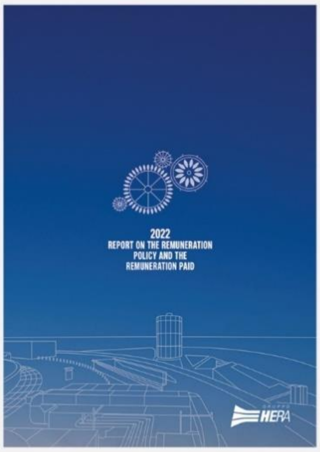
Task force on climate-related financial disclosures

Risk and opportunity management

Governance and strategy

Metrics & targets

In order to provide a full and coherent vision of all the information Hera shares with its stakeholders, other reporting tools are also available.



INTRODUCTION

LETTER FROM THE CHAIRMAN TO SHAREHOLDERS

Dear Shareholders,

2022 also proved to be a complex year, mainly due to the high level of uncertainty caused by volatile energy markets, the crisis in global supply chains, geopolitical instability and rising inflation. Despite all this, our Group managed to deliver results that exceeded expectations, often turning challenges into opportunities.

The results reflected in the financial statements presented for your approval are positive in all respects, confirming a growth trend and the validity of our multi-business model, which capitalises on the experience gained over the years, valorising our infrastructure assets and accelerating the sustainable growth path within the company and in the communities served, uninterrupted since 2002.
It was only last year that the Hera Group celebrated its twentieth anniversary, crowning a successful path that has seen our company, thanks in part to more than 50 M&A transactions, gradually become one of the largest multi-utilities in the country, with a consolidated leadership position in the sectors in which it operates.

In the 2022 financial statements, Ebitda rose to 1,295 million euro, an increase of 6.2%. This performance was mainly due to the waste management sector, which benefited from the expansion of its activities and from a management and commercial policy that was able to withstand the slowdown in production in the manufacturing sector, which also had an impact on waste production. The contribution coming from the energy sector was also significant, thanks to the opportunities offered by incentives for energy efficiency works and the Consip and last resort tenders.

After 2021, this is one of the best growth rates recorded by the Hera Group in over twenty years, and is all the more remarkable in light of the external environment in which it was achieved. On the strength of our consolidated business model and thanks to our risk-averse policy, we have once again confirmed our commitment to creating value for the company and for all our stakeholders.

Compared to the previous year, the net debt/Ebitda ratio stood at 3.28x, a figure strongly influenced by the absorption of cash due to increased gas storage. Excluding this effect, the ratio would have been in line with the previous year.
I would furthermore like to highlight that this report takes into account investments amounting to over 700 million euro, up by more than 20% compared to 2021, 62% of which were made in order to pursue carbon neutrality, promote the circular economy, enable resilience and innovate. This significant amount of investments has enabled us to upgrade networks and facilities and thus further improve the resilience of our infrastructures, ensuring quality and continuity in essential services for citizens and integrated, innovative and increasingly sustainable solutions for businesses as well.

Our focus on sustainable growth is also reflected by our shared-value Ebitda, which exceeded 670 million euro in 2022, or 51.8% of total Ebitda, up 17.5% over 2021. This is our contribution to achieving the sustainable development priorities set out in the UN's 2030 Agenda, which we feel is a precise duty of a company that deals with services that are essential for people's lives.

While continuing to invest, we also focused on developing our company through external growth, with the aim of consolidating our position in our reference markets and further improving the competitiveness and efficiency of the solutions proposed to our customers. The main M&A transactions completed in 2022 include Con Energia and Macero Maceratese, followed in the first quarter of 2023 by Asco TLC in partnership with Ascopiave, in the TLC-IT sector, and the

Modena-based ACR. The latter transaction, in particular, not only allowed us to strengthen our leadership in the waste management sector, but also led to the creation of Italy's largest operator in the environmental remediation and industrial waste global services sector, with extensive coverage throughout the country.

In such complex economic times, we have also taken strong decisions to support our stakeholders. Initiatives for customers, with particular attention to those in difficulty, include the expansion of instalment plans, the extension of protocols with municipalities and social bonuses for district heating. We should also recall the flexibility granted to suppliers, who have been able to adjust their supply conditions in line with inflationary trends. The recent renewal of the Group's integrative contract for 2022-2024, which places greater emphasis on the welfare and safety of employees, also confirms our attention to the areas we serve and the importance we attach to our company's workers.

I am pleased to conclude my term of office with another important achievement: on the occasion of the approval of the 2022 financial statements on 27 April 2023, we have decided to propose to the Shareholders Meeting a dividend of 12.5 cents per share, up 0.5 cents compared to the last dividend paid. The entire dividend policy set out in the latest Business Plan will benefit from this increase, reaching 15 cents per share in 2026. Over the years, we have always honoured our commitments to our shareholders and, when results have allowed, we have gone even further, well aware that almost 50% of our shareholders are municipalities in the areas in which we operate and that the dividends we pay them each year enable them to carry out important works and projects for their local communities.

Hera's stock as well, despite its decline during the year, was more resilient than the benchmark, which has been strongly affected by the rise in interest rates introduced by the European Central Bank and by tensions in the energy markets.

This is my last annual report. I am very proud to have led the Group for 20 years and to have contributed to its history. The Hera Group is a model throughout our country, and we have been pioneers in this, as well. We have believed in it and pursued a vision that has been able to combine growth and sustainability, with great attention to local areas, which we have made increasingly competitive.
I am sure that our company will be able to continue along its path of growth during this period of significant development and innovation, while remaining true to the values that have always distinguished us.

Thank you for your kind attention,

Tomaso Tommasi di Vignano
Executive Chairman

MISSION

HERA AIMS AT BEING THE BEST MULTI-UTILITY IN ITALY

for its customers, workforce and shareholders. It intends to achieve this by further developing an original corporate model capable of innovating and forging strong links with the areas served, while respecting the local environment.

FOR HERA, BEING THE BEST IS A WAY OF CREATING PRIDE AND TRUST FOR:

OUR CUSTOMERS, who receive quality services that satisfy their expectations, thanks to Hera's constant responsiveness.

OUR EMPLOYEES, because the women and men who work for the company, with their skills, engagement and passion, are the foundation of its success.

OUR SHAREHOLDERS, confident that the economic value of the company will continue to be generated in full respect of the principles of social responsibility.

OUR SUPPLIERS, because they are key elements in the value chain and partners in growth.

THE LOCAL AREAS SERVED, because economic, social and environmental wealth represents the promise of a sustainable future.

PURPOSE AND STRATEGY

Hera pursues a **multi-business** growth strategy concentrated on three core business areas: **waste management, water services and energy**. This allows us to maintain a balanced portfolio that includes both regulated and free-market activities, which even when facing a scenario that shows increasingly frequent systemic crises lays the foundations for a path of steady growth.

The Group is distinguished by its search for excellent and innovative management models which embody the principles of a **circular economy** and move towards **carbon neutrality**, making the most of emerging technological innovations, ever more decisive in increasing efficiency and resilience in assets and services.
In much the same way, long-term **risk and opportunity** assessment and management is continuously improved within the Group's strategy, as it is required to guarantee the **fundamental services** it provides to all, even in extreme or extraordinary circumstances.

Measuring the shared value generated for the local area provides tangible, quantifiable evidence that Hera has adopted a model suitable to achieve **sustainable growth** and a "just" transition, in which stakeholders are invited to play an increasingly active role.
Overall, the Group's strategy combines business development with the needs of the ecosystem in which it operates, enhancing the reciprocal trust-based relationship it enjoys with its local areas, as is further shown by the formal inclusion of Hera's social and environmental purpose within its Articles of Association.

THE WORDS THAT GUIDE OUR VISION

ENERGETIC TRANSITION

Confirming our commitment to **CARBON NEUTRALITY**, by making a direct contribution to reducing climate-changing emissions, and by getting our stakeholders involved

RESILIENCE

Strengthening the **RESILIENCE** of our assets and the activities we manage, to improve our ability to adapt and react to critical external contexts

REGENERATION

Taking steps towards the **REGENERATION** of the planet's natural resources, with circular business models that minimise the use of water, soil and raw materials and give them, whenever possible, a second life

TECHNOLOGY

Promoting the **DIGITALISATION** of our activities and assets, to ensure quality, efficiency, punctuality, security and accessibility in our services

COMMUNITIES

Working towards the prosperity and well-being of our **COMMUNITIES** and stakeholders, by providing quality services and generating shared value

HUMAN RESOURCES

Developing an organisation in which each **PERSON** is a protagonist of our growth and participates in creating shared value, collaborating to guide the transitions currently underway

OPPORTUNITIES

Fostering our path of development thanks to the **OPPORTUNITIES** offered by the market, the external context and innovation

OUR LEADERSHIP, BY BUSINESS AREA

1st WASTE SERVICES OPERATOR,
by waste treated

6.9 MILLION TONS OF WASTE TREATED

Collection and street sweeping ☆

Treatment and selection

Recycling, recovery and disposal

2nd WATER CYCLE OPERATOR,
by volume of water supplied

289.3 MILLION M^3 OF WATER SUPPLIED

Abstraction, conveyance and treatment ☆

Distribution and sales ☆

Sewerage and purification ☆

3rd ENERGY SALES OPERATOR,
by number of customers served

3.5 MILLION ENERGY CUSTOMERS SERVED

4th GAS DISTRIBUTION OPERATOR,
by volumes dispensed

2.4 BILLION M^3 DISTRIBUTED ☆

5th ELECTRICITY DISTRIBUTION OPERATOR,
by volume dispensed

2.9 THOUSAND GWH OF ENERGY DISTRIBUTED ☆

5th PUBLIC LIGHTING OPERATOR

197 Municipalities served

614 THOUSAND lighting points

Rankings updated on 30 September 2022

☆ Activities regulated by Arera

MAIN OPERATING INDICATORS

EBITDA >1 BN€

MN€	2022	VS	2021	%
Revenues	20,082.0		10,555.3	+ 90.3%
Ebitda	1,295.0		1,219.4	+ 6.2%
Net profits	372.3		369.5	+ 0.8%
Investments	688.7		570.3	+ 20.8%
Net debt	4,249.8		3,261.3	+ 30.3%
Net debt/Ebitda	3.28		2.67	+ 22.7%

TRENDS BY BUSINESS AND MARKETS EBITDA

1,259,000,000 EURO

59% free market 765.0 mn€

41% regulated market 530.0 mn€

GAS*

45.2%

mn€	2022	2021
Ebitda	585.1	483.2
Investments	156.7	141.3

* adjusted results, as mentioned in paragraph 1.07

Agreements made to support customers most affected by high energy prices and **promote energy efficiency**. Development of renewable sources, in particular **hydrogen** and **green gas**. Ongoing installation of **NexMeter**, Hera's 4.0 gas meter.

WASTE MANAGEMENT

26.1%

mn€	2022	2021
Ebitda	338.0	291.7
Investments	149.2	98.2

Partnerships and agreements for **sustainable management projects in the waste cycle**, primarily organic waste and plastics. **Plant development** and new **acquisitions of companies** operating in the **industrial management of the waste cycle**.

WATER CYCLE

20.2%

mn€	2022	2021
Ebitda	261.9	262.4
Investments	208.0	194.6

Efficiency improved in networks and plants, to further increase the **resilience of this service** and gradually **reduce** water **consumption**. Awards obtained for technical quality and leadership in **quality standards nationwide**. Project launched for installing **smarty meters**, which "detect" network losses.

ELECTRICITY

5.5%

mn€	2022	2021
Ebitda	71.6	144.7
Investments	78,3	55.3

Agreements made to support customers most affected by high energy prices. Further promotion of **value-added services and renewable sources**. Inauguration of a **new centre for remote control** of over 10,000 km of network. Support for **electric mobility**.

OTHER SERVICES

3.0%

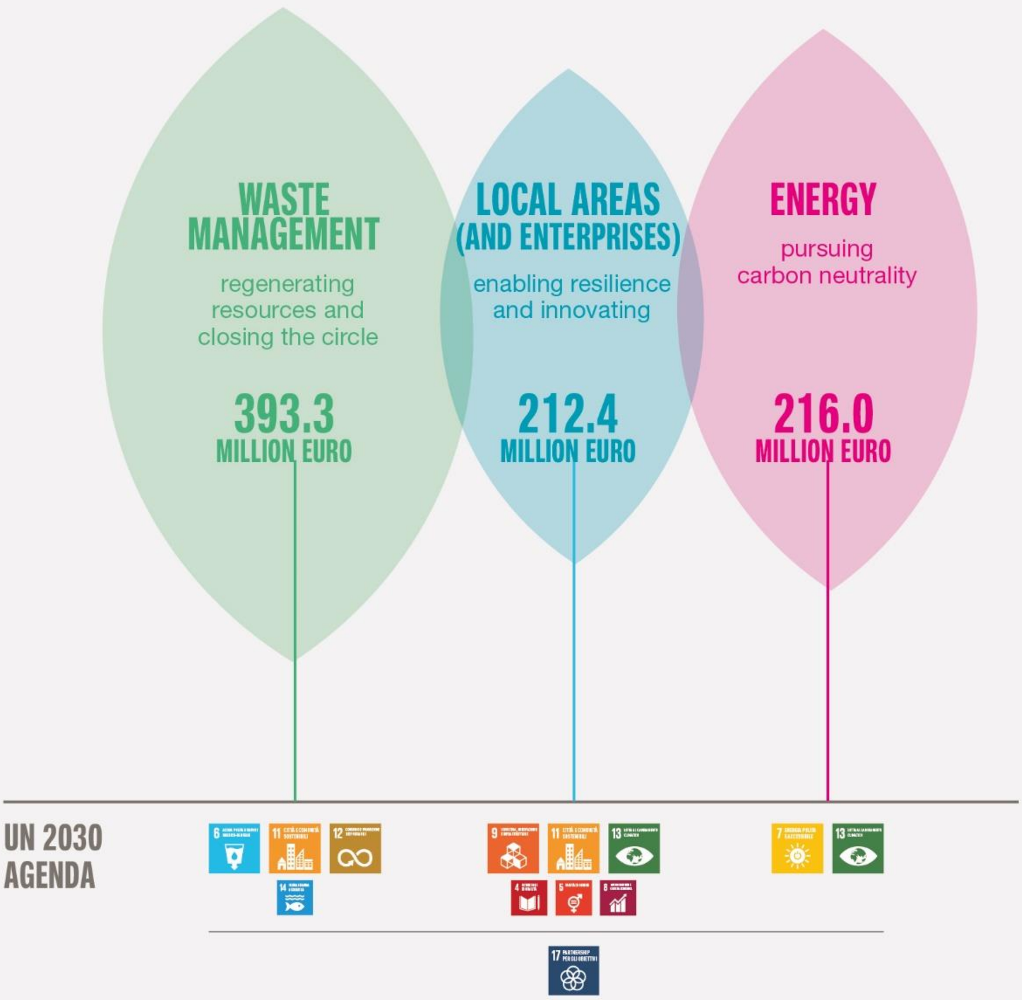
mn€	2022	2021
Ebitda	38.4	37.4
Investments	15.3	14.6

Process transforming Hera Luce into a **benefit company** concluded. Increase in projects promoting **energy efficiency** in public lighting. Consolidation of activities in the area of **TLC** and **IT**.

SUSTAINABILITY AND SHARED VALUE

Sustainability and shared value are the foremost operating principles indicated in the Group's code of ethics, and one of the cornerstones upon which Hera's strategy is developed, combining operating and financial targets with environmental and social objectives.

DRIVERS OF SHARED VALUE



SHARED VALUE EBITDA

670.3 MILLION EURO

+17.5 % COMPARED TO 2021

+99.7 MN€

51.8% OF TOTAL EBITDA

REDUCED CO_2 EMISSIONS CALCULATED WITH THE SBTi METHOD: **-11.7%** (vs 2019)

SORTED WASTE: **67.8%** (65.3% in 2021)

REDUCED INTERNAL WATER CONSUMPTION: **-20.5%** (vs 2017)

PLASTIC RECYCLED AND SOLD BY ALIPLAST SPA: **79.2 K TONS** (+33% compared to 2017)

HERA RANKING WITH RESPECT TO ESG STANDARDS

The Group's Sustainability Report is prepared according to **GRI** standards (core level)

DOW JONES SUSTAINABILITY INDEX

90/100

In December 2022, Hera was confirmed in the Dow Jones Sustainability Index (DJSI), World and Europe, ranking as "Industry leader" out of the approximately 3,500 largest capitalised companies in the world assessed by S&P Global. With a score of 90/100 (vs an industry average of 34/100), Hera was recognised as the world's best multi & water utility. In early 2022, S&P Global awarded the multi-utility its Gold Class 2022, the highest recognition reserved for companies included in the DJSI

SUSTAINALYTICS

18.2 Low risk

Hera achieved a score of 18.2, which ranks it among the lowest Esg risk companies (best European multi-utility). The Group's score improved by 0.6 points over 2021

MSCI

A

Hera's A rating by MSCI was confirmed.
In particular, the Group's score shows a strong outperformance in the Carbon Emissions category, coming to 9.8/10

INTEGRATED GOVERNANCE INDEX

1st place global ranking

In 2022 Hera was given first place, for the second year running, in the global ranking on the integration of sustainability in governance

CDP

B

Hera obtains top rating (A) for governance, climate change-related opportunities, emission reduction initiatives and targets, partially thanks to the alignment of its reporting with the recommendations of the Financial Stability Board's Task force on climate-related financial disclosure (TCFD) and the approval of its greenhouse gas emission reduction target by the Science Based Targets initiatives (SBTi)

TITLE AND RATING

S&P BBB+ STABLE OUTLOOK

MOODY'S BAA2 NEGATIVE OUTLOOK

3.77 BILLION EURO

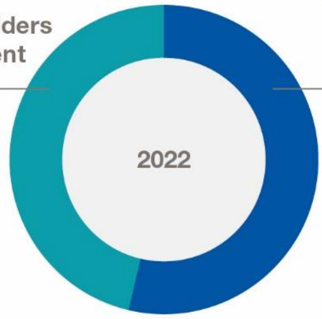
capitalisation at 31/12/2022

SHAREHOLDERS

Stable and balanced shareholder structure; highly diversified shareholder base (the largest shareholder has a stake of less than 10%)

45.8% public shareholders agreement

54.2% free float



ALONGSIDE STAKEHOLDERS, FOR A JUST TRANSITION

Over time, Hera has proven itself a leading figure in the multi-utility sector, continuing to display internal and external growth. The Group's strategy is shaped by focusing on the interests of its various key stakeholders, understood as the protagonists of change within the context of a balanced and inclusive transition.

INTERNAL

277,924 HOURS OF TRAINING
(30.8 hours per capita. The Group's digital training plan further enhanced)

1,893 NEW HIRES
in the last three years, with a 6.3% turnover

6.6 MILION EURO
dedicated to **WELFARE FOR EMPLOYEES**

REMOTE WORKING FOR 77% OF EMPLOYEES

31% FEMALE PRESENCE
in roles of responsibility

176 ACTIONS TAKEN TO IMPROVE HEALTH AND SAFETY
over the course of the year

-48% DAYS OF ACCIDENT LEAVE IN 2022
(compared to 2013). Hera's frequency index for accidents lasting more than one day (12.3) is 48% lower than the 23.5 average for utilities (source: Utilitatis Foundation)

EXTERNAL

OVER 2 BILLION EUROS IN ECONOMIC VALUE
distributed to **LOCAL AREAS**

64.5% AMOUNT OF SUPPLIES COMING FROM LOCAL BUSINESSES

102.8 million euro invested in **INNOVATION** in three areas:
ENERGY TRANSITION, CIRCULAR ECONOMY and **DIGITAL TRANSFORMATION**

GOVERNANCE SYSTEM

Hera's corporate governance is aimed at understanding and evaluating the stimuli coming from an increasingly complex context, in order to continue growing and, at the same time, further consolidate the close links with the area served that have distinguished the Group since its establishment. Constant engagement and specific knowledge of the actors involved have led us to develop an open and transparent way of doing business. This distinctive trait has been implemented over the years thanks to the creation of corporate bodies that are integrated with each other and, in line with the Corporate governance code and the Code of ethics, enable the expectations of all those interacting with Hera to be satisfied.

CG

For further information, consult the Corporate Governance Report

SHAREHOLDERS MEETING

INDEPENDENT AUDITING FIRM

BOARD OF DIRECTORS

BOARD OF STATUTORY AUDITORS

EXECUTIVE COMMITTEE

REMUNERATION COMMITTEE

ETHICS AND SUSTAINABILITY COMMITTEE

CONTROL AND RISKS COMMITTEE

CHAIRMAN

CEO

VICE CHAIRMAN

BOARD OF DIRECTORS

MEMBER	OFFICE	EXECUTIVE COMMITTEE	REMUNERATION COMMITTEE	CONTROL AND RISKS COMMITTEE	ETHICS AND SUSTAINABILITY COMMITTEE
Tomaso Tommasi di Vignano	Executive Chairman	C			
Orazio Iacono	CEO	M			
Gabriele Giacobazzi	Vice Chairman	VC	C	C	
Fabio Bacchilega	Member		M		
Danilo Manfredi	Member				
Alessandro Melcarne	Member	M			
Lorenzo Minganti	Member			M	
Monica Mondardini	Member		M		
Erwin P.W. Rauhe°	Member			M	
Manuela Cecilia Rescazzi	Member				
Paola Gina Maria Schwizer	Member			M	
Federica Seganti	Member				C
Bruno Tani	Member				
Alice Vatta	Member		M		M
Marina Vignola	Member				
					Filippo Maria Bocchi
					Cristiana Rogate

BOARD OF STATUTORY AUDITORS

CHAIRMAN
Myriam Amato
STANDING AUDITORS
Antonio Gaiani
Marianna Girolomini

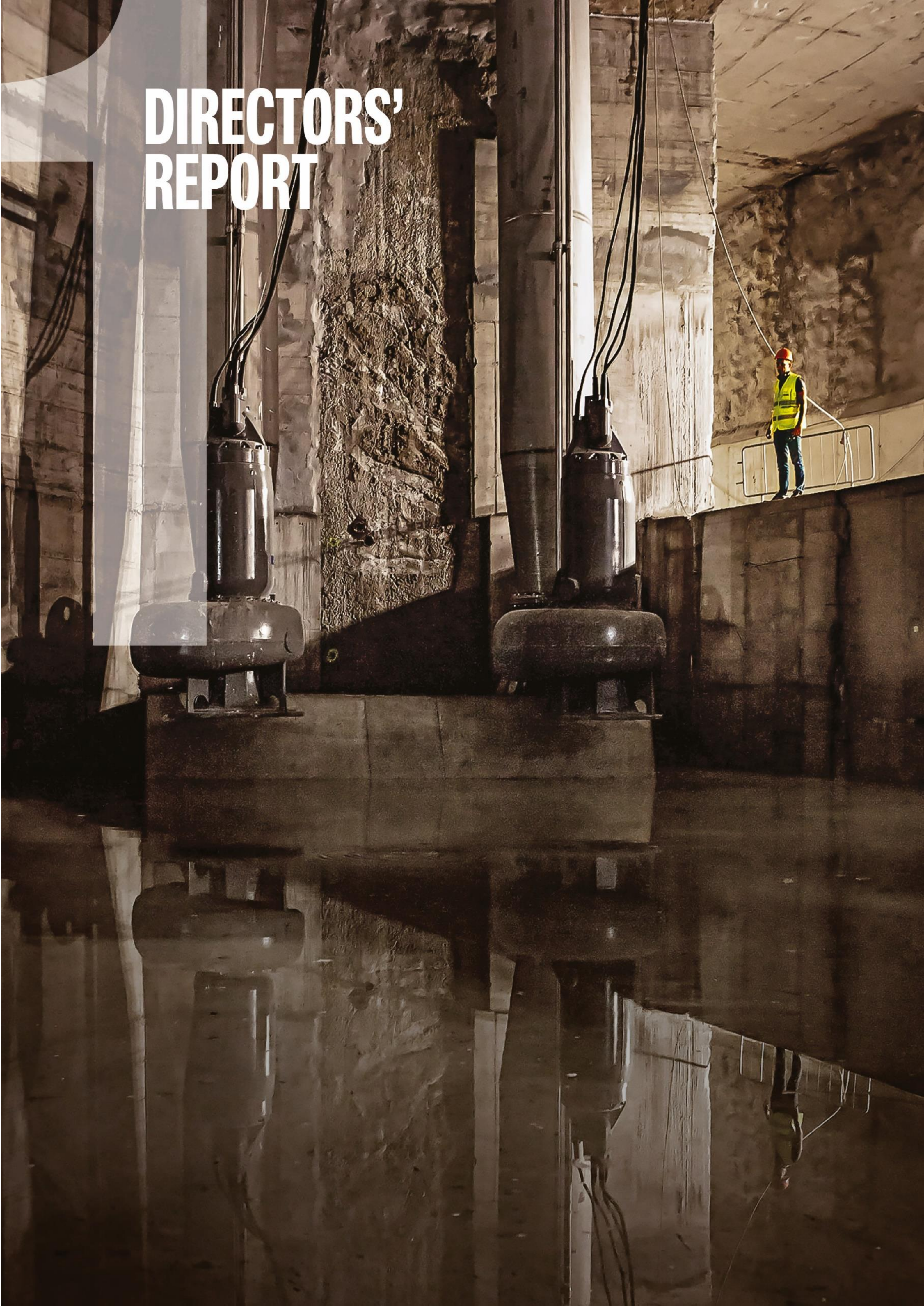
INDEPENDENT AUDITING FIRM

DELOITTE AND TOUCHE SPA

KEY

- C Chairman of the Committee
- VC Vice-chairman of the Committee
- M Member of the Committee
- ° Lead Independent Director

DIRECTORS' REPORT



1.01 TRENDS AND CONTEXTS, STRATEGIC APPROACH AND GROUP MANAGEMENT POLICIES

1.01.01 Trends and contexts

Hera makes ongoing efforts to interpret the signs coming from the contexts in which it operates, in an attempt to obtain an overall view of what lies ahead for the Group and its stakeholders. In order to anticipate future developments, the main drivers of change and their essential interrelations are identified below. In particular, the macro-trends of the Group's reference contexts are described, as are its main management policies, i.e. its industrial strategy and the related sustainability factors (concerning the environment, technology and human capital).

Macroeconomy and finance

World and European economy: year-end results

In 2022, the world economy decelerated with respect to the trend of recovery that began in 2021. According to the International Monetary Fund (IMF), global GDP growth stood at 3.4%, as against 6.2% in 2021. The causes of this slowdown lie mainly in the outbreak of the conflict in Ukraine and the ensuing increase in inflation worldwide, driven by energy commodity prices. Furthermore, the lockdowns imposed in China late in the year additionally hindered recovery in the global supply chain.

This slowdown, compared to the previous year, affected all major global economies, with China's growth falling from 8.4 % in 2021 to 3.0 % in 2022, while the growth rate of the US economy went from 5.9% in 2021 to 2.0% in 2022.

The eurozone was the most heavily affected by the war in Ukraine, due to its proximity to the conflict zone and its dependence on gas supplies coming from Russia. Highly volatile energy commodity prices accentuated the rise in inflation that had already begun in late 2021, bringing inflation in the eurozone to 9.2 % in December 2022. The IMF has observed that growth in the eurozone came to 3.5% in 2022, down from the 5.3% seen in 2021.

World and European economy: projected trends

The IMF's most recent estimates for the next two years point towards a scenario strongly influenced by current geopolitical conditions. The global economy is expected to increase by 2.9% in 2023, while for 2024 the increase has been projected at 3.1%. Growth in the eurozone is expected to settle at 0.7% in 2023 and 1.6% in 2024, influenced above all by the additional increases in interest rates announced in advance by the ECB.

National data: projected economic trends

The most recent analyses carried out by the Bank of Italy indicate growth in the Italian economy in 2022 among the best in the euro area, at roughly 4% year-on-year, despite the slowdown witnessed in the last three months of the year, mainly caused by the persistence of high energy prices and the slowdown in post-pandemic recovery.
Inflation remained very high in December, standing at 12.3% year-on-year. Energy commodity and food prices remained at historically high figures, even while falling in the latter part of the year.
Although the consumer confidence rate remained lower than prior to the pandemic, it rose in the latter part of the year due in part to an improvement in opinions and expectations concerning the overall economic situation, particularly regarding unemployment.
Industrial production, which had increased in the second and third quarters, declined in the last part of the year due to energy costs, still high, and a fall in demand.
The slowdown in production also effected foreign trade, bringing growth in exports to a halt in the last quarter of the year, compared to the strong expansion seen in the first nine months (+0.1% compared to the third quarter).

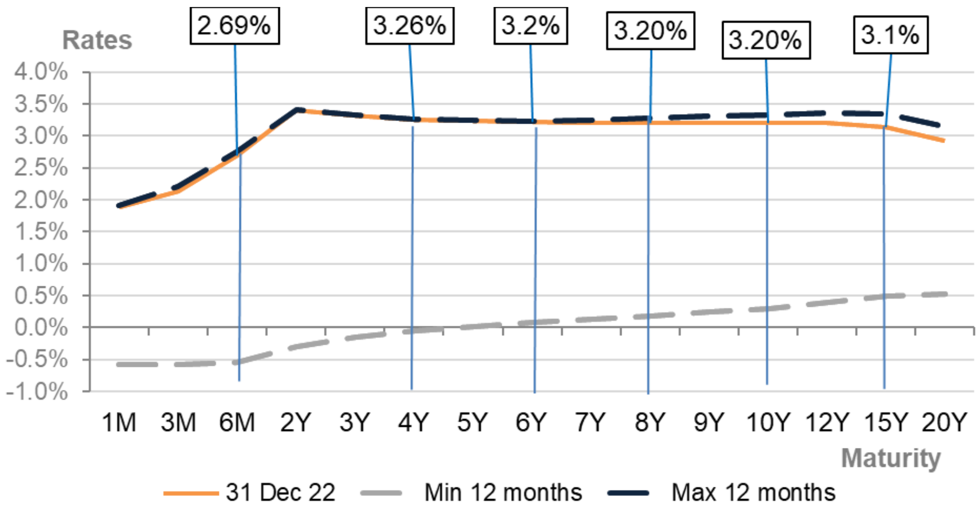
For the upcoming years, the most recent IMF estimates indicate growth at 0.6% in 2023 and 0.9% in 2024. As concerns inflation, the Bank of Italy's projections set this indicator at 6.5% in 2023 before falling to 2.6% in 2024. These forecasts take into account a macroeconomic framework still strongly influenced by the ongoing war in Ukraine.

Financial markets, monetary policies and interest rates

The global financial context felt the effects of the negative developments following the trade and tariff wars between the US and China, the pandemic and slowdowns along the supply chains, as well as the Russia-Ukraine conflict and the increased pressure on energy resources that caused the major inflationary shock mentioned above. During one of the worst years for financial markets around the world, in 2022 Wall Street experienced its most significant drop since the 2008 financial crisis, with the S&P 500 index plummeting by 19.4%, the Nasdaq falling by 33.10%, and the Dow Jones containing its losses at 8.7%.
A similar trend was seen in Europe, where the main stock exchanges lost around 12% year-on-year (including the Milan Stock Exchange, which lost 12.6%); London managed to limit the impact of the crisis with a positive, albeit modest, closure of 0.9%.

The Federal Reserve (Fed) and the Bank of England (BoE) began a process of monetary tightening during the first half of 2022, which continued with further interest rate hikes in the following months as well. The European Central Bank (ECB) also adopted a restrictive policy and announced that it would continue in the early months of 2023 as well; in December, the reference interest rate reached 2.5%. Also note that the ECB, as part of its asset purchase programme to inject liquidity into the system (quantitative easing), confirmed the beginning of quantitative tightening as of March 2023. Securities purchases will thus be reduced by 15 billion euro per month until June, with the pace of reductions during the following months to be defined at a later date. Reinvestments of government bonds will be 'partial', respecting the defined proportions for redemptions (by nation and national and supranational issuer). The portion of maturing corporate bonds to be reinvested will be focused only on 'green' bonds. In order to avoid risks of malfunctions in the monetary policy transmission mechanism, the flexibility to re-invest maturing bonds under the Pandemic emergency purchase programme (PEPP) will remain unchanged, meaning that this portfolio will be reinvested at least until the end of 2024.

The increase in eurozone interest rates accelerated during the second half of 2022, leading to an upward shift in the interest rate curve on all maturities by more than 300 basis points (bps) on average, year-on-year. The implicit forward rate curve forecasts a further rise for 2023 on short-term rates coming to roughly 3%. On medium- to long-term maturities, no further increases are expected, only slight downward adjustments coming to roughly 10 bps on average.

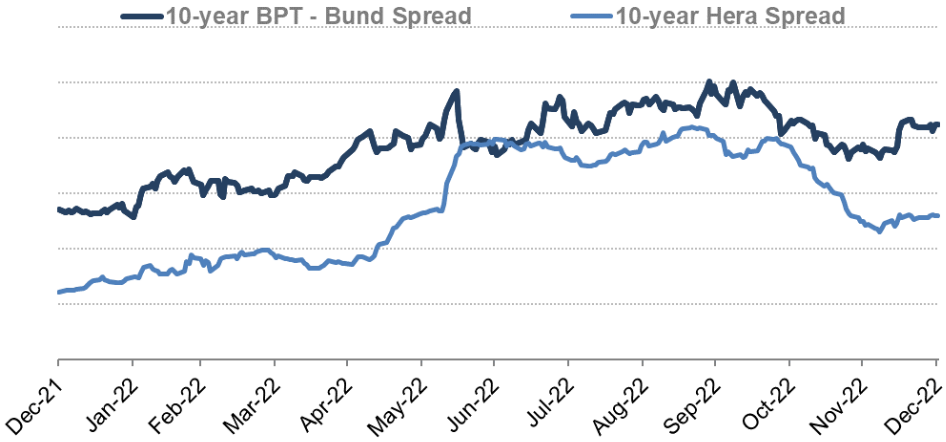


Over the year, in Europe, fears that a reduction in monetary stimuli could be accompanied by the reappearance of fragmentation in markets, resulting in a sovereign debt crisis, led to an increase in government bond yields. In order to ensure the effective transmission of monetary policy as part of the normalisation process, a new anti-fragmentation instrument, the so-called TPI (Transmission Protection Instrument), was introduced by the ECB. This instrument allows the ECB to make secondary market

purchases of securities issued by countries experiencing an unjustified deterioration in financing conditions.
The size of the purchases, which are not constrained ex ante, depends on the severity of the risks involved and a list of eligibility criteria to assess whether those countries where the ECB can make purchases under the TPI pursue sound and sustainable fiscal and macroeconomic policies.

Hera spread

On 31 December 2022, the spread between the yield on the ten-year BTP and the yield on the equivalent German bond closed at 212 bps, up 77 bps from 31 December 2021. After reaching a peak of 251 bps in September and experiencing pressure in the last month of the year, 2023 opened with a downward trend coming to roughly 180 bps.
Unlike in the past, in 2022 the spread of bonds issued by Hera followed the upward trend of government bonds, narrowing this spread. During the second half of the year, the recovery in Hera's spread, i.e. the increase in this spread, confirmed the return of investor confidence in the Group's creditworthiness. At 31 December, the ten-year spread, in particular, was 82 basis points lower than the BTP-Bund spread having the same duration.



Businesses and regulations

Business trends

During 2022, the high volatility of energy commodity prices, coupled with the threat of possible reductions in the availability of gas, caused a decline in domestic electricity and gas consumption.

In August 2022, European gas prices at the Dutch Title transfer facility (TTF) reached peaks of over 300 euro/MWh, more than ten times the benchmarks seen in 2021.

According to the first estimates processed by the Energy Market Operator (GME), in 2022 gas consumption decreased by 9.5% compared to the previous year, totalling approximately 69 billion cubic metres and returning to the amount seen in 2020. The drop in consumption was spread out over the entire year, but was particularly concentrated in the last four months, during which the recessionary effects of the war in Ukraine were compounded by milder weather. The industrial and civil sectors recorded the most significant drops, down 15.2% and 13.2% respectively, while in the thermoelectric sector the reduction was more moderate (3.1% compared to 2021).

As regards electricity, the data compiled by the national transmission company (Terna) indicates total national consumption at 316.8 TWh for 2022, down 1.0% compared to 2021. Approximately 86% of energy demand was met by domestic production, in line with the previous year.
In 2022, net national production from renewable electricity sources decreased by 13.1% compared to 2021, resulting in a portion of consumption met by renewables coming to 31.1%. In particular, the contribution of hydropower production declined sharply compared to 2021, with a reduction of about 11%, due to the drought conditions seen during the year. On the other hand, photovoltaic production and wind power production increased by 7% and 2% respectively, compared to the previous year.

With regard to the waste management and water businesses, since data referring to 2022 is not yet available, the most recent values defined by the main national institutes are provided below.
According to the latest calculations of the Institute for Environmental Protection and Research (ISPRA), the annual production of municipal waste in Italy in 2021 amounted to 29.6 million tons, equivalent to an average per capita production of about 500 kg, with values gradually realigning to those seen prior to the pandemic.

On the occasion of World Water Day 2022, ISTAT presented its new report on the statistics of the national water sector, updated to 2020 and focused on provincial capital cities. This report states that operators injected 2.4 billion cubic metres of water into the network (the volumes moved in the networks of the provincial capitals historically represent about 33% of total volumes distributed nationwide), with a reduction of more than 4% compared to the volumes seen in 2018 (the last available historical data). Of these, about 0.9 billion cubic metres, or 36.2% of the total amount injected, would seem to have been dispersed.

Competition

Increasing competition was seen in the activities carried out by Italian utilities, with a particular focus on free market businesses.
In the energy sector, strong commercial pressure persisted, especially in the retail market. This trend was confirmed by the churn rates, which remained very high and continued to rise, in sales of both electricity and gas. In 2021, in electricity sales the switching rate increased by 2.6 percentage points compared to the previous year, while for the gas sales the increase was 1.4 percentage points compared to 2020 (source: ARERA). In recent years, competition among sales companies has expanded to the offer of value-added services, complementing the supply of commodities, so as to compose commercial portfolios in line with customers' needs, more oriented towards energy saving. Similarly, another factor that has affected competition in the market lies in the increasing use of digital channels by customers, both to choose offers and to interact with their energy and service supplier.

As regards the waste treatment and recovery business, the European context has witnessed for several years now a series of aggregation operations based on the synergies that can be extracted from the different businesses that fall within the scope of utilities, with a growing connection in particular between energy, waste and water. Examples of the most widespread partnerships include the production of biomethane from the organic fraction of municipal solid waste (FORSU) and from sewage sludge, as well as Waste to Material and Waste to Chemical procedures. Within Italy, moreover, for several years the focus of the main market players has gone towards expanding plant equipment, and this will be given further impetus thanks to the resources provided by the National Recovery and Resilience Plan (NRRP).

With regard to regulated businesses, competitive pressure has been introduced into the procedures for awarding service concessions and their subsequent management.
Considering the local areas in which the Group currently provides the water cycle service, the new management of the concession in the province of Rimini began in January 2022, with an expected expiry date coming at the end of 2039.

Turning to legislative and regulatory factors, the most important aspects for the Group in 2022 include:

- various government measures intended to support citizens and businesses in coping with rising energy prices, including measures to curb the effects of price increases on bills;
- the measures adopted by the government to ensure security in supplies and the more widespread use of renewable energy;
- measures to promote competition and a reorganisation of the regulation of local public services of economic importance;
- the following measures adopted by the Regulatory Authority for Energy, Networks and the Environment (Arera):
  - a modification of the methods for determining the economic conditions for supply of the protected gas service as of 1 October 2022, and the regulation of gradual protection for micro-businesses;
  - the conclusion of the consultation of the new regulation for expenditure and service targets (ROSS) in the energy sectors;
  - the confirmation of WACC for energy infrastructure services for 2023, set in continuity with the reference values for 2022;

- an infra-period update, for the three-year period 2023-2025, of the tariff regulations for gas distribution and metering;
- a measure to incentivise energy transition experiments along the gas chain;
- new regulations for gas metering performance, with reference to smart meters;
- the completion of the regulation of reactive energy input into low-pressure and high-pressure networks;
- the approval of applications for the recognition of investments in specific 2G metering systems for the Group’s two electricity distributors, and updates in the 2G directives for the three-year period 2023-2025;
- extraordinary measures taken in the water sector to recognise the cost of electricity;
- the conclusion, once again in the water sector, of the preliminary proceedings to determine the system of incentives and penalties for technical quality for the two-year period 2018-2019, and the earliest results of the preliminary investigation on contract quality;
- for the municipal waste management service, the determination of the WACC for the four-year period 2022-2025, and the introduction of contract and technical quality obligations for waste collection;
- an investigation into changes in the prices and costs of the district heating service, and a consequent report to Parliament and the government on the attribution of tariff regulation powers to the Regulator.

Beginning in the autumn of 2021, the government has introduced a series of measures to support citizens and businesses in coping with rising energy prices, both in the electricity and gas sectors. Following the outbreak of war in Ukraine and various price mitigation initiatives, a number of measures to ensure security of supply and a more rapid development of renewable energy sources also appeared.

Measures to offset price increases in bills

The continuation of the war forced national governments to intervene constantly throughout 2022, updating the measures adopted according to the needs imposed by changes in the scenario. The first need to which the Italian government intended to respond was a mitigation of the impact of energy price increases on customers’ bills. To this end, a number of areas were identified for interventions: a reduction of system charges for both gas and electricity users, which was extended during the year, and a redefinition of social bonuses, with a wider number of beneficiaries and an increase in the amounts paid. In addition, Decree Law No. 115/2022, so-called Aid bis, suspended until 30 April 2023 the effectiveness of contractual clauses that allow a unilateral modification of the price conditions of electricity and gas supplies, if they fall outside the expected contractual notice periods. These measures were subsequently extended to 30 June 2023 by Decree-Law No. 198/2022, the so-called Milleproroghe, converted into Law 14/2023, which also clarified that the same did not apply to contractual clauses that allow suppliers to update contractual economic conditions upon expiry, in line, moreover, with the principles sanctioned by the State Council in the disputes brought by certain operators for the annulment of prescriptive measures adopted by the Antitrust Authority.
At the same time, tax credits for procurement by energy-intensive companies were first introduced and subsequently strengthened, and the way in which the GSE sells the electricity it possesses was regulated (by the so-called Energy Release, under Law Decree 17/2022).

In order to raise the resources required to sustain these measures, additional charges were introduced for those benefitting from the energy price increases. In particular, Decree-Law No. 4/2022 introduced a limit on revenues from electricity generated by certain types of renewable-source plants (including photovoltaic plants exceeding 20 KW), which was further extended by the Budget Law 2023 (Law No. 197/2022) on the basis of European Regulation 2022/1854, also including electricity generated by the combustion of waste. The same Regulation was also responsible for the provision of the solidarity contribution on the share of profits exceeding the average of the previous years, which the Budget Law applies to companies over 75% of whose revenues come from the energy sectors. This measure replaces the content of the “Price Cut” Decree (Decree-Law No. 21 of 21 March 2022), which had introduced, for the year 2022, an extraordinary levy of 25% to be paid by companies operating in the electricity and gas sectors.

Measures to ensure security in supplies and a broader use of renewable energies

In a context that saw an increasing risk of supply disruptions, the Government was called upon to intervene so as to ensure the resilience of the domestic gas system. Decree Law 17/2022, the so-called “Caro Energia”, entrusted the Ministry for the environment and energy security with defining the rules for optimising the gas cycle in national storage, through means including resorting to counter-flow injections during the supply season, to guarantee that the filling level is maintained. In addition, with the aim of containing consumption, with Ministerial Decree 383/2022 of 6 October the Ministry modified the terms of operation of thermal systems fuelled by natural gas, establishing a reduction in both the temperatures and the daily and seasonal duration of the ignition period, and regulating the modalities for filling storage and supply during the winter season.

In addition to these measures, aimed at providing immediate support to the economic system, the national regulatory framework acknowledged and implemented the European strategy that identifies the ecological transition as the main tool for reducing dependence on fossil fuels. For this purpose, the procedures for allocating NRRP resources were published during the year, and for some investments relating to utilities' areas of responsibility the final awards have already been made. These include measures for developing the electricity and district heating network, as well as some lines relating to circular economy projects. In addition, a number of reforms related to the NRRP itself have been approved, including:

- the publication of the so-called Biomethane Ministerial Decree (Ministerial Decree 340 of 15 September 2022), which regulates the allocation of approximately 1.7 billion euro in incentives for the production of biomethane from agricultural and organic waste;
- the definition of requirements for green hydrogen production plants (Ministerial Decree of 21 September 2022);
- the National Strategy for the Circular Economy, its Chronoprogramme and the National Waste Management Programme, to ensure an effective transition to a circular economy.

Measures to promote competition

On 5 August 2022, the annual Law for the market and competition 2021 was approved, which contains measures for a number of areas of interest, including the awarding of tenders for the gas distribution service and the waste management service. More specifically, as regards the gas sector, among other measures, the possibility was given to local authorities to dispose of their assets through tenders on the basis of the Industrial residual value (VIR) instead of the Regulatory value (RAB). Furthermore, with regard to the reorganisation of the regulation of local public services, the Government received and implemented the delegation with the publication in the Official Gazette of the Unified text for local public services (TUSPL) on 30 December 2022. This legislative decree applies to all services of general economic interest, with the exception of electricity and gas distribution, and calls in particular for the requirement of a qualified justification for not turning to the market in the case of in-house awarding.

Protected gas service

In regulating the economic conditions for the supply of natural gas in the protected service, note that ARERA, in order to ensure greater price stability and adherence to market conditions, introduced a new method for determining the component covering the costs of supply in wholesale markets, moving from a quarterly forward system to a monthly forward system. In particular, as of 1 October 2022, the new reference to be used in determining the CMEM component is set at the monthly average of daily prices at the PSV Day Ahead, published at closure by ARERA.

Last resort and default gas distribution services

In regulating the terms and conditions for providing the last resort and default distribution services**,** note that Arera also intervened, with Resolution 372/2022/R/gas, with measures to compensate for the unforeseeable and excessive charges due to the extraordinary situation of the wholesale gas market price trend, and in particular:

- replaced, similarly to what was done for the protected service and once again as of 1 October 2022, the reference to the CMEM component with the price of the PSV Day Ahead;
- introduced, on an extraordinary basis, an equalisation mechanism aimed at compensating the procurement costs incurred by operators for incremental volumes for the period 1 October 2021 - 30 September 2022, financed by activating a specific tariff component to be applied within the scope of the services in question.

Gradual protection service in electricity

With Resolution 586/2022/R/eel, Arera also postponed the date for the activation of the gradual protection electricity service for micro-businesses from 1 January 2023 to 1 April 2023, due to the postponement of the competitive procedures, which lasted until the end of 2022, and the technical need for at least three months after the publication of the results to carry out all the prodromal activities for the transfer of withdrawal points to the new service operators.

Energy infrastructure sectors

Arera, during 2022, began consultations for the guidelines on the new tariff regulation by expense and service objectives (ROSS) in the energy infrastructure sectors. The objective of this regulation is to efficiently direct resources, eliminating distortions in companies' investment choices. The process leading towards the new method will start with a simplified model, called ROSS-based, which as of 2024 will be applied to electricity distribution operators and as of 2026 to gas distribution companies. Consultation document 655/2022/R/com, published at the end of the year, contained Arera's final guidelines on the criteria for determining the recognised cost when following the ROSS-based approach: the expense of distributors, total and no longer simply managerial, will be compared annually with a reference expense defined by the regulator**,** any efficiencies/inefficiencies achieved will be shared with users according to appropriate mechanisms, and the treatment of the capital stock existing at the date of transition to the new methodology will be guaranteed with continuity in the criteria applied. In the first few months of 2023, with the publication of the integrated TI-ROSS text, the new tariff regulation will be formalised (which should essentially constitute a methodological framework with indications of general regulatory principles and criteria), while for the actual completion of the ROSS-based scheme it will instead be necessary to wait for updates in the specific regulations for each infrastructure service**.**

Arera, in late 2022, with Resolution 654/2022/R/com, established the rates of remuneration for capital in energy infrastructure services for 2023. The changes in the underlying financial parameters, while considerable, were not sufficient to trigger the updating mechanism provided for by the regulation. For 2023, therefore, the values of 2022 WACC were confirmed at 5.6% for the gas distribution and metering service and 5.2% for the electricity distribution and metering service.

Gas distribution and metering regulations

With regard to the tariff regulations for gas distribution and metering (RTDG)**,** in late December 2022 Arera updated its regulations for the second semi-period (2023-2025) of the fifth regulatory period. The main changes for 2023 concern: an update of the standard costs for electronic meters up to class G25**,** to be applied starting from investments; the introduction of a new parametric recognition method to cover the costs of remote management and concentrators equal to 1.59 euro/redelivery point (PDP), to be updated for inflation for the following years; and a differentiation in the cost recognised for switch readings taken on PDRs equipped with a smart meter compared to PDRs equipped with a traditional meter.
As regards the recognition of operating costs, pending the outcome of the appeals against Resolution 570/2019/R/gas, the Authority decided that it was appropriate not to change the productivity recoveries set at the beginning of the regulatory period, but also considered introducing a mechanism for adjusting the allowed revenues to cover operating costs if a reduction in redelivery points emerges. ARERA also resolved to recognise the residual depreciation of G4-G6 smart meters installed from 2012 to 2018 and decommissioned before the end of their useful life.

In order to support the process of energy transition and decarbonisation of the gas sector, with Resolution 404/2022/R/gas and subsequent Decision 9/2022, the Authority prepared a special bonus tariff mechanism aimed at providing incentives for pilot projects optimising the management and innovative use of infrastructures in the natural gas sector. In particular, three specific project areas were defined, the first relating to methods and tools for the optimised management of networks, the second concerning innovative uses of existing infrastructures, including the use of hydrogen and Power-to-Gas in the area of sector coupling, and the third relating to energy efficiency interventions in gas infrastructure management. A total of 35 million euro was earmarked for financing these trial projects (each of which may have a maximum duration of three years), which will be allocated through a selective scoring procedure based on specific assessment indicators.

As regards gas metering, at the end of the first half of 2022, ARERA approved a measure that defines more stringent expected output and performance levels for the service provided by smart gas meters**.** Indeed, Resolution 269/2022/R/gas establishes new obligations regarding the timing of smart meter commissioning, the frequency of metering data collection, the granularity of the same, and the timing with which the data collected is made available. The measures set out in this resolution also affect various aspects relating to billing and the determination of compensation for customers and sellers. The effective date of almost all the new provisions has been set at 1 April 2023.

Electricity distribution

Concerning regulations for electricity distribution, the reformed reactive energy regulations were completed in 2022. With regard to reactive energy fed into medium- and low-voltage grids, Resolution 232/2022/R/eel established the respective fees as of 1 April 2023. Instead, with regard to the regulation of the flow of reactive energy fed into high-voltage grids and interconnections, the sector had to wait until late 2022 for Resolution 712/2022/R/eel. ARERA decided that, once again as of 1 April 2023, a basic unit fee will be applied to the entire national grid and, only for the most critical areas, an increased fee. Moreover, adopting a gradual approach, under specific conditions (assessed ex post) and which demonstrate a fundamental absence of critical reactive flows, it is expected that the fees may be cancelled and, where necessary, refunded.

Electricity metering

During 2022, with Resolutions 410 and 411/2022/R/eel, ARERA furthermore approved the Requests for admission to the recognition of investments in specifically 2G metering systems (RARI) made by Inrete Distribuzione Energia Spa and AcegasApsAmga Spa. The measures approved the 2G Metering commissioning plans and defined the mandatory performance of second-generation smart metering systems, confirming the reference expenditure forecasts submitted to ARERA by the two distributors.

Regarding the electricity metering service, ARERA, in late 2022, updated the 2G directives for the three-year period 2023-2025 for the recognition of the costs of second-generation smart metering systems. While introducing a few innovative elements with respect to the previous three-year period, the new directives guarantee essential continuity in the cost recognition mechanism for companies involved in a large-scale replacement of 2G electricity meters. The main new features include the introduction of a bonus for distributors who accelerate their meter replacement plan after obtaining public contributions of any kind.

Integrated water service

As regards regulations for the integrated water service, the measures concerning 2022 with the largest impact for the Group involve incentive mechanisms for service quality and, as far as tariffs are concerned, the recognition of electricity costs due to the exceptional context of energy price volatility. On this matter, with Resolution 229/2022/R/idr the Authority established a number of extraordinary measures for water operators. More specifically, the possibility of requesting a financial advance from CSEA for electricity procurement in 2022 was introduced (which was later extended, by Resolution 495/2022, until 30 November 2022) as was the possibility of making an extraordinary request, in agreement with the area Authority in question, for the recognition of the cost pertaining to 2021, provided that it was accompanied by a plan of actions to contain consumption and energy costs.

Concerning the regulation of technical service quality, with Resolution 183/2022/R/idr, ARERA concluded its preliminary investigation, begun with Resolution 46/2020/R/idr, aimed at quantifying incentives (and penalties) relating to performance in 2018 and 2019. With this assessment, ARERA observed a generally positive performance shown by operators, who seem to have acted according to largely satisfactory criteria, with the exception of some cases, in which they were excluded from the mechanism due to violations of regulations. The penalties relating to 2018 and 2019 are to be treated as reserves and used for achieving the established objectives, in accordance with the reference regulations, while the bonus payments relating to the same years were disbursed by CSEA. With Resolution no. 107/2022/R/idr, the second preliminary assessment investigation was opened for the performance of technical quality in 2020 and 2021 and, at the same time, with Resolution no. 69/2022/R/idr, the first preliminary investigation was opened in the area of contract quality concerning the objectives for the two-year period 2020-2021. As a result of the latter preliminary investigation, with Resolution No. 734/2022/R/idr Arera published the methodological note adopted for the quantitative assessment of incentives/penalties, pointing out that, in addition to identifying some of the most serious cases of exclusion from the mechanism and thus from the bonuses, in the event of particular data inconsistencies/incompleteness, in-depth investigations may be requested from the operators concerned, with the possibility of justifying and possibly correcting the data sent, providing adequate supporting documentation.

Integrated waste cycle

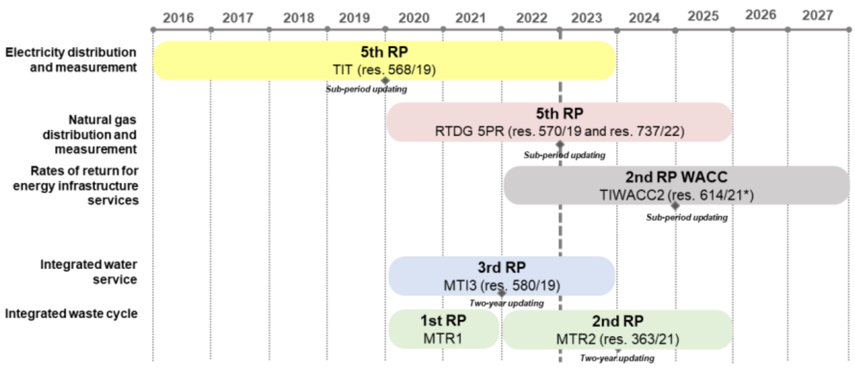
With regard to regulations for the municipal waste management service, the measures with the greatest impact for the Group that ARERA finalised in 2022 concern regulations for the remuneration of capital, in order to promote the industrial development of the sector, and the initial elements of quality regulations, aimed at standardising service levels nationwide. More specifically, Resolution 68/2022/R/rif established the WACC for the years 2022-2025, providing for a remuneration of capital coming to 5.6% for the collection service (to be adjusted when tariffs are set for 2024-2025, since until then it will remain at 6.3%). The WACC for the treatment service was instead set at 6.0%, recognising the higher level of risk associated with this phase of the municipal waste management chain. On the other hand, with reference to quality regulations, note Resolution 15/2022/R/rif, which introduces the first regulation of service quality, introducing a set of contract and technical quality obligations for the collection service, minimum and uniform for all managers, accompanied by quality indicators and the related general standards differentiated by regulatory schemes, identified in relation to the actual initial quality level guaranteed to users by the various managers. Lastly, note Resolution 413/2022/R/rif which, in light of the mandate given to ARERA by the annual Market and Competition Law 2021, initiated a procedure for defining technical and quality standards for carrying out waste disposal and recovery activities, proceeding to verify minimum quality levels and furthermore acquiring information on management costs and any other suitable element for monitoring the actual methods used in carrying out disposal and recovery activities and their impact on the fees applied to end users.

District heating

With reference to regulations for the district heating service (TLR), note that ARERA closed, with Resolution 547/2022/R/com, its investigation on the evolution of the prices and costs of the district heating service, begun with Resolution 80/2022/R/tlr. One factor that appeared, according to the Regulator, is that indexing district heating prices to trends in gas prices, whereas thermal energy is mainly produced by waste-to-energy plants and thermal power plants, seems to have led to a progressive gap between the costs and revenues of this service. This is because the increase in revenues was not followed by a corresponding rise in variable costs, with a consequent significant increase in margins for the remuneration of invested capital. ARERA, with Resolution 568/2022/I/tlr, therefore made a report to the Parliament and the government, essentially proposing the introduction of a cost-reflective regulation of prices for the district heating service, attributing the related powers to ARERA itself.

A timeline showing the main regulatory periods and related measures introduced by ARERA, pertaining to the Group's sectors of activity, is provided below.

Tariff regulatory periods



- *Resolution 614/21 set out the new methodology for determining the rates of return on energy capital and established WACC for 2022 only; these values were confirmed for 2023 as well by the more recent Resolution 654/22*

Lastly, the table below indicates the main tariff references for each regulated sector, based on the regulatory framework in effect in 2022 and expected to remain until the end of the current regulatory periods.

	Natural gas distribution and measurement	Electricity distribution and measurement	Integrated water service	Integrated waste cycle
Regulatory period	2020-2022 First sub-period of the fifth regulatory period (Resolution 570/19) 2023-2025 Second sub-period of the fifth regulatory period (Resolution 737/22)	2016-2019 First sub-period of the fifth regulatory period (Resolution 654/15) 2020-2023 Second sub-period of the fifth regulatory period (Resolution 568/19)	2016-2019 Second regulatory period (Resolution 664/15) 2020-2023 Third regulatory period (Resolution 580/19)	2018-2021 First regulatory period (Resolution 443/19) (1) 2022-2025 Second regulatory period (Resolution 363/21) (2)
Regulatory governance	Single level (ARERA)	Single level (ARERA)	Dual level (Governmental authority Body, ARERA)	Dual level (regional authority, ARERA)
Recognised invested capital for regulatory purposes (RAB)	Previous cost revised (distribution) Weighted average between actual cost and standard cost (measurement) Parametric recognition (centralised capital)	Parametric recognition for assets up to 2007 Previous cost revised for assets since 2008	Previous cost revised	Previous cost revised
Regulatory lag for investment recognition	1 year	1 year	2 years	2 years
Return on investment (3) (real, pre-tax)	2019 6.3% Distribution 6.8% Measure 2020-2021 6.3% Distribution and Measurement 2022-2023 5.6% Distribution and Measurement	2019-2021 5.9% 2022-2023 5.2% Distribution and Measurement	2018-2019 5.31% 2020-2021 5.24% 2022-2023 4.8% +1% for investments since 2012, covering the regulatory lag	2020-2021 6.3% +1% for investments from 2018, covering the regulatory lag 2022-2025 (4) 5.6% Collection (adjusted when tariffs are set for the years 2024-2025, until then 6.3%) 6.0% Treatment
Recognised operating costs	Actual average cost values by company grouping (size/density), based on 2011 (for revenues until 2019) and 2018 (for revenues from 2020) (5) Sharing for efficiencies achieved against recognised costs Upgrade with price-cap	Average actual segment cost values on a 2014 basis (for revenues until 2019) and (2018 for revenues from 2020) Sharing for efficiencies achieved against recognised costs Upgrade with price-cap	Efficient costs: 2011 operator's actual values inflated Upgradable costs: actual values with 2-year lag Additional charges for specific purposes (provisional nature)	Collection and treatment Actual operator costs with 2-year regulatory lag Additional costs for quality improvement and changes in the manager's scope (previsional) Additional charges for specific purposes (previsional)
Annual efficiency operating costs	Annual X-factor 2019 Distribution: 1.7% large enterprises 2.5% medium-sized enterprises Measurement and marketing: 0% As of 2020: Distribution: 3.53% large enterprises 4.79% medium-sized enterprises Measurement: 0% Marketing: 1.57%.	Annual X-factor 2019 Distribution: 1.9%. Measurement: 1.3%. As of 2020: Distribution: 1.3%. Measurement: 0.7%.	Efficiency mechanism based on: sharing operator efficiencies 2016 Differentiated sharing level with respect to the distance between actual cost and efficient cost of the operator	
Incentive mechanisms		Net revenue sharing from fibre transit in the electricity infrastructure	Sharing of electricity costs based on energy savings achieved; Recognition of 75% of margins from activities aimed at environmental and energy sustainability	Collection Sharing on revenues from the sale of material and energy (range 0.3-0.6) and from Conai fees Treatment Sharing not explicitly recognised by the method, although it can be traced back to the general principles supporting the development of the circular economy

Annual limit on tariff increases	On an asymmetrical basis and depending on: - investment needs - cost-effectiveness of management - changes in scope of operations Mechanism to guarantee financial equilibrium	Collection On an asymmetrical basis and depending on the presence of: -perimeter changes -improved Service quality Treatment Limit to growth less tight since the efficiency factor is not provided for, it is a function of -inflationary growth -environmental impact of plants Collection and treatment Mechanism to guarantee financial balance

(1) Resolution 443/19 is applied to managers in the integrated waste cycle, including treatment activities (for disposal or recovery) only if these activities are included in the operator's corporate scope. On the other hand, the tariff regulation of the gate fees of the plants is postponed to a dedicated measure.
(2) Resolution 363/2021/R/rif updated the previous regulatory period and introduced tariff regulation for treatment where these are "minimum" plants, i.e. essential for closing the municipal waste cycle.
(3) For the energy and waste sectors, reference is made to the WACC methodology, while for the integrated water service the values refer to the coverage rate of financial and fiscal charges.
(4) For the years 2022-2025, the reference measure for the WACC in the waste sector is Resolution 68/2022/R/ref.
(5) In February 2020, Inrete Distribuzione Energia Spa, the Group's main distributor, challenged the measure before the Lombardy-Milan Regional Administrative Court (TAR) with regard to the significant reduction in the recognition of operating costs introduced by Resolution No. 570/2019.

Climate and the environment

Climate change

Regulatory and economic interventions aimed at managing climate change, and the concrete opportunities that derive from addressing the risks associated with it, have become priorities for international and national institutions, as well as those operating in all economic sectors. The Group's main concerns in pursuing environmental sustainability coincide with the 17 goals on the 2030 Agenda for Sustainable Development (SDGs), as well as the indications contained in the Paris Agreement to limit global warming to below 2ºC, and the long-term climate strategy "A Clean Planet For All" (adopted by the European Union), intended to achieve carbon neutrality by 2050 and to limit the increase in temperature to below 1.5ºC. Further important elements moving in this direction include the change called for by the Green Deal, the European Commission's plan for a Europe that is more competitive in the fight against climate change and increasingly capable of transforming the economy and society by setting them on a path of sustainable development and, in the wake of this, the circular economy action plan (CEAP). The actions taken by European and national institutions are coordinated and converge towards the goals of a fair, sustainable and inclusive transition. Adopting the Green Deal and related initiatives, aimed at tackling climate and environmental problems in order to achieve carbon neutrality and the transition to a regenerative and circular growth model, is aimed towards an industrial strategy that implements the circular economy in all sectors.

Circular economy action plan

The Circular Economy Action Plan, presented by the Commission last year, has made it possible to outline a strategic framework for circular economic development in the European Union and, in so doing, is geared towards accelerating the transition and making the change foreseen by the Green Deal possible.
Incentive initiatives, reuse and recyclability in products, reduction of overpackaging and rules for bioplastics have become increasingly important in this respect. Above and beyond the plastics sector, the promotion of the circular economy is also encouraged with respect to water management, both in terms of reuse of purified wastewater for irrigation in agriculture and in terms of minimum requirements for the use of reclaimed water.

Opportunities

National policies are developing in a European context where priorities are defined and available resources allocated accordingly. In this sense, the National recovery and resilience plan (NRRP), which makes use of the European funds made available by the NextGenerationEU package supplemented by a complementary national fund, guides Italy in the implementation phase of the European Green Deal and, since there is an overall consensus concerning the need to introduce progressively more challenging climate targets, reinforced instruments have been made available to member states with the aim of:

- accelerating the process of ecological and digital transition;
- accelerating the transition to a regenerative and circular growth model;
- providing a tool to help investors in the transition to a low-carbon economy.

In order to manage the energy crisis that began last year, the European Commission introduced in May 2022 a series of measures that can be launched in the short term (REPowerEU), including a common gas purchasing platform, a cap on gas and electricity prices, the diversification of supply and a reduction of gas demand through energy efficiency measures and electrification of consumption.

The drive to decarbonise the European economy has instead been entrusted to long-term measures, in particular the Fit for 55 package, which aims to reduce climate changing emissions by 55% within 2030 by focusing on an increase of renewable energies in the production mix. In terms of energy efficiency, the current 2030 targets, revised upwards to meet this ambitious emission reduction target, will be pursued by giving a leading role to public buildings in the process of making Europe's building stock more efficient. In terms of renewable energies, whose increased production is crucial to replace fossil fuels and reduce carbon intensity, the electrification of consumption will require considerable investments along the entire supply chain and, as far as regional energy planning is concerned, it is expected that the recovery of waste heat from industrial processes will have significant potential. The development of renewable gases, including hydrogen, by constructing electrolysers powered by renewable energy sources, will also be a priority.

In early 2018, the European Commission published the Sustainable Finance Action Plan, which aimed to respond to three objectives: redirecting capital flows towards sustainable investments in order to achieve sustainable and inclusive growth; managing financial risks arising from climate change, resource depletion, environmental degradation and social issues; and promoting transparency and a long-term vision of economic and financial activities.
The first concrete action took the form of the EU's own definition of a Taxonomy for sustainable investments, aimed at directing investors' funds towards sustainable initiatives.
In order to be aligned with this Taxonomy, economic activities must comply with three principles identified by the Regulation:

- contribute positively to at least one of the six environmental objectives set out, including mitigation of climate change, adaptation to climate change, sustainable use and protection of water and marine resources, transition to a circular economy, prevention and reduction of pollution, and protection of biodiversity and ecosystem health;
- not produce negative impacts on the environment;
- respect minimum social guarantees.

Moreover, as of 1 January 2022, companies subject to the directive on non-financial reporting must indicate the amount of their activities that fall under the European Taxonomy.

As regards the Italian context, the six strategic missions of the NRRP are built around the six pillars of intervention set out in the European Regulation for Recovery and Resilience and are accompanied by specific sectoral reforms. Mission 2, "Green revolution and ecological transition", the largest in terms of resource allocation, addresses the initiatives that most closely concern the Hera Group.
For the water cycle and waste sector, the NRRP aims to modernise networks and plants and reduce the infrastructure gap between the north and south of the country, assigning a central role to the national Plan for the water sector, for providing public funding, and to the national Programme for waste management.
In the energy sector, the NRRP focuses on developing renewable energy sources, modernising electricity grids (to increase their digitalisation and resilience against climatic events) and energy-saving solutions. Other key actions include the integrated development of the hydrogen supply chain, promoting production- and consumption-side projects at the same time and the principle of energy efficiency as the first zero-emission fuel.

Strategy for decarbonisation

All countries that signed the Paris agreement made a commitment to a strategy for reducing climate-changing emissions reaching 2050. The strategy will move towards improving knowledge of climate impacts, intensifying climate risk planning and assessment, accelerating adaptation actions and developing resilience to climate change globally. People are becoming increasingly sensitive to environmental and social inclusion issues and are thus driving the increase in demand for green & digital interventions, in line with EU recommendations on economic recovery and resilience. In order to get various stakeholders and civil society involved in the adoption of sustainable behaviour, the European Commission has created the European Climate Pact. This initiative offers individuals and organisations opportunities to learn about climate change and find solutions, and provides a space for individuals to interact and promote a European climate movement. Organisations can identify their own ambassadors with a focus on gender equality and, in order to support the beginning of concrete actions, the Pact's platform makes it possible to share experiences, funding opportunities and know-how.

Opportunities In the utility sector

The inevitability of climate change, which has led the European Commission to anticipate its emission reduction targets to 2030, with the hope of achieving full decarbonisation by 2050, is also forcing local authorities to review priorities and courses of action. Moreover, the pandemic has made it urgent to implement actions to make cities and local programmes more resilient and has increasingly oriented regional policies towards circular economy initiatives, sustainable mobility, carbon neutrality and digitisation. This scenario is increasingly ambitious and offers new opportunities to the utility sector. All types of customers (household, industrial and public administration) will be called upon to introduce technological improvements that can reduce their energy needs.

Promoting and selling products and services for energy efficiency and supporting the energy efficiency of buildings are some of the initiatives being promoted.

Environmental and socio-economic factors

Stakeholders, both financial and non-financial, who are increasingly interested in sustainability issues, are therefore also moving towards green financing, which can raise liquidity on the capital market at rates that are potentially lower than the alternatives.

Following a rationale based on value sharing between companies and communities, oriented towards finding solutions for the benefit of both, the engagement of the community and individuals is becoming increasingly important. The main megatrends are those built on the UN 2030 Agenda, theoretical references and successful experiences of shared value approaches and new business opportunities.

The new lines of development will continue to include the full exploitation of data (seen as a real corporate asset) and a greater focus on cybersecurity, to protect the company and its data. The speed of change makes it essential to define training plans that enable the corporate population to better manage change (first and foremost digital change). This includes training that may be fragmentary but is still able to provide the necessary continuity (self-development).

Technology and human capital

Digital technological evolution involves a continuous acceleration of some major ICT trends and, in addition to moving beyond the paradigms found in economic and social contexts with increasing speed, it alters entire market segments and social relationship patterns. The rise of Artificial Intelligence, automation, Robotic Process Automation, data collection and management (Internet of Things, data governance and data analytics), cybersecurity and, finally, cloud-based platforms favours an increase in the amount of data produced and the speed of its availability, generating further opportunities for companies. Utilities are actors capable of promoting a wider use of innovation thanks to their contribution to digitisation and technological development, giving attention to IT security as well. The Internet of Things and digital interaction between people (exemplified by the automation of more standardised customer relations through chatbots) favour a continuous and growing flow of data, which allows not only timely analyses of different situations (real time analytics), but also a more precise definition of decisions and actions to be taken, often with the support of artificial intelligence. In this direction, the EU Commission, adopting the communication "Digital compass for 2030: the European model for the digital decade" has confirmed the path for an ethical digital development in Europe, with clear targets to 2030 benefitting citizens and businesses. The main goals include:

- 80% of the population between 16 and 74 with basic digital skills;
- 20 million specialists in ICT, equally distributed between men and women;
- 75% of businesses using cloud computing, big data and Artificial Intelligence services;
- 90% of small and medium-sized enterprises with a basic level of digital intensity;
- 100% of public digital services available online,
- 80% of citizens using digital identity solutions;
- 100% of households with gigabit connectivity and inhabited areas covered by 5G.

The benefits of digitally-aware development have been defined in Italy by the "Strategy for Technological Innovation and Digitisation", one of whose main challenges is to accelerate the transition to a digital society, prepared to achieve the above-mentioned European targets. This strategy intends to innovate by safeguarding the economic, environmental and social sustainability and guaranteeing equal opportunities for participation. In 2022, more than 45% of Italian companies adopted forms of remote working, allowing their employees to work from home at least one day a week. Italy also ranks third in terms of readiness for 5G. Investments in telecommunications, networks, software, automation and other technological infrastructures, which are essential for reaching European targets, must be accompanied by the spread of a culture and training that will enable the new technologies, which in turn are oriented towards a sustainable and circular economy, as well as hinging on digitisation and artificial intelligence.

The NRRP intends to direct 22% of the available funds towards a major digital acceleration in the country, as a lever to give a decisive boost to the country's competitiveness. By virtue of their relationship with the public administration and SMEs, utilities play an important role in supporting digital transformation, in particular through digital services for optimising the yield of production processes, but also through sensors installed for data collection and analysis, without forgetting connected machinery for automatic task performance and predictive maintenance. Examples of this can be found in the various applications in the relevant businesses, such as data-driven energy management solutions, thanks to connected and smart-sensor-equipped systems and devices inside public buildings, or sensors and smart devices distributed throughout the territory, coordinated and integrated by digital platforms that process the generated big data for resource planning and service optimisation. The widespread presence of digital technology affects all aspects of business operations, extending the changes to the point of translating into additional and new value-added services.

The increase in infrastructural requirements, which continues to drive the demand for investment in connectivity and remote collaboration tools, for utilities focuses on the need for connectivity and security applied to remote working and also multi-channel interaction with the customer, without forgetting the management and sensitisation of infrastructures across the area served. The digitisation process is also fuelled by incremental investments in Artificial Intelligence and hyper-automation, Internet of Things and Internet of Behaviors (IoB), distributed cloud and 5G. Operation technology (OT) or remote management, which had developed over the past few years as a niche area limited to plant effectiveness and with little attention to cybersecurity aspects, requires companies to increase investments in order to reduce system fragility. In this context, it is essential to continue to deploy all available technological skills and resources to increase the level of protection and attention to cybersecurity risks, in order to counter threats and minimise possible consequences. Customers in all sectors, who are increasingly inclined to interact through digital channels, expect real-time responses and uninterrupted service availability, and therefore the advantage goes to the most proactive suppliers in terms of attention to behaviour and optimisation of consumption, but also, increasingly, additional services such as smart house and e-mobility.

Cloud platforms have made high-performance connectivity available and enabled significant infrastructural economies of scale for exponential technology development, optimising the use of time. The availability of processing power also drives the spread of Artificial Intelligence and Robotic Process Automation applications with integrated Artificial Intelligence (IRPA), which are useful for making the most appropriate decisions on actions to be taken. The identification and formalisation of managerial processes that combine human and automated activities, balancing them according to the value added to the process, is therefore one of the issues to which all organisations will have to pay particular attention, not only in terms of organisational design, but also from the point of view of training and managerial monitoring.

The added value of a resilient workforce

The enhancement of the human component is also fundamental for a balance between technology and people, focusing the organisation of resources on value-added activities, according to a pattern of intelligent integration, which is not limited to mere cost efficiency and purely replacements, but rather fits into the broader horizon of the Just Transition targeted by the European Union. The current historical moment has emphasised the need to address the priorities towards which corporate culture, leadership styles and models must be directed. The strong acceleration of the digital transformation confirms the need for an increasingly sensitive approach to relational aspects. When dealing with the consolidation of remote working, therefore, the ability of companies to develop distinctive and inclusive communities is a critical factor in their success, and its consolidation reduces the risk of the weakening of relational capital resulting from an irrational use of remote working. Repositioning individual priorities towards an all-round concept of individual well-being and the increased search for flexibility, combined with a growing need for work-life integration, are driving companies to seek constant alignment between individual and collective purpose.

The digital workplace transformation and the interconnection on a single platform allow people to interact, share information and gain knowledge and skills. Research by the World Economic Forum in the energy and utilities sector, however, shows that 11.8% of workers are at risk of redeployment, with only 51% of them successfully re-employed. The socio-demographic evolution characterised by a lower birth rate and an increasing incidence of migration will also lead to an increase in the co-presence of different generations within organisations and an increasing focus on diversity and inclusion issues. The ongoing technological, energy and environmental transitions, together with the evolution of organisational models

and ways of working, have an impact on the evolution of skills and learning models, but also on a concept of leadership based on authenticity, autonomy and transparency, on performance management beyond the boundaries of space and time, and on a greater search for agility and participation in work regulations. The emerging roles on which to focus training investments will depend on skills related to digital transformation, energy transition (with a focus on decarbonisation and renewable energies), the environmental transition (with a focus on circular economy, climate change and green finance) and, last but not least, problem solving and self-management, thus underlining the increased importance of "soft skills". The technological ability to acquire huge amounts of data makes it even more important to invest in the human ability to read it and make it "speak", so that it can generate the expected value. At the same time, while the increasingly pervasive adoption of remote collaboration tools has created a change in the way of working and measuring performance, the ability to provide an environment that is also connected in terms of human relations becomes, for this very reason, sought after and valued. The wider presence of performance management skills, through rooted trust, responsibility, motivation and autonomy, is necessary to ensure the achievement of objectives in a context in which the working time factor is becoming less and less important compared to the result, and has proved to be crucial. Employer branding, moreover, will be decisive in attracting and retaining talent; engagement and inclusion, interconnected by the idea that each person must be valued and encouraged to express his or her potential, are fundamental to maximising performance.
In order to generate value for people, it seems increasingly important to move towards structured data governance and to develop sustainable and circular behaviour. Enabling experiences and paths in training and development that are increasingly defined by a rationale of individual and collective responsibility will make it possible to face future scenarios that are changing and not always predictable. Flexible organisational models used to increase agility and resilience, individual empowerment actions, accompanied by a rethinking of working methods, the reinterpretation of space and time, and the well-being of people, are therefore drivers for the valorisation of human capital and as a consequence for increased productivity. In this respect, the creation of fair and inclusive environments is essential for the responsible financial community, and the commitment to promoting policies of inclusion and protecting diversity must increasingly translate into a fight against discrimination in the workplace.

1.01.02 Strategic approach and management policies

Scenario analysis is a methodology for defining useful inputs for strategic plans to increase the effectiveness of the business model over time.
This type of analysis involves a process aimed at testing a strategy's resilience under different assumptions describing possible future states. For the Hera Group, it is essential to analyse the potential impact, positive or negative, of various economic-financial, business, regulatory, competitive, environmental, technological and human capital scenarios that are different from each other, but equally plausible and internally consistent.
The study of scenarios has also been applied to climate change, in order to understand how physical and transitional climate opportunities and risks may plausibly affect business and its various areas over time.

The reference framework within which the Group's strategy has been developed in the various areas consists of three areas:

- **the environment**, in order to respond in a concrete way to the threats linked to climate change, by regenerating resources and strengthening the resilience of the assets managed, favouring the energy transition and aiming at carbon neutrality;
- **socio-economic factors**, in order to match developments in the Group's size with the generation of an increasing portion of shared value, to positively affect the well-being and prosperity of stakeholders and the areas served;
- **innovation**, to drive the evolution of the Group's activities, thanks to the opportunities offered by the most advanced technologies and digitalisation, with the aim of increasing the efficiency and quality of the services provided, multiplying opportunities for stakeholder engagement and accelerating the spread of behaviours and skills capable of responding to the challenges of a constantly evolving context.

Macroeconomy and finance

The debt structure towards which the Hera Group is oriented responds to its business needs, not only in terms of the duration of loans, but also in terms of interest rate exposure. The Group's financial strategy, in turn, is aimed at maximising its return profile while maintaining a prudent risk strategy.

Financial planning

The scenario projected in the Plan expects the Group's financial structure to maintain, in 2026, 20% of variable-rate debt and 80% of fixed-rate debt, within the limits of the financial risk policy. These projections are part of a well-pondered long-term planning of the necessary financial resources, which Hera carries out by analysing and monitoring cash flows, paying attention to maintaining a flexible and efficient debt structure. The average cost of debt, in particular, is constantly monitored, both through financial risk management activities which, in order to limit the risk of interest rate fluctuations, include the use of derivative instruments, and through assessments of liability management operations aimed at seizing favourable market opportunities and maintaining a debt repayment profile that is evenly distributed over time. One challenging objective for the upcoming years, falling under the Plan, within a scenario that includes rising rates and a highly volatile market, is to contain the average cost of debt through liability and financial risk management activities. The Plan confirms the Group's desire to meet financial requirements through fixed-rate bond issues, including green and/or sustainable bonds, taking advantage of any opportunities for subsidised finance, in order to respond to the Group's investment needs with further gains in efficiency and thus guarantee the implementation of innovative and sustainable projects in the environmental, water and energy sectors. The funding strategy is reflected by the actions included in the Business plan for projects to reduce greenhouse gas emissions and increase the amount of recycled plastic.

Credit ratings

Most of the Group's business is concentrated in Italy, and its rating is thus closely linked to the country's rating, its macroeconomic trends and its political scenario. Hera's actions and strategies remain oriented towards maintaining and improving adequate ratings; its usual communication with the rating agencies Moody's and Standard & Poor's (S&P) has confirmed positive feedback in terms of the solidity and excellent balance of its business portfolio, as well as in terms of excellent operating performance, efficient and proactive risk management and resilient creditworthiness indicators. In 2022, in particular, Moody's and S&P ratings were confirmed respectively at BAA2, with an outlook going from stable to negative which reflects the worsening of the sovereign rating outlook (since, despite the Group's business being recognised as sound and sustainable, a company's rating cannot be 1 notch higher than that of the country in which it operates), and BBB+ with a stable outlook. The rating obtained is among the highest in the multi-utility sector at European level and is higher than the sovereign rating, confirming the path of growth implemented over the years and the results in line with multi-year expectations.

Sustainable financial reporting

Over the period covered by the plan, the ongoing adoption of sustainable financial reporting best practices will support the Group's green financing and ratings. Hera has already been committed to green funding for some time: it was the first Italian company to issue a green bond in 2014, which was followed by an ESG-linked loan in 2018. In 2019, it adopted a Green Financing Framework (GFF), accompanied by a further green bond issue. An expected further improvement in sustainability ratings, in turn, will make it even easier to access lines dedicated to sustainable financing, characterised by potentially lower costs than traditional credit lines. Consistently with these guidelines, the Group is also in the process of implementing the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) coming from the Financial Stability Board, which foresee the definition of climate scenarios, risks and opportunities related to climate change, as well as processes for managing these risks, and the definition of targets for reducing climate-changing emissions.

In this context, becoming part of the Dow Jones Sustainability Index (DJSI), the first index to track the financial performance of the world's leading companies in terms of sustainability, bears witness to the validity and credibility of the path taken by the Hera Group, opening up further developments. Recognitions of this type, in fact, act above all as a stimulus and allow Hera to identify the areas to be developed for further improvement in its performance and, at the same time, to include among its reference investors those who are engaged in socially responsible investing (SRI), a segment that, as mentioned above, is undergoing considerable and continuous expansion.

Business areas and industrial strategy

The Group's 2022-2026 Business Plan, approved in February 2023, was drafted with respect to a complex external context, strongly disrupted by the geopolitical and energy crisis. Faced with such a challenging scenario, the Group's strategy to 2026 confirms the strategic aspects of its previous planning, putting the focus back on its synergic relationship with its reference areas, thanks to significant investments in projects capable of effectively responding to the main macro-trends of the utility sector: ecological transition, innovation, cohesion and social development.

To orient the ecological transition, the Group's plan focuses on reducing climate-changing emissions, the circular economy and resilience in services, to improve their quality and continuity.

The Hera Group's strategy is also developed thanks to a solid contribution coming from innovation, by adopting technological solutions that will make it possible to know and monitor customers' needs and adapting existing services to their requirements, and to optimise the management of the assets, rationalising their maintenance.

Free-market businesses

In the free-market businesses of the energy sector, the Group aims to consolidate its national position through a gradual increase in its customer base, reaching the target of four million energy customers by 2026. This goal will be pursued by strengthening and enhancing the portfolio of value-added services offered, with increasingly advanced solutions to enable and support customers in the path towards the energy transition. Examples of this include offers for monitoring and reducing waste, including the sale of smart thermostats, and those aimed at increasing energy efficiency. The Group's innovative service package also includes the sale of charging stations for sustainable mobility and the design, sale and installation of photovoltaic systems.
The customer base will also be expanded by taking advantage of the opportunities arising from the termination of the protected electricity service, which is scheduled to come to an end for household customers in January 2024.
Innovation will be a key element in enabling the evolution of the relationship between sellers and customers towards new standards of quality and satisfaction. This will be possible thanks to customised offers that will leverage the data collected by second-generation meters and the introduction of artificial intelligence solutions supporting the various business applications used in customer relations.
In the energy services business, the Group aims to grasp the new energy efficiency opportunities that will emerge in particular in the public administration segment, thanks to the NRRP and national energy saving targets.

With regard to the waste treatment and recovery business, the Group intends to consolidate its leadership by leveraging plant and industrial development, as well as commercial development in the industrial waste and recovery sectors. In the latter area, Hera, acting through its subsidiary Aliplast, will develop new projects both to expand plant capacity in segments already covered, such as the production of recycled PETs for food use and recycled polymers for cosmetics and food, as well as in narrower and more innovative segments. In particular, two new plants will be built, with state-of-the-art technology, also partially financed by the NRRP: work on both a carbon fibre regeneration plant in Imola (BO) and a rigid plastics recovery plant in Modena will begin during the period covered by the Plan.

In terms of commercial development, the Global Waste Management solutions offered to industrial customers will also be strengthened, with customised services covering the entire waste cycle, water resource management and energy services, fully exploiting the synergies between the various businesses covered by the Group. Furthermore, customers will be offered the means with which to improve the circularity of their production and logistics activities, with the aim of reducing waste production or changing its nature towards higher-value types of waste. Lastly, development in the remediation sector is expected to be accelerated by ongoing corporate acquisitions.

Regulated businesses

As regards regulated businesses, our strategy for the coming years will be based on innovation and digitalisation, intended to increase the resilience of the infrastructures managed and to improve operations, benefiting the service offered to the Group's customers.
For example, the use of predictive maintenance and functional modelling models will make it possible to classify, plan and better gauge the interventions necessary for the range of networks managed, with benefits both of an economic nature and concerning system resilience.

In gas and electricity distribution, a drive towards innovation will come from installing approximately 410 thousand second-generation (2G) electricity meters, which will allow for a more precise measurement of consumption, and around 300 thousand NexMeter gas smart meters, patented by Hera, having advanced safety functions in the event of leaks or earthquakes, and which can also be used for green gas mixtures.
During the period covered by the Plan, the Group will further evolve its businesses towards decarbonisation, through investments in innovative and circular projects involving renewable gases, from the production phase to their final use, and at supporting the electrification of consumption and an increase in distributed generation. For example, the Power-to-Gas plant is scheduled to become managerial at the Idar purification plant in Bologna Corticella, which will use wastewater and electricity originating from renewable sources to produce biomethane and oxygen.

In the water cycle, work will continue on making networks more resilient to climate change, smarter in terms of automation and remote monitoring of assets, and more efficient in the management of water resources. The district-based programme for the aqueduct will be developed and extended, which allows the condition of the pipelines within portions of the water network (districts) to be constantly controlled, thanks to a precise monitoring system that provides data that can also offer indications on the presence of hidden leaks, as well as remote pressure regulation. Concerning the sustainable management of water resources, various circular economy initiatives have been planned for saving, reusing and recovering water, both at customers' premises and at the Group's assets and sites, including through the effective optimisation of sewage sludge management and recycling materials from water cycle waste with dedicated plants and innovative tools.

In district heating, investments will mainly be focused on projects aimed at developing and optimising existing systems and maximising the use of renewable heat. In this sense, the main efficiency-enhancing project, awarded NRRP funds, consists in the interconnection between two district heating systems in Bologna, the S. Giacomo facility (fed by a cogeneration plant with a gas integration boiler) and the Caab Pilastro system.

Lastly, in the municipal waste business, the Group will confirm its commitment to achieving ambitious recycling targets, by improving the quality of sorted waste collection. On the one hand, new communication campaigns and citizen engagement initiatives will be launched, with a focus on single-use plastics and packaging, as well as actions countering abandonment and degradation. On the other, the planned change for all Emilia-Romagna municipalities to unit pricing systems within the time covered by the Plan will also play an important role. As a further support to the virtuous behaviour of citizens, more than 60,000 smarty bins will be made available, which can be monitored remotely and in real time (by a control room) in order to improve this service and optimise operator interventions.

Key figures for the Group

The industrial strategy described thus far makes it possible to project growth in the Group's Ebitda at 2026 coming to over 250 million euro, compared to the final figure for 2021, in order to reach the 1,470 million euro at the end of the time covered by the Plan. This development will follow a solid, sustainable and balanced path, fuelled both by internal and external lines, consistent with Hera's history and its industrial evolution over the years. Investments coming to approximately 4.1 billion euro have been planned over the five years, an amount significantly higher (approximately +53%) than the average seen during the last five years and also higher than the amount set out in the previous plan. These investments will be supported by more than 130 million euro of NRRP funding among the calls for tenders already assigned, which will allow for more rapid interventions for the ecological transition in the areas served, demonstrating that the Group's strategy is fully in line with national and European policies concerning sustainability. The margins created during the time covered by the Plan will make it possible to respect the significant financial commitment required in terms of investments, also enabling the ratio between net debt and Ebitda to be brought back below 3x, starting from 2025, thus confirming the Group's solidity.

By 2026, 62% of the Group's total Ebitda will contribute to creating shared value, fuelled by approximately 2.8 billion euro in investments over the period covered by the Plan (equivalent to 70% of the total amount of investments planned for the five-year period), a target in line with the Group's 2030 objective of increasing the amount of Shared Value Ebitda to 70%. The Plan to 2026 also confirms the convergence of the path towards the other 2030 targets that Hera is pursuing regarding carbon neutrality and the circular economy, including the ambitious 37% emissions reduction target (compared to 2019, with SBTi validation) and a +150% increase in recycled plastics (compared to 2017).

Utilities are called upon to develop strategies able to effectively orient the challenges and the priorities of the coming years. Hera's strategy has always been based on a close relationship with the areas served and its own ecosystem. The evolution of this context, in its economic, political, local and technological aspects, affects the Group's activities across the board and influences the guidelines that will characterise their evolution, leading towards increased resilience and accelerating the evolution of its corporate culture. Local areas are the focus of the Group's strategic plan, which can be subdivided into various areas of action:

Local areas

- **Energy Transition**, the path to economic growth and sustainability for the green transition;
- **Resilience**, confirmed and strengthened through the evolution of the enterprise risk management model;
- **Regeneration**, including a project for the reuse of soil and demolition materials;
- **Technology**, understood as harnessing the enormous amount of data available and its use in Artificial Intelligence projects, and for the enhancement of cyber security monitoring tools;
- **Community**, and tools for listening to and communicating with the reference area, considered fundamental for wellbeing, and aimed at consolidating relations with stakeholders and generating the engagement necessary for the success of initiatives;
- **Human resources**, enhancing the development of the individual and guiding the evolution of the way of working;
- **Opportunity**, in terms of growth in size, as well as green gas development, an opportunity to exploit synergies between the different businesses managed, including extending laboratories towards the external market by exploiting the experience and know-how acquired.

See the following paragraphs for further details about the strategic actions mentioned above, and the attention towards human capital implied by each of them.

Climate and the environment: sustainable development

Shared value framework

Hera's shared value framework, introduced in 2016, has oriented the Group's strategy towards growth based on responses to the problems of the external context, capable of maximising shared value, both for the company and for the community. Creating shared value is the perspective that integrates an orientation towards sustainability into the very heart of the Group's strategic approach.

The latest revision of this model includes the topics of resilience and adaptation to climate change, drinking water (included within the scope of sustainable management of water resources) and biodiversity. These are issues to which the Group has been committed for years, which complement the other dimensions of Hera's framework (such as the circular economy and sustainable management of water resources). The Group's objective is to create shared value through business activities that are strongly integrated into the socio-economic fabric of the communities served, generate operating margins and respond to the drivers of the Global Agenda, i.e. the calls to action for change indicated by policies at a global, European, national and local level. The year 2022 confirmed the validity of the initiatives already launched by the UN Global Agenda to 2030 to respond to the megatrends in place: fragile planet, technological disruption and accelerated urbanisation were considered the most closely linked to Hera's business, having a direct impact on corporate activities. Hera's contribution is most significant for seven sustainable development goals on the 2030 Agenda: 6) clean water and sanitation, 7) clean and affordable energy, 9) business, innovation and infrastructure, 11) sustainable cities and communities, 12) responsible consumption and production, 13) combating climate change and 17) partnership for the goals.

The Group's website (www.gruppohera.it/gruppo/sostenibilità) and its Sustainability Report (Sustainable Strategy and Shared Value section) offer further details on the actions that the Group intends to promote

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by contributing in a broad sense to the 17 Goals of the UN 2030 Agenda. Also note that the Group has set itself clear industrial objectives for both 2026 and 2030, to make a significant contribution to achieving carbon neutrality. The main elements include energy efficiency solutions applied both within the Group's operations and to customers (by valorising multi-business assets), the development of new renewable plants, the sale of green energy to customers and, as mentioned above, a strong commitment to reduce carbon dioxide emissions from the industrial chain, reaching 37% by 2030 (compared to 2019), calculated according to Science Based Target references.
In order to foster a culture linked to these SDGs among the Group's entire workforce, dedicated training events have been made available on its corporate training platform, concerning the circular economy in particular; the UN agenda is also part of training for all newly hired employees. The main actions include those aimed at promoting energy efficiency, sustainable management of water resources, the selection of suppliers with qualifications in terms of environmental and social sustainability aspects, the development of employment and new skills, and a broader use of innovation and digitalisation. Awareness of the significance of climate change is considered by the Group to be the first necessary step towards incorporating precise responses to the resulting risks and opportunities into its corporate strategy, consequently reflecting the effects of these responses in the drafting its multi-year plans.

Energy transition and Opportunities

Among the initiatives identified to seize the opportunities emerging from an analysis of the climate scenarios hypothesised, the most promising were included in the Business Plan to 2026, which also reflects the mitigation actions identified in response to the risks defined. In particular, the Group's strategy to implement climate change mitigation mainly consists of:

- choosing renewable electricity to power its own activities and to promote dedicated business solutions for customers; examples include the plans to install photovoltaic systems at Group sites and other suitable areas, and the launch of the first energy community projects;
- increasing the production of energy from renewable sources (in particular geothermal and biomethane, in relation to which, at the Sant'Agata Bolognese plant, performances exceeding expectations continue to be obtained);
- offering solutions to reduce the carbon footprint of customers in all segments (households, condominiums, businesses and public administrations, for example by setting Business Plan targets that aim to involve customers in replacing boilers with a high environmental impact);
- initiatives and projects to reduce the carbon footprint, such as the technological and regulatory feasibility studies to produce green hydrogen through water electrolysis, using the share of renewable energy generated by WTEs, or connecting the two district heating systems in the Bologna area that are currently separate, from which a single, more resilient, efficient and saturated district heating network will emerge (Power-to-gas plant);
- implementing technological innovation projects and initiatives for greater environmental sustainability in the Group's activities, such as optimising the mix with which district heating heat is generated to increase the portion produced from renewable sources, extending the district heating programme for the water network, and extending public lighting with smart, consumption-conscious solutions. Also confirmed during the period covered by the Plan are revamping and automation interventions of some networks and district heating systems, of primary electricity substations, as well as the roboticization of about 1,200 secondary substations ("Apennine resilience plan", which will address resilience with a view to mitigating the risks identified in the area of electricity distribution).

In order to support the energy transition to which society is called, the Hera Group essentially plans actions aimed at increasing the incidence of energy efficiency among the various user categories, as well as exploiting every possible form of renewable energy.
Actions to reduce energy consumption within the Group's perimeter (-8.6% to 2026 compared to 2013) will therefore continue with renewed impetus.

Regeneration & resilience

The resilience of networks and plants, recycling, separate waste collection, purification and sewage, and saving water resources guide specific projects in the various sectors. By way of example, the design and execution phases of engineering works show a progressive focus on sustainability issues, reducing the environmental footprint and minimising the use of virgin soil. Building information modelling (BIM) technology, which makes material analysis possible (even during plant demolition), allows for maximum recycling and reuse and extends the circular approach to the end-of-life of the work. The development of plastic recycling, in terms of increasing the recycling capacity of flexible plastics, in addition to building plants for recycling new types of plastics (rigid and carbon fibres) and processing plastics and paper, and an increase in the production of biomethane, foreseen in the period covered by the Plan, are increasingly oriented towards giving new value to the organic portion of solid municipal waste. The rationale underlying circularity also involves the Group's main purchasing processes: Hera's strategic approach involves an increasing focus on materials or goods that meet the principles of the circular economy and extends the adoption of minimum environmental criteria (MC) to the definition of product characteristics, not only to components for water connections but also to other standard elements of the networks such as gas and water reducers and sewer lifts.

The Group confirms its commitment to widely adopting circular economy solutions with medium- and long-term industrial objectives and projects based on defined deadlines, through technological and behavioural solutions. These solutions are oriented towards improving the volume and quality of sorted waste collection, providing new plant capacity for the treatment, recovery and recycling of special urban waste (including through partnerships in the local area), revamping of sludge treatment plants, the recovery of sand from the integrated water cycle waste for subsequent reuse, and lastly technology, to maximise the reuse of water resources and for advanced plant engineering for purification quality, including through technological upgrading of dewatering systems. Actions to increase the resilience of the Group's activities also include the installation of remote-controlled accessories and sensors in all networks (to ensure remote monitoring and management), the installation of smart meters for each business, and the implementation of programming and modelling tools based on artificial intelligence to anticipate critical events or optimise maintenance.

To benefit the wider use of circular models, greater attention will also be paid to the various customer engagement tools, so as to use the different communication/dissemination channels according to the features of the various geographical areas, as well as to improve and expand the tools already in place by paying attention to the different types of customers.

The campaign to raise awareness of environmental challenges will continue to involve schoolchildren (environmental education projects), and will be carried out through the main media at a local level (press tour on environmental issues).

Opportunity

Decarbonisation policies reduce dependence on fossil fuels and therefore contribute to guaranteeing the security of the system. The Group's plant assets also have further potential to seize opportunities related to the development of new renewable energy vectors, such as hydrogen. The Group intends to become involved in the various phases of this chain, and is launching experimental projects in this direction. In the sustainable hydrogen production phase, a circular solution comes from synergies between the electrolytic process and the water purification process, with multiple circular flows of material between the two activities (oxygen as input for purification and biogas from sewage sludge as material for hydrogen methanation). The Group's Waste-to-Energy plants will be able to use biogenic electricity (considered renewable) to power electrolysers capable of obtaining hydrogen for industrial customers, mobility or the distribution network. Once again with reference to gas distribution, experiments are underway on the Group's assets to assess the optimal blending percentage between methane and hydrogen for the operation of cogeneration assets and plants for industrial and household users. Finally, note the project to install the latest generation of "NexMeter" gas meters, suitable for measuring hydrogen/methane mixtures, as described in the paragraphs above.

For Hera, the need to guarantee quality and continuity in essential services in such a changing context, subject to increased climate risks, represents a cost, but at the same time an opportunity. The necessary increase in investments to improve the resilience of its assets puts the Group, thanks to its solidity and financial capacity, in an advantageous position compared to smaller competitors, who could face greater difficulties in dealing with such a volume of investments. In addition, internal reinforcement, accompanied by growth through external lines and tenders, allows the Group to seize opportunities for development in the most effective way. In this regard, further consolidations in the waste management and energy businesses are envisaged in period covered by the Plan, which will allow for synergies in activities complementary to those of the Group. This involves an expansion of the Group's range of services while, as regards the energy markets, Hera Comm, which has already been awarded two lots for the protected electricity service, is awaiting the tenders scheduled for 2023 for the 2023-2024 and 2024-2025 thermal years for the last resort gas and default gas markets. Further tenders in the regulated markets are possible in the period cover by the Plan. Many of the Group's projects fall within the financing scope of the NRRP and are related to the circular economy. Their objectives include the improvement and mechanisation of the urban waste collection network, and the construction, modernisation and expansion of treatment plants for waste sorting, sewage sludge, leather and textile waste.

Several tenders concerning the Group are expected to be issued in the coming months.

In other words, the Group aims to make the most of the opportunities offered by technological evolution and digitalisation to extract innovations, managerial improvements, cost efficiencies and synergies related to data management, in order to meet the needs of the local area and stakeholders, to take a leading role in the provision of services and to accompany cities towards new development models, overseeing each technological upgrade by analysing its impacts and mitigating its side effects.

Technology and human capital: innovation

A strategy moving towards green innovation

Advances in the chemical and engineering industries are at the forefront of technological development in production processes, and concern the waste management (first and foremost plastics) and energy (biogas and biofuels) sectors. This is where the search for concrete solutions may prove to be instrumental adapting to climate change or countering the depletion of natural resources. The Group strategically exploits these advances in order to identify plastic recycling processes that can flank mechanical procedures and make the process effective even for less pure and less valuable types of plastic. The same advances make it possible, for example, to experiment with solutions that use excess renewable electricity (otherwise unusable) to split molecules into hydrogen and oxygen and then convert the result into synthetic methane gas by adding carbon (from CO_2).

Digital strategy

Hera has adopted a Group strategy to exploit all available information and to be able to guarantee the quality and exchange of data flows. The principles that have guided the implementation of the strategy are those of an organisational approach to data architecture, which is articulated in the organisation of information by "domains", development according to a product strategy, on a self-service technology platform and with the adoption of a federated governance model.
The Group's data strategy model and related guidelines are included in training courses dedicated to individual business units, with the aim of spreading the strategic plan at all levels. In order to increase the ability to intercept anomalous events, the data sources used with the convergence between the management environment (applications) and the industrial environment (Group plants) must be continuously extended. Vulnerability assessment activities on both environments, aimed at preventing attacks on systems and plants, are fundamental; to this end, the model envisages distributed actions and responsibilities, and it will be further strengthened in the period covered by the Plan, through projects aimed at increasing monitoring capacity and the evolution of prevention tools.

The utility sector is fragmented and characterised by strong technological gaps, the resolution of which is necessary to comply with the new European directives. In order to consolidate its role in the Italian utility sector, Hera intends to leverage the specialisations built up over time, through the implementation of new analytical methods and the development of automation and process digitisation projects. The main pillars for developing the digitisation of the Group's activities include:

- more sensors in the field of operation and thus greater control capacity, through the enhancement of remote monitoring, the installation of smart meters in the various businesses and the expansion of predictive maintenance systems;
- digital customers, both in terms of making personalised offers to customers through the management of 2G meters, and through artificial intelligence applied to sales channels and customer interaction;
- data strategy, aimed at exploiting all available information and ensuring the quality and exchange of data flows, i.e. creating the first data products;
- reporting on digital transformation initiatives according to the corporate digital responsibility (CDR) framework.

Further developments in digitalisation include the definition of a specific training plan to strengthen employees' skills in innovation and sustainability, the continuation of data analytics projects and artificial intelligence to support the circular economy and energy transition, as will be explained below in the strategies for human capital development.

Digital transformation processes will cover various business areas, in order to make the most of the opportunities offered by new technologies. In the sales business (energy and gas), for example, customer acquisition activities will be supported by advanced digital marketing tools; the technological infrastructures of the billing processes will be renewed to optimise the "meter to cash" process; and, to enhance customer centricity, a new customer relationship management platform will be implemented. The "more control" offer was also introduced, through which customers equipped with second-generation electricity meters will be able to monitor their energy consumption hour by hour via app, and will be able to see the next day's cheapest energy hours. In distribution (water, gas and electricity networks) and collection (waste) businesses, the implementation of advanced functionalities aimed at improving the effectiveness of the service is planned, such as predictive maintenance, the sharing of managerial progress with municipalities through the development of a dual system, or the implementation of virtual control for containers, in order to optimise their maintenance.

Technology

Data strategy is increasingly designed in such a way as to transform the Group into a data-driven company, where decisions guided by data, valued as a corporate asset and subject to an ethical and conscious reading, highlight the growing importance of data management and resources dedicated to its protection.

In 2022, international geopolitical events related to the Russia-Ukraine conflict led the national cybersecurity agency to raise the cybersecurity alert level, which forced Hera to increase the monitoring carried out by the Group's Security Operation Centre (SOC). Cyber security initiatives have continued and will be renewed in terms of technologies, processes and people. In the area of technologies, interventions are aimed at improving the security of mobile devices (smartphones and tablets) and controlling access to cloud services. For the security of smartphones and tablets, a solution was implemented for real-time monitoring (centralised at the Group SOC) of 80% of the company's devices. For the protection of access to cloud services, a cloud access security broker solution is planned, and event monitoring is centralised at the SOC. The group's cybersecurity monitoring service has also been enhanced with additional dedicated tool consoles; moreover, following the installation of probes in the industrial environment, visibility on the various operating contexts, particularly water and electricity, has increased. The evolution of the regulatory system also continued in 2022, with the revision and publication of the Security by Design procedure in each project, accompanied by the publication of mandatory training videos.
In order to ensure the security monitoring of systems, vulnerability assessment and penetration testing activities are constantly implemented, particularly of Group services exposed on the Internet.
With regard to people, who represent the human factor in the chain of cyber-attacks, awareness activities continue to be planned through a dedicated online training platform, extended to the entire corporate population, as well as monthly adaptive ethical phishing exercises. In addition, in the area of cyber security for industrial plants, an ad hoc training course was set up and a technical document was defined on cyber security controls in the area of operation technology to support the design of new plants.

The evolution of technology and digitalisation, calling for continuous development of employee skills and the consequent training needs, confirms the Group's strategic decision to introduce cloud-based platforms to increase individual productivity and as the main tools for collaboration, since cooperation between man and technology requires continuous evolution in the way we work. With this in mind, process automation projects (virtual factories and digital labs) encourage a wider awareness of technological integration, focusing on initiatives to apply artificial intelligence and enhance the community, through digital workplace tools.
The Group intends to use data to generate value for people and for its business; the gradual digitalisation of human resources management processes, as well as the creation of a reference architecture to integrate systems and data available by using a prescriptive analytics approach, confirm this intention.

Community and human resources

SR

In the context of the current transitions, the human resources development guidelines are constantly updated in order to address the priorities within the Next GeneHERAtion Growth model, and guide corporate policies. After observing the external context, the Group has confirmed investments with the following strategic objectives:

- people development;
- people engagement;
- increasingly agile and flexible approach to organisational and operational models and the evolution of regulatory tools;
- evolution of skills to support the current energy, environmental and digital transition by seeking possible integrations between the different dimensions considered;
- technologies, to enhance the contribution of each individual through the conscious development of technological innovation, following a human-centred rationale.

In order to encourage ethical values and behaviour that can represent a distinctive model for the Group, a result-oriented culture is increasingly fostered, as well as relations between individuals and widespread leadership. The Group's programmes on culture and an agile approach to improving performance, through deeply rooted trust, responsibility, autonomy and work ethics, are guided by the continuous development of a work by objectives culture. As part of the Group’s strategy, it is fundamental to make everyone perceive how their work and their sense of belonging are correlated to the company’s overall results and performance and, consistently with this, the development of a talent attraction strategy guided by the company’s purpose is fundamental. In order to enable everyone to express their potential and accelerate the organisation’s growth, favouring harmony between work and private life and guaranteeing an ethical approach to work, welfare initiatives dedicated to individual physical, psychological and financial wellbeing will continue, in line with the priorities identified by continuously listening to people and with the aim of enhancing their wellbeing. As regards digital transition, the “HER@futura” programme will be followed up on, as mentioned among the previous development pillars for digitalisation, by introducing increasingly innovative and customised initiatives to develop digital culture, processes and skills, increasing the level of digital proficiency at all levels of the organisation and integrating aspects of corporate digital responsibility in the execution of projects and business processes.
In order to consolidate awareness of the Digital Workplace, the dissemination of the use of Microsoft 365 tools among the entire corporate population, segmented by target audience, and the implementation of new projects for the digitisation and automation of business processes will continue to be promoted. With the aim of consolidating the transfer and wider spread of technological knowledge within the Group, specific initiatives aimed at further stimulating the application of new technologies and methodologies will also continue through partnerships with universities, suppliers, start-ups and innovative training centres.

Therefore, moving towards a virtuous integration between people and technology remains central. The objective is to make each person a protagonist along the path of process automation and virtualisation, enhancing the skills of individuals to improve the daily work experience of the workforce.

In order to go beyond the concept of equality and achieve true equity in treatment, thus recognising individual specificities, the Group will continue to evolve its performance management, with the aim of making dialogue between team leader and team member increasingly effective, orienting it towards accountability regarding measurable objectives and greater delegation and autonomy in the organisation of work-related activities. This result management-oriented path will be further consolidated through a series of initiatives. The Group, also in this regard, is continuing its path of progressive digitalisation, which enables it to encourage experiences, training, development and career paths in an increasingly self-determined manner, confirming a rationale based on individual and collective empowerment and guided by the company’s purpose. Human resources management and development processes are designed to preserve the skills and distinctive values built up over time and, at the same time, to develop individual talents, regardless of gender and age, seeking innovation in all aspects that can generate added and sustainable value over time. In order to develop people’s unique characteristics, targeted policies and programmes are foreseen to enhance inclusiveness and diversity, oriented at fostering a culture of innovation and continuous improvement. In this sense, structured and frequent engagement initiatives will be implemented in synergy with the biennial surveys on human resources satisfaction, and diversity monitoring methodologies will continue to be implemented as a tool for awareness and sensitisation and a development of the Group’s gender equality reporting model.
The expression of diverse individual potential constantly guides diversity & inclusion initiatives. Hera’s strategy hinges on the continuous development of an inclusive culture of diversity, understood as an engine for generating change, in which employees can benefit from a positive balance between development actions assigned to them by the manager and development actions in which the initiative instead starts from themselves. It is no coincidence that, in addition to retaining the figure of the Diversity Manager (introduced in 2011), Hera, a signatory of the “Utilitalia Pact - Diversity makes the difference”, promotes inclusive policies at all levels of the organisation, progressively refines measures to reconcile work-life time and adopts a merit management system that is not only transparent, but also and above all neutral with respect to gender, age and cultural diversity, with the adoption of systems aimed at monitoring progress and internal and external awareness policies. Artificial intelligence and digital tools are also now well established to analyse data emerging from listening initiatives that allow for in-depth analysis of employees’ level of satisfaction on issues related to the working environment and corporate values, and translate them into corrective actions in each employee’s reference department, but also through internal mobility between various departments.

The Group's strategy also contributes to the creation of value by accelerating the process of re-designing training activities from a blended learning point of view, the continuous evolution of professional academy progressions, the increasingly widespread use of a HerAcademy learning centre as a reference point for internal and external knowledge sharing, without forgetting other projects to further improve the level of employee engagement.

Consistently with its corporate path, the Group has planned multidisciplinary initiatives to develop projects consistent with the SDG framework, with particular reference to the circular economy, and to work in an ecosystem perspective with the various stakeholders, so as to converge towards common goals in terms of green economy. The broader adoption of a green culture and an approach oriented towards sustainability and circularity is a central element of the strategic plan and presupposes a path of cultural change that, since the previous year, has been supported by various project initiatives, processes of continuous updating of know-how and the expansion of the offer of specialised higher education, linked to the Group's core activities, to seize market opportunities and encourage the route towards the energy and environmental transition. Over the period covered by the Plan, the awareness-raising and skills-building processes already launched concerning the impacts related to Fit for 55, TCFD, EU Taxonomy and the continuous regulatory changes at European and national level will continue. The data of the "ecoHERA" assessment, carried out in 2022, will also be used to consolidate the indicators that measure and verify the level of proficiency achieved in both the energy transition and environmental transition fields, and to build the programme of transversal and vertical initiatives for strengthening the skills of the corporate population.

The objective of achieving results in terms of green economy in relation to the reduction of the Group's carbon footprint, by way of example, is shared through the enhancement of the contribution of remote working, through the enrichment of the green offer within the corporate welfare tools, and by raising awareness on green issues already at the time of hiring.

This integrated vision of technological evolution and employee experience, accompanied by the application of organisational network analysis, artificial intelligence and business intelligence tools, aims to foster the optimisation of organisational processes, human capital development and individual decision-making capabilities. The evolution of competences and roles according to the needs of the business, through a strategic dialogue between the areas of business and the function of human resources, enables a shared understanding of the meaning of the business challenges addressed by the business plan, but also a sense of the risks and opportunities.

1.02 RISK FACTORS: ACTORS, METHODOLOGY AND AREAS OF MANAGEMENT

1.02.01 Risk governance

The Hera Group's organizational structure is designed to uphold management effectiveness and profitability across the entire value chain while at the same time managing any risk exposure arising from its businesses.
Hera's corporate governance system enables strategies to be handled uniformly and consistently. The Risks Committee is the principal policy-making, monitoring and reporting organ for risk management strategies. Additionally, under article seven of the Self-Governance Code, the Controls and Risks Committee oversees the internal auditing system, the efficiency of corporate operations, the reliability of financial reporting and compliance with laws and regulations, as well as the protection of company assets. In order to maximise the consistency of the management strategy, these bodies meet periodically. During 2022, the Risks Committee met four times and the Controls and Risks Committee met seven times.

The Group has adopted a three-tier risk defence strategy, appropriately distinguishing between:

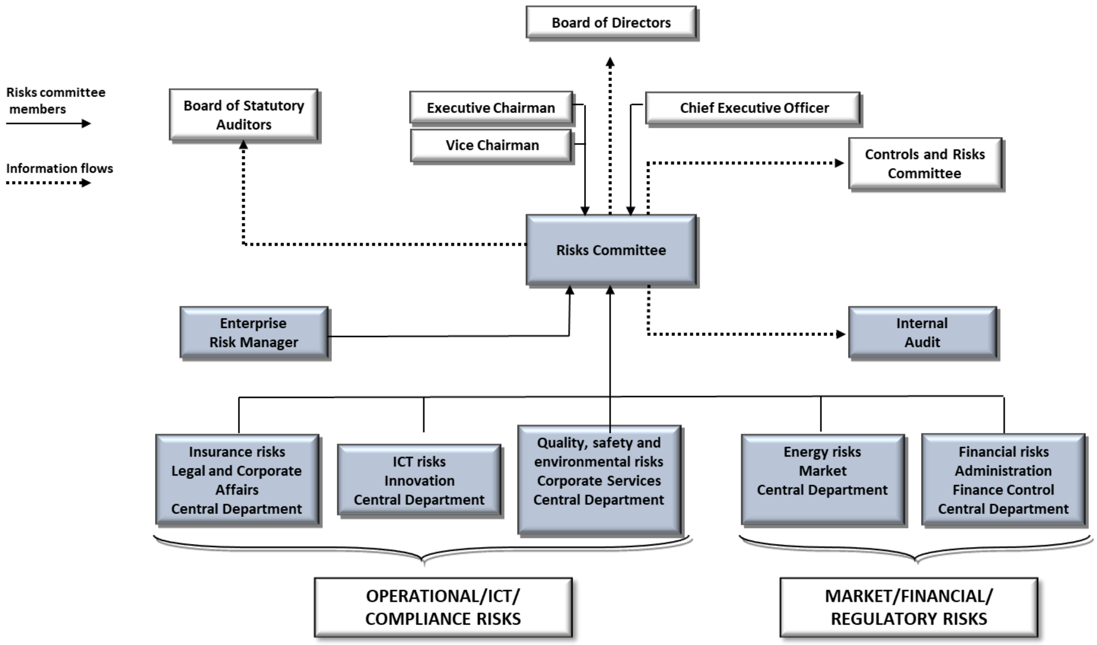
- the role of risk management, entrusted to the risk owners in charge of the various organizational sections;
- the role of risk guidance and control, entrusted to the Risks Committee, which relies on risk specialists who carry out second-level controls, i.e. who are responsible for defining, applying and updating risk analysis methodologies and carrying out control activities for the areas under their responsibility (review challenge and control);
- the role of assessing the effectiveness of risk management processes and the internal control and risk management system, entrusted to the Internal Auditing department.

The Risks Committee sets the general risk management guidelines, maps and monitors corporate risks, ensures that risk policies are set forth and outlines the information protocols targeted to the Controls and Risks Committee, the Internal Auditing management and the Statutory Auditors.

The Board of Directors approves the risk policies and measurement parameters, guides and assesses the adequacy of the internal control and risk management system. The Controls and Risks Committee supports the Board of Directors in defining internal control and risk management guidelines.

The Executive Chairman and the CEO supervise, each within their area of responsibility, the internal control and risk management functions. The Vice Chairman oversees coordination between the Risks Committee and the Controls and Risks Committee, maintaining an independent status.

The risk governance structure is outlined here below:



1.02.02 Management methodology

Hera has introduced the Enterprise Risk Management (ERM) process, to provide the Board of Directors with useful elements for assessing the nature of corporate risks and defining the Group's risk profile, particularly in the medium to long term. The definition of the risk profile is made explicit by the Board of Directors itself through the approval of the Group risk management policy and the risk limits established therein.

The risk management framework is formulated through three key elements:
- the **risk model,** which identifies the types of existing and emerging risks to which the Group is potentially exposed, and is subject to periodic review;
- the **Group's risk propensity**, which defines acceptable risk levels consistently with a given risk management strategy, through the identification of:
  - key risk scales;
  - risk metrics;
  - the limitations associated with key risks;
  - monitoring, escalation and updating processes to ensure that corrective actions are identified and implemented;
- **risk management activities**, which ensure effective monitoring and management of the risk universe to which the Group is potentially exposed. The activities are broken down into:
  - ongoing risk management, also by means of sectoral management entrusted to dedicated risk specialists/risk owners;
  - enterprise risk management, aimed at analysing the evolution of the Group's overall risk profile, to support informed risk-taking and the identification of strategic objectives.

On 8 February 2023, the seventh Enterprise Risk Management report on the 2023-2026 Business Plan was presented to the Board of Directors.
Over the course of 2022, the ERM analysis made further methodological improvements and refinements, while at the same time not revealing any critical risks, either in terms of reputation or operating-financial impact.

The area of significant risks includes two additional ones with respect to those identified last year, concerning the possibility of a deterioration in net financial position due to the scenario of extreme commodity price volatility, or due to possible criticalities in the market for sales of receivables involved in energy efficiency initiatives. In the same area, the risk of a reputational impact deriving from possible proceedings undertaken by supervisory/regulatory/investigation bodies was confirmed, generated by the degrees of discretion on the start of verification/investigation procedures, in the presence of non-univocal interpretative guidelines (despite the Group’s conduct always complying with the law), as was an operating-financial risk, deriving from high-intensity seismic events relating to networks. The risk arising from the possibility of fires at waste treatment and recovery plants, while confirmed, has a negligible impact in terms of consequences on the Group’s results and none whatsoever for the environment and business continuity. However, due to the growing social awareness on the issue, such events can lead to significant reputational consequences due to the perceived risk. The difficult economic situation, partially due to the Russia-Ukraine conflict, reverberating in various forms on the activities and priorities of all economic operators, could also affect the full compliance of actions taken by companies that are engaged, on behalf of Hera, in interventions on the networks managed by the Group through external tenders. Hera is committed, however, to containing this risk by confirming its approach to extensively monitoring the health of the value chains affected by its businesses.

1.02.03 Risk areas: identifying and managing risk factors

The existing and emerging risks which Hera faces belong to different types: risks deriving from the evolution of the macroeconomic and financial, business (regulatory and competitive), technological, environmental and human capital contexts, including a constantly increasing regard to climate change and sustainable development. Paragraph 1.01, “Contexts and trends, strategic approach and Group management policies”, provides a detailed analysis of the factors constituting some of the fundamental prerequisites for identifying these risks.

In order to mitigate exposure to these risks, introduce optimisation measures (including technological and efficiency improvements) within current structures and develop strategic planning that offers coherent responses, Hera carries out the specific analysis, measurement, monitoring and management activities described below.

RISK TREATMENT AND MANAGEMENT

AREA	TYPE	IDENTIFICATION
OPERATIONS AND FINANCE	DEBT MARKET	Fluctuation in interest rates, exchange rates credit spreads and liquidity crises.
	COMMODITY PRICE	Fluctuation in commodity prices.
	COUNTERPARTS	Counterparties unable to meet the obligations undertaken, both in respecting the economic conditions and in the execution of contractual previsions.
BUSINESS AND REGULATORY	COMPETITIVE AND MACROECONOMIC	▪ Business activities involving increasing competition on the free market, carried out mainly in Italy, with an economic context of limited growth: ▪ Changes in energy consumption; ▪ Reduced production of volumes of waste treated at Hera's plants, affecting the achievement of pre-set targets.
	REGULATORY AND LEGISLATIVE	▪ Interventions by the regulatory Authorities of the sectors in which Hera operates; ▪ Regulatory interventions with a possible impact on both network and free-market businesses and on municipal waste collection.
	STRATEGIC	▪ Failure to achieve the strategic targets set in the long-term planning process; ▪ Loss of the necessary licenses, authorisations and permits for the regular performance of the company's activities.
CLIMATE AND THE ENVIRONMENT, TECHNOLOGY AND HUMAN CAPITAL	ENVIRONMENTAL-CATASTROPHIC AND CAUSED BY CLIMATE CHANGE	▪ Failure to comply with environmental standards and related legal limits, with worsening of environmental conditions and exposure to possible sanctions; ▪ Climate change impacting both economically and in terms of service quality, arising from physical and transitional scenarios.
	OPERATIONAL SECURITY AND ICT	▪ Negative externalities that compromise business continuity and may increase the financial requirements for the restoration of the Group's regular operations; ▪ Reduced operational security of distribution networks (fluids and electricity), reduced logical security of information, reduced security of communication networks and information systems, and reduced reliability of remote control systems.
	SAFETY AND PERSONAL DEVELOPMENT	▪ Reduced occupational health and safety and limited social protection for workers; ▪ Skills mismatch; ▪ Reduced attractiveness of the workplace environment.

MANAGEMENT

- Diversified funding source structure and balanced maturity profile;
- Careful monitoring of the Group's financial indicators and use of derivative financial instruments.

- Effective management of procurement and hedging activities, with strong focus on skills and a single interface for the constant monitoring of the market

- Structured process of origination and selection of counterparties through credit checks;
- Constant monitoring of positions towards counterparties;
- Possible external transfer of risk through credit assignment.

- Continuous innovation in and timely presentation of the commercial offer;
- High degree of flexibility in the supply sources for energy commodities, alongside the timely management of hedging activities;
- Diversified plant equipment with high-performance environmental technologies, and a strategy focused on the circular economy, specifically in the industrial waste cycle: entry in the process of recovering and recycling polymeric materials and in producing biogas.

- Communication with national and local Authorities through an organizational structure designated for this purpose;
- Timely alignment of commercial offers with guidelines specified by the Regulator;
- Enhancement of technical capacity and management efficiency to meet customer expectations (in terms of service range and quality).

- Structured approach to strategic risk analysis, aimed at evaluating the robustness of the Business Plan in handling multiple adverse risk scenarios following an enterprise-wide rationale;
- Constant monitoring of authorization processes and the requirements for maintaining them.

- Adequate environmental control system, both as regards the governance of environmental certification processes and related audits, and as regards the operational management of controls and assessments;
- Reporting on company performance and engagement in the area of climate change;
- Activating projects to promote the production and consumption of energy from renewable sources and reduce energy consumption;
- Support for customers in reducing their own greenhouse gas emissions;
- Incentivizing recovery strategies.

- Centralized and constantly operating network monitoring systems, with real-time detection of potential critical factors;
- Continuous technological assessment and improvement of the Security by Design process;
- Governance and organisational structures intended for this purpose and training.

- Precise identification of hazards and assessment of emerging needs;
- Continuous and targeted initiatives to raise awareness about improving protection and prevention processes in terms of safety, and technical-regulatory training accompanied by training to develop risk perception awareness;
- Constant monitoring and identification of evolving needs in terms of skills, and qualitative adjustment of existing skills and those to be acquired;
- Establishment of a welfare system based on attention to people.

Operating and financial area

Identifying commodity price risk

The Group operates in an integrated manner in the supply and sale of electricity and gas at different stages of the value chain. Hera is therefore exposed to risks arising from the volatility of energy markets, which are only partially mitigated by an integrated assessment of these markets and associated management strategies. Energy market risks are centralised in the Central Market Department, which is responsible for the purchase and sale of electricity and gas.

Managing commodity price risk

In order to standardise the approach to risk taken by the various corporate structures involved and with the aim of optimising the use of the market for hedging operations, the Group has adopted specific policies aimed at setting guidelines and operating procedures for the energy risk control and management process. Hera structured these processes to achieve an effective management of procurement and hedging concerning the energy market, with a clear focus on the skills involved. The Group's approach provides for a single interface for the management of risk deriving from the energy market: Hera Trading. A unified risk management approach, in compliance with the assigned policies, provides advantages in terms of achieving higher levels of coverage, cost optimization by resorting less to the market, and greater flexibility in structuring procurement and supplying customers.

Identifying risks associated with the debt market

The operating and financial area, in addition to being characterised by fluctuating energy and commodity prices, may show different scenarios as a result of changes in interest rates, exchange rates, the credit spread and as an effect of possible liquidity crises. These fluctuations may have an impact on Group results, future growth and strategic investments (e.g. due to high refinancing costs).
The Group might not be able to meet its payment obligations due to an inability to raise new funds, or it may only be able to do so on unfavourable economic terms, due to an inability to liquidate assets on the market, or due to a changed risk perception. Among the factors determining this perceived risk, the creditworthiness assigned to Hera by rating agencies plays a key role, as it influences the possibility of accessing sources of funding and the related economic conditions. The Group's debt structure is not subject to financial covenants on debt balances, with the exception of the corporate rating limit (i.e. the assignment of a rating lower than BBB) defined on a portion of debt equal to approximately 150 million euro. On the other hand, with respect to the remaining outstanding debt, mandatory early repayment is provided for only in the event of a significant change of control over the Group, in the event that a concession is revoked (concession event), or assets are sold (sale of assets event), resulting in downgrading the Group to non-investment grade or lower, or terminating the publication of the rating.

Managing risks associated with the debt market

Hera's financial management is centralised in the Administration, Finance and Control Central Department, which aims to maintain an adequate balance between the maturities of assets and liabilities, matching investments to consistent sources of financing in terms of duration and repayment methods while taking into account the need to refinance the current debt structure. In order to meet its medium- and long-term commitments, Hera's strategy involves diversified financing sources and a balanced maturity profile, constantly monitoring rating indicators and the availability of long-term credit lines. This strategy is considered effective in minimising liquidity risk even in the event of particularly critical scenarios. Approximately 40% of the Group's financial debt is long-term (more than five years) and 59% of this is represented by bonds with repayment at maturity. See note 26 to the consolidated financial statements, "Non-current and current financial liabilities", for further details in terms of worst case scenarios.
Moreover, the Group's activities and strategies are particularly focused on ensuring that the highest rating level is maintained, as appears in its BBB+ rating with a stable outlook, confirmed by S&P, and the Baa2 rating confirmed by Moody's, even with a worsened outlook, from stable to negative, due to the worsening of the outlook of the sovereign rating).

Sensitivity analysis

Financial risk control and management processes are based on a careful monitoring of the Group's financial indicators, as well as a permanent presence on the benchmark markets, to minimise the impact of interest rate and spread volatility so as to ensure efficient debt servicing. The Group also uses derivative financial instruments to reduce its exposure to interest and exchange rate fluctuations. At 31 December 2022, the Group's exposure to the risk of interest rate fluctuations was 22%, while the remaining 78% of debt is at a fixed rate. A 1% increase in the benchmark interest rate with respect to the business plan scenario, based on the assumption of a coupon rate shift and an unchanged debt structure, would increase financial expenses by an average of approximately ten million euro per year.

Identifying risks from counterparties

Hera operates with counterparties that might fail to fulfil their obligations, unable to comply with either economic terms or any contract provisions (delivery of goods or services). Additionally, credit risk affects the Group across all of the various areas in which it operates: the sale of energy commodities and services, waste treatment activities and telecommunication services.

Managing risks from counterparties

Hera employs a structured origination process, formalised in specific credit risk management procedures; this process allows the Group to adequately select its counterparties through credit checks and requests for guarantees, where applicable. In addition, its positions in relation to the counterparties are regularly monitored while articulated, proactive actions are planned, including external risk relocation through credit transfer, where appropriate. Expected losses are constantly estimated and monitored; the Group employs measures of default probability, exposure at default and loss-given default developed on the basis of its own historical series, customer payment behaviour and current credit processes. In order to test the soundness of the models, both internal and external information is used that may serve as a benchmark for the evolution of the macroeconomic environment.
In 2022, the 24-month unpaid ratio of the Group's main sales companies amounted to 0.71%.

Regulatory and business area

Identifying competition and economic risks

Within the final reference market, which is mainly limited to Italy, the economic and geopolitical context, the rising volatility in the prices of energy and other raw materials, as well as the difficulties connected to global logistics chains, all contribute to putting pressure on sales margins which, added to the increased competition on the free market, may impact the Group's profitability. The increased difficulty in forecasting volumes to cover the needs of the sales portfolio, continuously changing, may furthermore require Hera to purchase or sell additional energy on potentially unfavourable terms.
A potential reduction in waste production, deriving not only from the economic context and European and national regulatory frameworks and from new trends in customer behaviour, together with the unavailability of treatment and recovery infrastructures, may have a negative impact on the Group's ability to pursue its objectives. The risks of the waste management business related to the management of its set of plants are concentrated in the Herambiente Spa.

Managing competition and economic risks

The Group has maintained elevated flexibility in energy commodity procurement sources while at the same time developing hedging activities to minimize exposure to operating risks from electricity generation, thus ensuring ongoing alignment with the market and maximising natural hedging.
In waste management and treatment activities, the Group's diversified plant equipment features technologies that are cutting-edge and high-performance in terms of environmental impact, which to date have enabled the Group to achieve its strategic objectives. The implementation of a circularity strategy – through the polymeric material recycling process carried out by Aliplast Spa – and the development of recycling lines for other types of plastics make it possible to seize the opportunities offered by the evolution of European regulations.
Free-market businesses have gained increasing importance in the Group's portfolio, contributing significantly to its operating performance but also exposing it to growing competition. The Group responds to the challenge of competition by continuously innovating its sales offers and introducing new products in a timely manner, increasing its presence and customer base on the free market, and aiming to ensure the fulfilment of expectations in terms of service range and quality.

Sensitivity analysis

Risk analyses deriving from changes in the economic context (GDP and inflation) and energy market conditions (gas and electricity prices) make it possible to quantify the sensitivity of the Group's Ebitda to changes in primary operating and financial indicators.
In particular, a 1% reduction in GDP compared with the business plan's scenario would lead to an average annual drop in Ebitda of approximately 3 million euro.

A 1% reduction in the inflation rate compared with the business plan's scenario would lead to an average annual drop in Ebitda coming to approximately 7 million euro. A 1€/MWh increase in the price of gas and an ensuing rise coming to 2€/MWh in the price of electricity on the wholesale market compared to the indications set out in the business plan would lead to an average annual drop in Ebitda coming to roughly 0.8 million euro.

Identifying regulatory risks
Hera carries out part of its activities in a regulated market, and its operations are therefore influenced by the regulatory measures taken by the sector authorities and the government (in particular concerning tariffs and market structure), government incentives for renewable energies, the concessions granted by local authorities (for regulated activities relating to waste collection services, gas distribution, integrated water service and public lighting) and national authorities (for electricity distribution), as well as by the impacts expected from changes in the market structure and its liberalisation, and from the evolution of supply and demand in the energy and waste management sectors.

Periodic updates of the legislative and regulatory framework, both at national and European levels, may significantly impact the sectors in which Hera operates, influencing its profitability as a consequence.
Regulatory risks impact network businesses (water cycle, gas and electricity distribution and district heating) and the municipal waste collection business and result in the introduction or modification of economic, organizational and IT requirements to be met by Hera, and on potential market structure changes caused by them.
The tenders for gas distribution, the integrated water service, waste collection and street sweeping scheduled for the time covered by the Plan determine the risk of losing some of the areas currently managed, especially in contexts with a significant presence of competition, only partially offset by compensation for the portion of invested capital not yet depreciated.
Lastly, there is a risk arising from the regulatory uncertainty surrounding the end of protected services, in terms of the implementation timeframe.

Managing regulatory risks
The Group's organisational structure liaises with national and local authorities and carries out extensive consultation with institutional stakeholders, actively taking part in working groups established by authorities and adopting a transparent, co-operative, proactive approach towards possible regulatory instability.
The Group operates by making the most of its technical skills and management efficiency. Indeed, Hera's focus on service quality, cost efficiency and innovation is a competitive strength in tenders for gas distribution, the integrated water service and waste collection and street sweeping services.

Identifying strategic risks
Strategic risks, associated with long-term planning, financial sustainability, involvement in strategic initiatives and appropriate investment decisions, affect the soundness of results for the various supply chains and business units. Moreover, the Group's ability to achieve its strategic objectives may be compromised if the necessary licences, authorisations and permits to carry out its activities are not maintained or obtained.
Achieving the planned results is therefore conditioned by the different endogenous and exogenous risks that are simulated, measured and controlled as appropriate.

Managing strategic risks
Hera has developed a well-planned strategic risk analysis model designed to gauge the soundness of its Business plan against a variety of adverse risk scenarios, which supports an integrated risk projection from an enterprise-wide viewpoint. Thanks to this model, it is possible to perform scenario analyses, stress testing and what-if analyses of plan forecasts through an effective analysis of risk factors and related variables, and enables an adequate assessment of the risk level of the various business sectors.
Hera constantly monitors the authorisation processes and proactively participates in the working tables for obtaining permits, licences and authorisations, to avoid the possibility of jeopardising the regular performance of its activities.

Environmental-catastrophe, climatic, technological and human capital areas

Seismic, atmospheric and other climatic events may affect the Group's performance. Hera intends to continue valorising its resources and to ensure that they are preserved and developed, so as to continue to enjoy their benefits in the future. The physical and transitional risks linked to climate change, as well as accidents in the Group's plant equipment, may generate potential environmental damage, and therefore the operating and strategic implementation of best practices in risk management and the opportunities deriving from climate change, i.e. the gradual updating of current reporting tools, increasingly reflect TCFD recommendations. Risks arising from cybercrime, which Hera also assesses in terms of their impact on service continuity, are also being given increasing attention. Since accidents may pose a risk to people's rights and freedoms, i.e. if they cause physical, material or immaterial damage, the Group's policies regarding the parameters and acceptability thresholds are published on its web portal.
The risk management approach is organised according to the specific areas in which environmental, technological and human capital risks occur.

Identifying environmental-catastrophe risks
Hera, while aware of the need to preserve natural resources, uses them to provide essential services to its customers. The Group's activities, in turn, have an environmental, water and carbon footprint, and adopting mitigation and adjustment measures to reduce environmental-catastrophe risks is therefore fundamental. In keeping with the ambitious goal to reduce current levels of greenhouse gas emissions compared to their current level, as set out by international organisations, the physical and transitional climate change risk scenarios relevant to the Group's activities have been identified. For further details, please refer to the next section, "Identifying climate change risks".
As regards the environmental standards with which Hera must comply in carrying out its businesses, the Group's activities are subject to various rules and regulations, including rules relating to CO_2 emissions, emissions of other substances produced by combustion, water discharge and the handling of hazardous and solid waste. Non-compliance with CO_2 limits contributes to climate change, while non-compliance with legal limits on other environmental aspects leads to worsened environmental conditions and exposes the Group to fines.
Scarcity of water resources, or possible contamination of water reserves, may affect the regular water supply and cause service interruptions or significant environmental, economic and social damage, worsening the water stress, which affects these natural resources by their very nature, in order to meet water demand.
In addition, note the risks stemming from the impact on the Group of weather variability in relation to the electricity and gas demand deriving from the various scenarios. The most significantly affected areas pertain to the Central Market Department, which is exposed in terms of electricity, gas and heat sales and to the variable demand resulting from different weather scenarios.

Managing environmental-catastrophe risks
Investments aimed at preventing and reducing the frequency of harmful events and measures to curb their severity, play a key role.

The Group's commitment to reducing carbon dioxide production began with reporting on its own performance and commitments in the area of climate change and continues with projects to promote energy production from renewable sources, reduce energy consumption, and provide customers with opportunities to cut greenhouse gas emissions. The Group is committed to contributing to mitigating environmental risks by complying with the energy efficiency objectives set by national legislation and the United Nations, continuing to improve its production facilities and encouraging virtuous and responsible forms of consumption on the part of its customers. The Group uses exclusively electricity from renewable sources to operate its production sites. In relation to the consequences of extreme events, which are expected to occur with increasing frequency as a possible consequence of climate change, Hera has taken steps to adopt important measures, such as, for example, the Rimini seawater safety plan, currently underway which, in addition to maintaining the quality of marine resources, increases the resilience of the stormwater drainage infrastructure in the event of extreme events. For further details on specific initiatives, please refer to the section "Mitigating climate change" in the Hera Group's Sustainability Report.

Hera has adopted an environmental control system that is effective both in terms of the governance of environmental certification processes and related audits, and in terms of the operational management of controls and surveys. The Group succeeds in tackling environmental hazards by constantly monitoring potential pollution factors and ensuring transparency in surveys, as well as through substantial investments in technological plants that ensure consistently better air and water quality than required by legal limits. For more details, see the sections on “Protection of air, soil and biodiversity” and “Sustainable water management” in the Sustainability Report. Moreover, in line with its circular economy strategy, Hera has already invested (and continues to do so in the medium-to-long term) in sorting, recovery and composting plants, increasing the amount of waste treated while at the same time reducing the use of landfills, thus anticipating the requirements of European and national regulations. For further details, see the “Transition to a circular economy” section in the Sustainability Report.

SR

Strengthening the resilience of the Group’s water supply and distribution system in a medium to long-term outlook continues. Furthermore, the reduction of the water footprint is pursued through the water management system, which aims to promote a sustainable management of this resource both inside the Group (by preventing network leaks, reducing diffuse consumption, recovering rainwater for irrigating green areas and washing vehicles) and externally (by monitoring domestic consumption and offering advice and solutions to optimise it, providing support with technological solutions for water-demanding customers, and providing support for the construction of treatment plants to reuse/recover water). The implementation of water safety plans in the integrated water service also ensures an approach to water quality management based on risk assessment and management, and thus on prevention and control.
Regarding weather-variable risks, the Group relies on advanced energy demand-forecasting tools that ensure an optimal use of the available sources. It also relies on adequate flexibility in the supply sources of energy commodities, ensuring their availability at market rates. A 1°C increase in the average winter temperature, compared with the scenario set out in the Business plan, leads to an average annual drop in Ebitda of approximately 16 million euro.

Identifying climate change risks

The physical and transitional risks from climate change scenarios pertinent to the Group’s activities have been classified according to their potential consequences on business, and submitted to further impact and mitigation assessments in relation to their criticality (some examples include extreme weather phenomena such as floods and droughts as well as health and economic risks).
Climate scenario analysis is a methodology to test the resilience of business plans under different assumed future developments. Hera selected two of the most relevant scenarios out of the nine that were considered as starting points. In particular, the IEA ETP 2DS transition scenario by the International Energy Agency, chosen as an ambitious climate scenario, envisages a future evolution characterised by strong decarbonisation processes in order to keep the temperature increase below 2°C: this scenario has been used in identifying transition risks.

The physical IPCC RCP 8.5 scenario, chosen as a pessimistic scenario, instead envisages a “business-as-usual” trend and consequent sharp temperature rise (approximately 4°C): this scenario has been used in identifying physical risks. Based on these scenarios, eight physical risks and eight transition risks were identified, associated with related business impacts. Each risk and opportunity was associated with a timeline, a priority level (defined as the combination of the probability that the context in which Hera operates will change and the impact of the risk/opportunity on the business) and consequent management methods, in the case of the risks identified, and business initiatives, in the case of the opportunities identified.

Type	Causes
Physical risks	▪ heat waves; ▪ abnormal winter temperature changes; ▪ flooding and floods resulting in landslides and mudslides*; ▪ extreme weather phenomena*; ▪ rising sea levels; ▪ changes in the timing of annual and average rainfall; ▪ drying soils*; ▪ rising temperatures*; the risk associated with decreased gas consumption and district heating for residential use as a result of an increase in temperature was also assessed as significant in the long term.
Transition risks	▪ electrification of energy consumption*; ▪ development of renewable energy sources; ▪ introduction of measures requiring structural and non-structural efficiency upgrades*; ▪ limits on the production of greenhouse gas emissions; ▪ an increase in the cost of raw materials and greenhouse gas emissions*; stigmatisation of the sector in which the company operates, i.e. limited access to the capital market; ▪ absence and/or obsolescence of the highly specialised skills required by the market to develop new technologies or replace existing products; ▪ legal disputes; ▪ obsolescence of existing plants and the associated need to introduce new, more sustainable solutions/technologies.

*These are the most significant risks currently being addressed, as described in section 2.04, "Climate Change Mitigation", of the Sustainability Report.

In order to assess potential impacts on the Group's assets deriving from extreme phenomena related to climate change, a flood risk analysis was completed in 2022, with a medium/long-term time projection. The results show that the average annual loss referred to timelines reaching 2030 and 2050, in accordance with the PCP 8.5 scenario, increases by 0.2 million euro and 0.5 million euro, respectively, compared to current conditions.

Note that physical risks are distributed over both the medium and long term, with a higher number of occurrences in 2031-2050, consistent with the principle that climate change impacts will become more evident in the long term.
Transition risks are mainly concentrated in the medium term, and are distributed across all categories of the TCFD classification. Each risk has also been associated with one or more management methods: 21 management methods were identified for physical risks and 13 for transition risks; some of the resulting actions have already been integrated into the investments made, as well as being reflected in the Business plan. For further details, please refer to the section "Hera's climate strategy" in the Sustainability Report. The investments and the mitigation and adaptation actions planned to date, moving in the direction of the energy transition towards carbon neutrality and the environmental transition towards the circular economy, as well as for technological evolution, in line with European strategies and the objectives of the UN 2030 Agenda, are now fully part of the Group's way of operating and are often implemented in advance compared to the estimated timeframe, in light of the Group's positive results.
The ongoing Russia-Ukraine conflict is leading to an increasing European effort to diversify energy supply sources and the transition process. For an evaluation of the potential effects in terms of impairment tests, specifically in relation to gas consumption, see note 25 of the consolidated financial statements in paragraph 2.02, "Commentary notes".

STR

Managing climate change risks

Hera has launched a series of initiatives to mitigate the effects of climate change, and at the same time reduce its own carbon footprint. Risk assessment activities continue, with the appropriate level of detail, especially with regard to transition risks and their modelling. Following the results of the first phase of analysis, a series of mitigation and adaptation activities have been identified, with no risks determined that – as regards their valuation over the time covered by the Business plan – may cause a need to make write-downs on the Group's assets.

Type	The Group's main initiatives/actions
Mitigation activities	▪ reduction in internal energy needs through efficiency investments; ▪ specific investments for the growing role of renewable energy production, such as those planned in plants for biomethane production and initiatives to build electrolysis plants for producing green hydrogen; ▪ sales of renewable electricity and gas with compensated emissions; ▪ offers of photovoltaic generation systems; ▪ offers of energy efficiency services to retail and institutional customers; ▪ acceleration towards the reuse of raw materials through polymer recovery and regeneration activities with consequent reduction of CO_2 emissions.
Adaptation activities	▪ consolidation of the resilience of Group infrastructure to climate change, increasing its capacity to adapt to adverse physical conditions. In this regard, the Rimini seawater protection plan will ensure a better response capacity of the integrated water service infrastructures to extreme precipitation events in the area; ▪ development of project hypotheses for the integration and partial replacement of water sources, as well as the construction of interconnections between them, in order to deal with emergency conditions by 2030; ▪ interventions for district-based water networks and monitoring leakage; ▪ agreements and investments for the reuse of purified wastewater, reducing pressure on primary water resources and thus water stress on the area served, which will be accentuated by climate change in the coming decades.

As mentioned in paragraph 1.01.02, "Strategic approach and management policies - Climate and the environment: sustainable development", Hera implements a risk management policy aimed at achieving carbon neutrality. The main contributions include energy efficiency solutions through the valorisation of multi-business assets, applied both within the Group and to customers, the development of new renewable plants, the sale of green energy to customers and a strong commitment to reduce carbon dioxide emissions from the industrial chain by 37% within 2030 (compared to 2019), calculated according to the Science Based Target method.

Identifying managerial and ICT security risks

Despite careful planning and insurance protection, negative externalities generated by exceptional events may jeopardise business continuity and increase the financial requirements for restoring normal operations. The provision of public utilities therefore requires both preventive activities and actions to counter interruptions, delays or poor service levels. Technological risks include the managerial security of distribution networks (fluids and electricity), the logical security of information, the security of communication networks and information systems, and the reliability of remote-control systems. The main threats to on-premise systems (hosted in company data centres) or in the cloud include identity theft, phishing aimed at taking control of a personal computer and then attacking central systems, and attacks on exposed services such as public websites.

The security of the information used, produced and processed by the company depends on the way it is managed and the human and technological resources involved. The loss of confidentiality, integrity and availability of corporate information, whether business-critical information or personal information (i.e. any data relating to natural persons, as more fully defined by the European regulation GDPR and the privacy code of Legislative Decree 196/03) may result in serious financial losses with consequent damage to market image. A business impact analysis has been carried out on all ICT systems used by the Group, and a security risk analysis is carried out annually to identify and assess risk, using a methodology based on a framework that considers three areas of security: availability, integrity and confidentiality.

Managing operational and ICT security risks
Centralised network monitoring systems (remote control of fluids and the electricity network) ensure continuous real-time monitoring and supervision and, in some areas, remote management, making it possible to promptly report potential critical factors to the technical structures in charge of emergency response and, where possible, to intervene directly to resolve the potential critical situation. These systems have been used in a variety of situations, allowing the service to be restored within an appropriate timeframe and ensuring adequate resilience of the services offered.
The Group constantly monitors the level of IT security risk, runs tests to continually assess the level of penetrability of its systems and network security, and carries out training campaigns to raise awareness among all users.
During 2022, work continued on measures aimed at ensuring the confidentiality, integrity and availability of Hera’s systems. The main initiatives, a consolidated part of the Group’s strategy and its method of action, are described in paragraph 1.01, “Contexts and trends, strategic approach and Group management policies”. By way of example, in the context of industrial plants, coordination of cybersecurity improvement initiatives has been boosted, aimed at a single monitoring model for cybersecurity covering both IT (Information Technology) and OT (Operation Technology) areas. In order to block any vulnerabilities in systems or applications that could be exploited by an attacker, vulnerability assessment activities have also been intensified, extending them to industrial plants.

Identifying people’s safety and development risks
People and their behaviour increasingly influence the effectiveness of corporate strategies. The protection of people thus remains a key element that must be reflected in workplace safety and at the level of social protection. The Group therefore continually focuses on the emerging needs and requirements of all employees.
Hera’s structured process for identifying hazards and the related risk assessment informs its analysis of roles, work activities, processes, workplaces, equipment, vehicles, plants and substances used. With reference to the specific nature of its business and its local presence, the Group has also established criteria for identifying risk scenarios due to the spread of the Covid-19 virus from an Enterprise Risk Management viewpoint.
The risk mitigation measures adopted and the effectiveness of their implementation are periodically monitored and reviewed. In this regard, a specific checklist has been developed for periodic monitoring by the heads of the various organisational units.
With the aim of identifying, measuring and monitoring the risks that threaten the Group’s assets and the continuity with which it provides essential services, a risk assessment model has been implemented for the physical security of these assets. This model aims to prevent and mitigate threats and impacts caused by events (malicious, culpable or accidental) such as fire, theft and acts of sabotage/vandalism.

Managing people’s safety and development risks
In order to ensure worker health and safety and mitigate on-the-job injury risk, the Group is constantly committed to measures promoting better monitoring as well as to the enhancement of safety protection and prevention practices aimed at reducing the frequency and severity of accidents.
The teaching methods chosen for worker training are no longer solely technical or normative, but geared towards developing self-awareness in the perception of risk and in adopting safe and aware behaviour.
The prevention and protection measures put in place by the Group aim to minimize the probability of an adverse event occurring, and lower the severity of the consequences following the event.
It is of fundamental importance for Hera to develop workers’ awareness of the risks associated with their work, and the company increasingly uses training courses that encourage people to gain greater awareness, modifying their own behaviour in terms of risk perception and becoming a virtuous example for other workers.
Focusing on these aspects is an essential element of operations, in order to maintain a steady decrease in the number of injuries, the accident frequency rate, the severity rate and the number of days of absence due to injury. In this respect, the Group has obtained important certifications for occupational health and safety, such as ISO 9001 (quality management system), ISO 14001 (environmental management system) and ISO 45001 (health and safety on the workplace). The process of hazard identification and risk assessment and control is carried out in a preventive and proactive (rather than reactive) manner, in order to identify appropriate risk reduction and control measures.

The ongoing commitment shown by people and the integration of safety into processes and training are the cornerstones of the Group's safety culture. This strategic element of risk management is based on the premise that everyone is responsible for their own health and safety, as well as that of the people with whom they interact.
This principle has been included in the procedure for managing the process of identifying hazards and assessing risks to the health and safety of workers. This procedure provides that each employee promptly report and halt any risky situation or unsafe behaviour. In addition, in 2022, the heads of the organisational units completed and managed about 5,000 checklists, instrumental in monitoring the measures adopted and the possible need for specific procedures for managing workers.

In order to maintain a high level of efficiency in carrying out its activities and guarantee the highest level of safety in the workplace and compliance with environmental standards, and reduce risks related to the continuity of services, Hera has drawn up a technical-management project that:

- guarantees a uniform minimum level of security throughout the Group, through the application of homogeneous, standardised and modular countermeasures;
- applies advanced technological solutions in compliance with regulations, standards and good practices;
- centrally manages contracts (infrastructures, maintenance and services) guaranteeing correct standardisation and optimisation of intervention costs.

For example, to better manage events, the Group's synergies, skills and resources have been made use of by centralising the alarm reception point in a control room with a view of all alarms/alerts concerning assets, and also by managing the global contractor's networks and systems (for installation and maintenance of systems, and activation of surveillance services).
Lastly, with reference to social wellbeing, and with the aim of fostering a positive working environment, Hera has created a welfare system based on attention to people. This system includes interventions which are monetary or linked to the quality of life, such as services relating to the family, education, work-life balance, wellbeing, leisure and health.

1.03 MAIN EVENTS OCCURRED

26.01.2022

For the third consecutive time, the Hera Group is included in the **Bloomberg Gender-Equality Index**, an international body that evaluates gender equality and promotes diversity and inclusion.

01.02.22

The Hera Group is awarded **Gold Class 2022 by S&P Global**, the highest recognition for listed companies in the Dow Jones Sustainability Index.

13.04.22

Hera Comm acquires 100% of **Con Energia**, a company involved in gas and electricity sales with over 40,000 customers in central and southern Italy.

25.07.2022

The Hera Group is the first Italian listed company certified by **Bureau Veritas Italia** for its circular economy projects.

06.09.2022

At the Gastech trade fair (Milan), the Hera Group gives a preview of an innovative **power to gas plant**, under construction at its Bologna purification site, capable of converting electricity produced from renewable sources and waste water into green hydrogen and later into biomethane.

28.09.22

The Hera Group signs a protocol with Cirfood for developing **circular economy and ecological transition projects**, following up on those previously signed concerning the same topics during the year with Elior, Camst, Federdistribuzione and Aeroporti di Roma.

18.05.2022

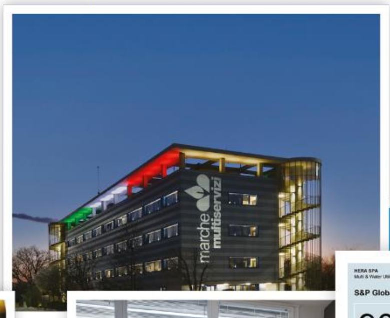
After publishing a new Green Financing Framework, the Hera Group issues its third **green bond** with a nominal value of **500 million euro**.

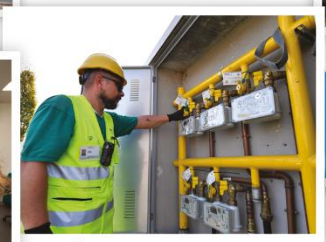
15.06.2022

The Hera Group's top rank in the **Integrated Governance Index**, which measures the integration of Esg factors in corporate governance, is confirmed.

30.06.2022

Acting through its subsidiary Marche Multiservizi, the Hera Group acquires 70% of **Macero Maceratese**, thus strengthening its national leadership in the waste management sector, in particular industrial waste management and treatment.





28.09.22

The Hera Group is included in the Top 10 of Refinitiv's **Diversity & Inclusion Index**, the world's leading multi-utility and the highest ranking company in Italy for its commitment to diversity and its inclusion and people development policies.

03.11.2022

In Castelfranco Emilia, Group subsidiary Inrete Distribuzione Energia launches its initial **experimentation** for the use of **hydrogen** mixed with methane in a city's gas distribution network.

10.12.2022

For the third consecutive year, the Hera Group is included in the **Dow Jones Sustainability Index, World and Europe**, and once again awarded first place in the Multi-Utility&Water sector.

Business and financial events

Green Financing Framework

On 17 May 2022, the Hera Group, which in 2014 became the first Italian company to issue a green bond, published its new Green Financing Framework, which consolidates its policy of transparency towards investors. As confirmation of Hera's green commitment, now also based on the new and ambitious European standards, the Group is the first multi-utility in Europe to publish a framework certified by an independent company in line with the European Taxonomy. This new Green Financing Framework provides a benchmark for issuing green bonds and new green bank loans related to the following areas: "Sustainable Water and Wastewater Management", "Circular Economy and Pollution Prevention and Control" and "Energy Efficiency and Energy Infrastructure", selected in compliance with the Green Bond Principles 2021 (GBP) of the International Capital Market Association (ICMA) and the Green Loan Principles 2021 (GLP) of the Loan Market Association (LMA).

Green Bond

On 18 May 2022, Hera announced its third green bond, having a nominal value of 500 million euro, repayable in 7 years. The funds coming from this listed bond, subscribed under the Euro Medium Term Note Programme (EMTN), will be used to finance or refinance several projects, already implemented or foreseen in the Business Plan, selected on the basis of the Green Financing Framework, which pursue one or more of the objectives on the UN's 2030 Agenda, i.e. Sustainable Development Goals (SDGs), divided into 3 areas:

- integrated water cycle (in line with SDGs 6, 13 and 14): wastewater management and treatment projects, sewerage and water infrastructures for resilience and adaptation to climate change;
- circular economy, pollution prevention and control (responding to SDGs 11, 12 and 13): innovative projects in plastics manufacturing, biogas and biofuel production for use in transport, waste collection systems, anaerobic digestion and composting of organic waste, vehicle fleets for waste management services;
- energy efficiency and infrastructure (respecting SDGs 7, 11 and 13): electricity generation through photovoltaics and geothermal energy; district heating networks; installation of devices and equipment for regulating and controlling energy performance; renewable energy technologies; networks for the introduction of hydrogen; electricity transmission and distribution networks.

Due to the strong demand, with subscriptions amounting to 3.4 times the offer, and the quality of the orders received, the price was set at a highly interesting level. The bond will pay an annual fixed-rate coupon coming to 2.5%. This new issue, whose settlement date was set at 25 May 2022, was listed, as of its issue date, on the regulated markets of Euronext Dublin and the Luxembourg Stock Exchange and on the Italian stock exchange's ExtraMOT Pro multilateral trading system.

Bureau Veritas

In July, Hera obtained from Bureau Veritas Italia, a leading multinational company in the certification sector, a certificate for its circular economy projects falling under the Afnor XP X30-901 standard, the first issued to an Italian multi-utility.
This standard is now the main international reference for implementing management systems for circular economy projects. The certification encourages a standardisation of company methodologies for managing projects, by adopting a concrete tool to perform a critical analysis of these projects in relation to areas of action and environmental, social and economic factors. More specifically, it is based on a framework that combines the 3 traditional areas of sustainability (environment, economy and society) with the 7 action areas of the circular economy (sustainable procurement, eco-design, industrial symbiosis, service economy, responsible consumption, product life extension, efficient product and material management).
Hera has implemented a management system for its circular economy projects and has defined the following three projects according to this framework: the O.V.E. project, to transform exhausted vegetable oils collected in the areas served into biofuel; a project to integrate circularity criteria in procurement; and a project to reuse purified wastewater.

Power to Gas

A preview of the innovative Power-to-gas plant designed and constructed by the Group, called SynBioS (Syngas biological storage) and capable of converting renewable electricity and wastewater into green hydrogen and later into biomethane, was presented at the Gastech exhibition in Milan.
The commissioning of SynBioS, located in Bologna inside the largest purification plant among those managed by the Group by catchment area served, is currently scheduled to take place within 2023 and is linked to support coming from incentive measures, such as those of the NRRP. More specifically, this plant uses wastewater and renewable electricity to produce green hydrogen and oxygen. By making use

of the CO_2 in the biogas produced by the digestion of sewage sludge, the hydrogen is converted into biomethane, which can then be fed into the city’s gas network without limits on concentration and easily stored, thus providing a diversified supply. In addition, the oxygen will be used in the future to increase the purification capacity and efficiency of the sewage treatment plant.
When fully operational, thanks to a capacity of 1 MW, the plant will be able to produce about 190 Nm3/h of green gas, avoiding the emission into the atmosphere of about 50 Nm3/h of carbon dioxide, corresponding to the annual impact of about 400 cars, and supplying enough methane to cover the annual consumption of 1,200 families.

Cirfood

In September, Hera and Cirfood, a leading Italian cooperative company involved in collective and commercial catering and welfare services, signed a memorandum of understanding to collaborate on projects aimed at promoting the circular economy, environmental sustainability and sustainable mobility, in line with the objectives for sustainable development defined by the UN 2030 Agenda. This agreement will last three years and will be developed by gradually implementing a series of environmental actions and initiatives, starting from the catering outlets located mainly in the areas served by Hera, and then gradually extending to other regions. Widespread communication activities will also be jointly developed, targeting both employees and customers, to whom targeted campaigns will be addressed.
In particular, the agreement calls for cooperation on several specific projects in the area of environmental sustainability, including: the fight against food waste; solutions for sustainable mobility; research on solutions consistent with the principles of the circular economy both in the choice of packaging types and the management of their end-of-life; the most advanced solutions for valorising waste, both food and otherwise.

Hydrogen

In November, the first trial for the use of hydrogen in a city gas distribution network was carried out in Castelfranco Emilia (MO). More specifically, this activity involved injecting a mixture of methane and hydrogen into a portion of this city’s gas infrastructure, managed by Inrete Distribuzione Energia, the Hera Group company that distributes natural gas and electricity.
This initiative, which involved approximately thirty households, is the first of its kind in Italy and aims to study innovative solutions for the use of green gases, which are energy vectors with a low environmental impact that, when fully operational, will contribute to decarbonisation. One must recall, in fact, that hydrogen combustion does not produce CO_2, but mainly water vapour. It also represents an important milestone in the process undertaken by Inrete Distribuzione Energia to explore the various operational aspects that allow the gas infrastructure to be managed in complete safety, even in its current configuration and including mixtures of natural gas and hydrogen.

Russia - Ukraine conflict

During 2022, tension continued to be seen on energy markets, intensifying above all in the first three quarters of the year. These trends were marked by a sharp rise in prices and high volatility, were strongly influenced by the ongoing conflict in Ukraine. During the summer, prices reached a peak, only to gradually fall and reach levels in December similar to those witnessed prior to the outbreak of the conflict. In the energy markets, note the agreement within the European Union to purchase 15% of gas and the introduction of a price cap on electricity.

The general context included two important phenomena, linked to the conflict:
- a rise in inflation especially due to energy commodities, with a consequent impact on GDP growth and energy demand;
- a reduction in gas supplies from Russia to Europe coming to over 60% compared to 2021 (when this figure came to 155 billion cubic metres across Europe), with impacts on the physical availability of this commodity and consequently on the level of market liquidity. The Italian market saw a similar reduction, going from roughly 28 billion cubic metres in 2021 to around 11 billion in 2022, equivalent to a reduction in national demand coverage from 39% to 16%.

From this point of view, the Group was directly exposed to the risk of unavailable gas supplies from Russia, but was still able to operate in full continuity thanks to a well-considered procurement policy, turning especially to the spot markets and no longer having current contracts with counterparties traceable to Russian suppliers of raw materials. Price tensions on wholesale gas markets, moreover, impacted the storage process, requiring the Group to significantly increase its financial efforts, since this process coincided with the period of most elevated volatility and highest prices, partially due to considerable speculation. The current energy scenario also entails impacts of a commercial nature, especially for the structural change in offers to customers (with a prevalence of indexed formulas with respect to the past) and the need to manage supply modulation processes more dynamically, in light of the high market volatility. The operating and financial impact of this new scenario are discussed below in the Directors' report, especially as regards trends in each strategic business area.

Significant corporate operations

Bfeng On 30 March 2022, the Group finalised the acquisition of a business unit from Bfeng Srl, the engineering company of the BolognaFiere Group, thus becoming the party responsible for managing the Bologna Exhibition Centre's district heating system. This acquisition is part of a broader project that will allow, starting in 2025, the Group's two other currently existing district heating systems to be interconnected thanks to the construction of a new backbone, thus further extending a sustainable and environmentally friendly heating system in the city.

The benefits created by this interconnection include a lesser use of methane gas, amounting to about 4.2 million cubic metres per year, thanks to the recovery of heat from the Granarolo waste-to-energy plant, and a reduction in nitrogen oxide and carbon dioxide emissions coming respectively to 13.2 tonnes and 10,800 tonnes per year. The possible construction of new connections along the backbone could also save up to 24,100 tonnes of CO_2 emissions and 19.5 tonnes of nitrogen oxides.

Con Energia On 13 April 2022, Hera Comm Spa acquired 100% of the share capital of Con Energia Spa, active especially in central and southern Italy with over 40,000 customers in its portfolio, specialising in natural gas and electricity sales to end customers.

Macero Maceratese On 30 June 2022, Marche Multiservizi acquired 70% of Macero Maceratese Srl, which operates in the waste management sector and whose customers are mainly located in the province of Macerata and partially in the remaining provinces of the Marche region, as well as in the neighbouring regions of Abruzzo and Umbria. Macero Maceratese is involved in services related to waste management for SMEs and large-scale distribution, and activities related to municipal waste management, partly for energy recovery and landfills, and partly for treatment and recovery, with an annual average of 58,000 tonnes of waste treated. With this additional transaction, the Group has strengthened its national leadership in the waste management sector, with particular reference to industrial waste management and treatment, making its state-of-the-art set of plants and an all-round service for special waste available to these new customers.

Other corporate operations

Biorg On 12 July 2022, effective as of 1 August 2022, the Shareholders Meeting of Biorg Srl, following a free share capital increase from 3 million euro to 7 million euro, resolved a further share capital increase reserved for the incoming shareholder Sara Srl and amounting to 3 million euro, subscribed and paid up by the latter through the transfer of its "Nonantola" business unit, consisting of the related composting plant. At the end of the aforementioned transaction, the share capital of Biorg Srl therefore amounted to Euro 10 million, 70% of which was held by subsidiary Herambiente Spa and 30% by shareholder Sara Srl. Following the aforementioned transfer, Biorg Srl acquired ownership of the land and building where the aforementioned plant is located from the company Agricola Corticella Srl.

Alibardi Fiorenzo On 13 September 2022, Aliplast Spa acquired the entire shareholding of Alibardi Fiorenzo Srl, a company operating in Quinto di Treviso and involved in the collection and production of plastic materials.

Significant events occurred after the reporting period

A.C.R. The Hera Group, acting through its subsidiary Herambiente Servizi Industriali, signed a binding agreement at the end of 2022 for the acquisition in 2023 of 60% of the company A.C.R. di Reggiani Albertino Spa, one of Italy's leading companies in the remediation, industrial waste treatment, industrial plant decommissioning and oil & gas-related civil works sectors, with headquarters in Mirandola (Modena).

This operation will create the leading national operator in remediation and global service activities, with a widespread presence throughout the country. The synergies between the Hera Group's set of plants and its multi-business strategy, and ACR's consolidated experience in environmental and industrial reclamation, are unique nationwide in terms of know-how and waste treatment capacity, and are able to create significant and positive economic impacts in the sectors in which the two companies operate. Through its subsidiary Herambiente Servizi Industriali, the Hera Group now manages 18 multi-purpose sites dedicated to the treatment of waste produced by companies and processes 1.3 million tonnes of industrial waste every year. In 2021, A.C.R. recorded revenues coming to roughly 110 million euro and Ebitda amounting to about 17 million euro in the sectors covered by the transaction.
The transaction was closed on 8 March 2023.

Asco TLC

The Hera Group, through its subsidiary Acantho, and Ascopiave were awarded the public tender called by Asco Holding for the transfer of 92% of the shares of Asco TLC, held by Asco Holding itself and by the Treviso-Belluno chamber of commerce. The partnership between Ascopiave and Acantho called for the two companies to participate in this tender with an amount coming to 60% and 40% respectively.
Asco TLC, a company active since 2001 in providing ICT services mainly to corporate customers and public administrations, owns a significant local network, located in the Veneto and Friuli-Venezia Giulia regions and including over 2,200 km of fibre optics, 56 radio links and 24 xDsl exchanges in unbundling, and provides services to more than 2,700 customers.
The closing of this transaction, following the fulfilment of the conditions precedent called for by the procedure, came about on 14 March 2023.

1.04 OVERVIEW OF OPERATING AND FINANCIAL TRENDS AND DEFINITION OF ALTERNATIVE PERFORMANCE MEASURES

Alternative performance measures (APMs)

The Hera Group uses alternative performance measures (APMs) to convey as effectively as possible information concerning trends in the profitability of the businesses in which it operates, as well as its equity and financial situation. In accordance with the guidelines published on 4 March 2021 by the European securities and markets authority and in keeping with the provisions of Consob communication no. 5/21 of 29 April 2021, the content of and the criteria used in defining the APMs used in this financial statement, if present, are explained below. Any operating, financial and fiscal special items are described below, as are any adjustments related to operations (managerial adjustments) considered to be useful in understanding the results. Adjusted APMs included reconciling items not extracted directly from the consolidated financial statements, however the reconciliations show how the figures are calculated.

The Hera Group determines its operating indicators for the reporting period by classifying as special items any significant components of income that (i) derive from non-recurring events or transactions, or any transactions or events that are not frequently repeated during the usual course of business; (ii) derive from events or transactions that do not represent normal business activities. At the same time, certain accounting items are adjusted using an operating valuation criterion, if and when the latter facilitates the analysis of certain specific business trends. In light of the fact that the managerial adjustments referred to above have an impact on the balance sheet, their effects are provided as an adjustment of the financial indicators described below.
The indicators illustrated below are used as financial targets in internal presentations (business plans) and in external presentations (for analysts and investors). They provide useful measures for assessing the Group's operating performance (as a whole and within each business unit), including comparisons between the reporting period in question and previous periods as regards operating profitability.
The managerial adjustments (not directly extracted from the consolidated financial statements) indicated in the calculation of the single APMs are described, if present, in a specific table provided in the section below entitled "Special items and managerial adjustments / balance sheet reconciliation", as are any operating, financial and fiscal special items and managerial adjustments.

Operating APMs and investments

Ebitda is calculated as the sum of the operating income shown in the balance sheets and depreciation, amortization and write-downs.

Adjusted Ebitda (hereinafter referred to as **Ebitda***) is calculated based on Ebitda, as described above, adding or subtracting managerial adjustments.

Ebit is calculated by subtracting operating costs from operating revenues. Among operating costs, special operating items are deducted from amortisations and provisions.

Adjusted Ebit is calculated based on Ebit, as described above, adding or subtracting any managerial adjustments.

Adjusted pre-tax results are calculated by subtracting the financial operations shown in the balance sheets from adjusted Ebit, as described above, net of any special financial items.

Adjusted net results are calculated by subtracting from adjusted pre-tax results, as described above, the taxes shown in the balance sheets minus special fiscal items and the fiscal effect of any managerial adjustments.

Results from special items (if present in the current report) are aimed at drawing attention to the result of the special item entries.

Adjusted net profit is calculated by adding the result from special items to the adjusted net result, as described above. This indicator therefore includes any managerial adjustments used to bring certain accounting valuation items back into line with managerial criteria.

Adjusted Ebitda on revenues, adjusted Ebit on revenues and adjusted net profit on revenues measure the Group's operating performance through a proportion, expressed as a percentage, of adjusted Ebitda, adjusted Ebit and adjusted net profit divided by the amount of revenues.

Net investments are calculated as the sum of investments in tangible fixed assets, intangible assets and equity investments net of capital grants.

Adjusted net non-current assets are calculated as the sum of: tangible fixed assets; intangible assets and goodwill; equity investments; deferred tax assets and liabilities (including managerial adjustments).

Adjusted net working capital is made up of the sum of: inventories (adjusted to reflect the different managerial value of gas storage); trade receivables and payables; current tax receivables and payables; other assets and other current liabilities; the current portion of assets and liabilities for financial derivatives on commodities.

Provisions includes the sum of the items "employee severance indemnities and other benefits" and "provisions for risks and charges".

Adjusted net invested capital is defined by calculating the sum of "adjusted net fixed assets", "adjusted net working capital" and "provisions".

Adjusted net equity is obtained by adding the economic effects of managerial adjustments, net of deferred taxes, to the equity that appears in the balance sheets.

Net financial debt (at times referred to below as **Net debt**) is a measure of the company's financial structure determined in accordance with ESMA guidelines 32-382-1138, adding the value of non-current financial assets. This measure is therefore calculated by adding together the following items: current and non-current financial assets; cash and cash equivalents; current and non-current financial liabilities; current and non-current portions of assets and liabilities for derivative financial instruments on interest and exchange rates.

Adjusted sources of financing are obtained by adding "net financial debt" and "adjusted net equity".

Operating-financial APMs

The **Net debt to adjusted Ebitda** ratio (**Net Debt/Ebitda***), expressed as a multiple of adjusted Ebitda, is a measure of the operating management's ability to pay back its net financial debt.

Adjusted funds from operations (FFO*) are calculated beginning with adjusted Ebitda, subtracting provisions for doubtful accounts, financial charges, uses of severance pay reserves and provisions for risks (net of releases from provisions and increases due to changes in assumptions on future outlays following revised estimates on current landfills) and taxes, net of any special items and the fiscal effect of any managerial adjustments.

The Adjusted FFO/Net debt indicator (**FFO*/Net debt**), expressed as a percentage, provides a measurement of the operating management's ability to pay back its net financial debt.

Adjusted ROI, or return on net invested capital, is defined as the ratio between adjusted Ebit, as described above, and adjusted net invested capital. It is intended to indicate the ability to produce wealth through operating management, thus remunerating equity and capital pertaining to third parties.

Adjusted ROE, or return on equity, is defined as the ratio between adjusted net results and adjusted net equity. It is intended to indicate the profitability obtained by investors, recompensing risk.

Financial APMs

Cash flow is defined as operating cash flow, net of dividends paid. Operating cash flow is calculated as adjusted Ebit, to which the following are added:
- amortisation, depreciation and provisions for the period, not including provisions for doubtful debts;
- changes in adjusted net working capital (*);
- provisions for the risk fund, net of releases from provisions (**);
- use of severance pay reserves;
- the difference between changes in taxes paid in advance and deferred taxes (***);
- operating and financial investments;

- divestitures;
- financial charges and financial income (****);
- current taxes.

(*) net of the effects arising from the fair value measurement of commodity derivatives recognised as cash flow hedges and net of any changes in NWC arising from changes in the scope of consolidation.
(**) minus releases from provisions and increases caused by modifications in estimated future expenses following revised appraisals for operating landfills.
(***) net of fiscal effects related to the cash flow hedge accounting of hedging derivatives.
(****) minus the effects of discounting deriving from the application of accounting standards IAS 37 and IAS 19 and the profits coming from associated companies and joint ventures, plus the dividends received from the latter, and gains/losses from transferred shareholding (excluding special items, if present).

The Hera Group's APMs are provided in the following table:

Operating APMs and investments (mn€)	Dec-22	Dec-21 (redetermined)	Abs. change	% change
Revenues	**20,082.0**	**10,555.3**	**9,526.7**	**+90.3%**
Adjusted Ebitda	**1,295.0**	**1,219.4**	**75.6**	**+6.2%**
Adjusted Ebitda/revenues	6.4%	11.6%	(5.2) pp	0.0%
Adjusted Ebit	**627.9**	**607.3**	**20.6**	**+3.4%**
Adjusted Ebit/revenues	3.1%	5.8%	(2.7) pp	0.0%
Adjusted net profit	**372.3**	**369.5**	**2.8**	**+0.8%**
Adjusted net profit/revenues	1.9%	3.5%	(1.6) pp	0.0%
Net investments	**688.7**	**570.3**	**118.4**	**+20.8%**

Financial APMs (mn€)	Dec-22	Dec-21 (redetermined)	Abs. change	% change
Adjusted net non-current assets	7,522.3	7,308.3	214.0	+2.9%
Adjusted net working capital	1,096.0	2.4	1,093.6	+45,566.7%
Provisions	(657.6)	(633.4)	(24.2)	+3.8%
Adjusted net invested capital	7,960.7	6,677.3	1,283.4	+19.2%
Net debt	**(4,249.8)**	**(3,261.3)**	**(988,5)**	**+30.3%**

Operating-financial APMs	Dec 22	Dec 21 (redetermined)	Abs. change
Adjusted Net debt/Ebitda	3.28	2.67	0.61
Adjusted FFO/Net debt	21.1%	26.7%	(5.6) pp
Adjusted ROI	7.9%	9.1%	(1.2) pp
Adjusted ROE	10.0%	10.8%	(0.8) pp
Cash flow	(864.0)	181.2	(1,045.3)

Special items and managerial adjustments / IFRS balance sheet reconciliation

Gas prices increased sharply in the second half of 2021, and this trend continued with higher volatility throughout 2022, reaching its peak during the summer. This rise also affected the natural gas storage process, which, compared to the same period of 2021, took place during a period of time (starting in April 2022) characterised by purchasing prices up to five times higher than those seen one year earlier, which produced both operating (purchasing costs) and financial impacts (involving working capital).
Therefore, to supplement the report at 31 December 2022, and in order to facilitate the analysis of business trends and ensure that the results are more easily comparable, the Group's management has decided to present the results by valuing gas storage according to a managerial criterion, in order to provide a representation that reflects the context seen during the year, marked by significant and sudden price changes with respect to the past.
More specifically, from a managerial point of view, the accounting standard calls for stored gas to be valued considering all gas deliveries made during the injection periods (April - October). This means that the definition of average costs per unit also includes purchases intended for delivery and sale to end customers during the period. The use of this criterion led to the definition of an average cost coming to 107 €c/sm3 that, also considering the purchases intended for delivery to end customers with costs defined in 2021 (much lower than the costs in 2022), is significantly lower than the cost of gas purchased and injected into storage in 2022.

From a managerial point of view, the accounting valuation of the inventory was therefore adjusted by taking into consideration only the flows identified under management for injection into storage, the average price of which was 128 €c/sm3, in line with the average market price over the injection period and, as described above, significantly higher than the average accounting price. As part of its balanced portfolio management, the Group introduced the appropriate hedges to correspond to the scheduled withdrawals during the winter. This means that the value of gas purchases destined for storage, determined under managerial criteria and in compliance with risk management policies, is fully recoverable during the periods in which residual withdrawals will be made.

From an accounting point of view, instead, no distinction can be made between the various supply processes, all of which fall under a single commercial portfolio. Therefore, since gas is a fungible commodity, all purchase transactions, regardless of their end purpose, are considered by calculating the average carrying cost. This different valuation criterion, which has always been used, does not produce significant differences when dealing with a price trend that does not change considerably over time.

In order to ensure a uniform comparison of results, the managerial statement for the period under comparison was also redetermined using the same managerial criterion.

The following table provides a reconciliation between the income statement referred to in the remarks on unaudited managerial statement and the published consolidated income statement.

mn€	Dec-22			Dec -21 (redetermined)			
	Published statement	Managerial adjustments	Managerial statement	Published statement	Managerial adjustments	Special items	Managerial statement
Revenues	20,082.0		20,082.0	10,555.3			10,555.3
Other operating revenues	548.2		548.2	400.1			400.1
Raw and other materials	(16,730.0)	94.1	(16,635.9)	(6,668.5)	(4.4)		(6,672.9)
Service costs	(2,105.8)		(2,105.8)	(2,464.6)			(2,464.6)
Personnel costs	(601.1)		(601.1)	(592.8)			(592.8)
Other operating expenses	(74.9)		(74.9)	(66.5)			(66.5)
Capitalised costs	82.5		82.5	60.8			60.8
Ebitda	**1,200.9**	**94.1**	**1,295.0***	**1,223.9**	**(4.4)**	**-**	**1,219.4***
Amortization, depreciation and provisions	(667.1)		(667.1)	(612.1)			(612.1)
Ebit	**533.8**	**94.1**	**627.9***	**611.7**	**(4.4)**	**-**	**607.3***
Financial operations	(125.0)		(125.0)	(204.8)		85.0	(119.8)
Pre-tax result	**408.8**	**94.1**	**502.9***	**406.9**	**(4.4)**	**85.0**	**487.5***
Taxes	(103.5)	(27.1)	(130.7)	(34.2)	1.2	(97.6)	(130.6)
Net result	**305.3**	**67.0**	**372.3***	**372.7**	**(3.2)**	**(12.6)**	**356.9***
Result from special items	-		-			12.6	12.6
Net profit	**305.3**	**67.0**	**372.3***	**372.7**	**(3.2)**	**-**	**369.5***
Attributable to:							
Parent company shareholders	255.2	67.0	322.2*	333.5	(3.2)		330.3*
non-controlling interests	50.1		50.1	39.2			39.2

* Adjusted results, as described above

The table below shows the impact on the balance sheet of the managerial adjustments made to gas storage, which, unlike the other special items, have not yet been reflected in cash receipts or disbursements:

mn€	Dec-22			Dec-21 (redetermined)		
	Published values	Managerial adjustments	Managerial values	Published values	Managerial adjustments	Managerial values
Net non-current assets	7,549.1	(26.8)	7,522.3*	7,308.0	0.3	7,308.3*
Net working capital	1,003.0	93.0	1,096.0*	3.5	(1.1)	2.4*
Provisions	(657.6)		(657.6)	(633.4)		(633.4)
Net invested capital	**7,894.5**	**66.2**	**7,960.7***	**6,678.1**	**(0.8)**	**6,677.3***
Equity	(3,644.7)	(66.2)	(3,710.9)*	(3,416.8)	0.8	(3,416.0)*
Net debt	(4,249.8)		(4.249.8)	(3,261.3)		(3,261.3)
Sources of financing	**(7,894.5)**	**(66.2)**	**(7,960.7)***	**(6,678.1)**	**0.8**	**(6,677.3)***

* Adjusted results, as described above

For 2022, as mentioned above, the value of stored gas has been adjusted.
More specifically, the change in storage was adjusted by 94.1 million euro, resulting in a negative tax effect coming to 27.1 million euro. The cumulative effect of these managerial adjustments, i.e. also considering the effects of misalignments in previous periods, resulted in a positive impact on equity totalling 66.2 million euro.

Concerning 2021, the values classified as special items and the managerial adjustments made are related to the following:

- a negative adjustment of the change in gas storage coming to 4.4 million euro, and an ensuing positive tax effect coming to 1.2 million euro;
- the partial repurchase of five bonds, for a total book value of 1,780 million euro, which led to the recognition of expenses totalling 82.6 million euro since the repurchase price was higher than the book value. The related tax effect, coming to 19.8 million euro, was also taken into account and recognised as an adjustment to the tax charge for the period;
- a write-down of the equity investment and non-current financial receivable related to H.E.P.T. Co. Ltd, totalling 2.4 million euro, due to the conditions of the Chinese market in question;
- a tax realignment of certain goodwill amounts that were recorded at 31 December 2019, pursuant to Article 1, paragraph 83, of Law 178/2020. This operation resulted in the tax recognition of these amounts, with the consequent recognition of a tax benefit coming to 87.0 million euro, against the payment of a 3% substitute tax set at 9.2 million euro.

1.04.01 Operating results and investments

Efficiency in the services offered and growth in industrial margins

For the Hera Group, the year 2022 closed with improvement in operating results and investments compared to the previous year, with consolidated adjusted Ebitda coming to 1,295.0 million euro, up 6.2%, adjusted Ebit up 3.4%, and adjusted net profit up 0.8%. As regards investments as well, significant growth was seen, coming to 20.8%, reflecting the Group's ongoing focus on the resilience of assets under management.

These results are particularly important, since they must be set against the backdrop of a particularly complex external scenario, characterised by continuous volatility on the energy market and a highly unstable international geopolitical situation. The management policies adopted by the Group, and its solid and resilient business model, proved to be effective in responding to these complexities, and even in this difficult moment guaranteed that the quality and continuity of the services provided remained high and continued to create value for its stakeholders.

As regards this latter aspect, note that the Hera Group, in order to support its customers during this particular situation, developed and implemented a few specific initiatives, from the possibility given to customers of requesting monthly billing for consumption and payment by instalments, to tools for monitoring consumption, and advice on saving energy and money. In addition, a specific training plan for operators was activated to offer qualified support on consumption analysis and efficiency.

The initiatives to support customers, the value generated for stakeholders and the proven ability to positively face the challenges of 2022, which showed an unprecedented complexity, find their foundations in the Group's consolidated multi-business industrial model, balanced between regulated and free-market activities.

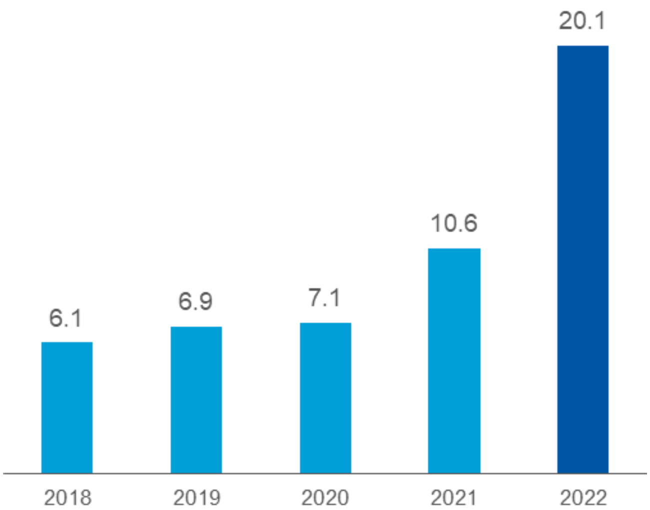
Despite the complicated scenario, the Hera Group has continued to grasp opportunities to expand its scope of operations through a number of acquisitions. In particular, in the waste management area, note the acquisition by Marche Multiservizi Spa of Macero Maceratese Srl, a company specialised in the recovery and treatment of waste, and the acquisition by Aliplast Spa of Alibardi Fiorenzo Srl, a company specialised in the collection and production of plastic material. The energy areas, instead, benefited from the acquisition of Con Energia Spa by Hera Comm Spa.

The following table shows operating results at 31 December 2022 and 2021:

Income statement (mn€)	Dec 22	% Inc.	Dec 21 (redetermined)	% Inc.	Abs. change	% change
Revenues	20,082.0	0.0%	10,555.3	0.0%	9,526.7	90.3%
Other operating revenues	548.2	2.7%	400.1	3.8%	148.1	37.0%
Raw and other materials**	(16,635.9)	(82.8)%	(6,672.9)	(63.2)%	9,963.0	149.3%
Service costs	(2,105.8)	(10.5)%	(2,464.6)	(23.3)%	(358.8)	(14.6)%
Other operating expenses	(74.9)	(0.4)%	(66.5)	(0.6)%	8.4	12.6%
Personnel costs	(601.1)	(3.0)%	(592.8)	(5.6)%	8.3	1.4%
Capitalised costs	82.5	0.4%	60.8	0.6%	21.7	35.7%
Ebitda*	**1,295.0**	**6.4%**	**1,219.4**	**11.6%**	**75.6**	**6.2%**
Amortization, depreciation and provisions	(667.1)	(3.3)%	(612.1)	(5.8)%	55.0	9.0%
Ebit*	**627.9**	**3.1%**	**607.3**	**5.8%**	**20.6**	**3.4%**
Financial operations	(125.0)	(0.6)%	(119.8)	(1.1)%	5.2	4.3%
Pre-tax result*	**502.9**	**2.5%**	**487.5**	**4.6%**	**15.4**	**3.2%**
Taxes	(130,6)	(0.7)%	(130.6)	(1.2)%	-	0.0%
Net result*	**372.3**	**1.9%**	**356.9**	**3.4%**	**15.4**	**4.3%**
Result from special items	-	0.0%	12.6	0.1%	(12.6)	100.0%
Net profit for the period*	**372.3**	**1.9%**	**369.5**	**3.5%**	**2.8**	**0.8%**
Attributable to:						
Parent company shareholders*	322.2	1.6%	330.3	3.1%	(8.1)	(2.5)%
Minority shareholders	50.1	0.2%	39.2	0.4%	10.9	27.8%

* Adjusted results, as described in paragraph 1.02
** Managerial values to reflect the different managerial value of gas storage

REVENUES (bn/€)



20.1
billion euro
revenues
(+90.3%)

Revenues at December 2022 were up by 9,526.7 million euro compared to 2021, almost exclusively as an effect of the significant increase in the price of electricity and gas seen in 2022. Indeed, the energy sectors showed significant growth, coming to 8,842 million euro, or 93% of the overall change. In addition, growth was seen in turnover for energy services, related to energy efficiency in residential buildings

(insulation bonus and 110% super-bonus) and an increase in activities for value-added services for customers. As a whole, these effects contributed with roughly 290 million euro.
Lastly, revenues from the waste management sector contributed with 160 million euro, mainly due to energy production, acquisitions on the industry market and increased prices in the markets. For further details, see the analyses of the individual business areas in paragraph 1.07.

Other operating revenues in December 2022 increased by 148.1 million euro compared to 2021. Note the higher revenues from energy efficiency certificates amounting to 60 million euro, as described in more detail in the Gas area in paragraph 1.07.01, and higher revenues from contracts on assets under concession coming to 56 million euro.

Costs of raw materials related to trends in revenues

The cost of raw and other materials increased by 9,963.0 million euro compared to December 2021. This increase was related to a rise in energy commodity prices, as seen under revenues. Lastly, note the increase in the purchasing price of raw materials in the recovery market and the higher purchasing costs for energy efficiency certificates, as mentioned above.

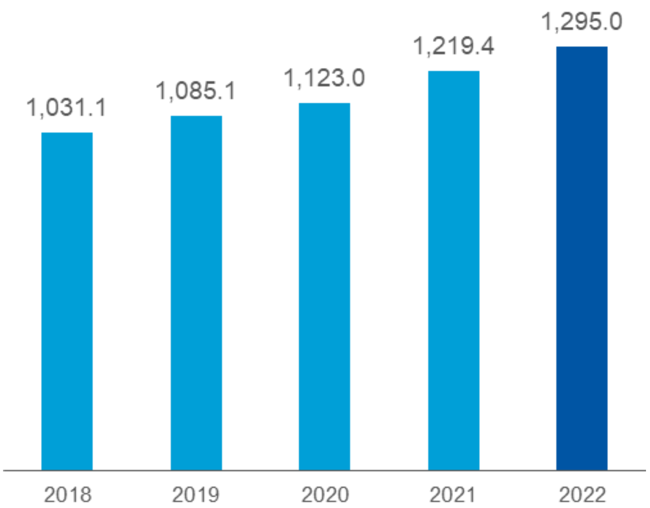
Other operating expenses decreased by a total of 350.4 million euro (with lower service costs coming to 358.8 million euro and higher operating expenses at 8.4 million euro). Overall, lower costs amounted to 739 million euro mainly related to system charges, as a result of the legislative measures indicated in paragraph 1.07.01 and paragraph 1.07.02, concerning higher costs for gas transport and storage. The decrease in costs indicated above was partially offset by higher costs in energy services for energy efficiency and value-added services, amounting to approximately 242 million euro. Higher costs were also seen for waste collection and treatment, totalling roughly 90 million euro, mainly due to higher supplier prices, corporate acquisitions and increased activities related to developing new sorted waste collection projects. Lastly, note the higher costs for orders on goods under concession and for third-party works, coming to roughly 63 million euro.

+1.4% increase in the cost of personnel

Personnel costs increased by 1.4% compared to 2021, for the equivalent of 8.3 million euro. This increase was related to salary increases under the national collective labour agreement and changes in the scope of consolidation due to the corporate acquisitions, as mentioned above. These effects were partially contained by a lower average presence recorded in the period.

Capitalised costs increased by 21.7 million euro, due to higher works invested in assets owned by the Group.

EBITDA * (mn€)



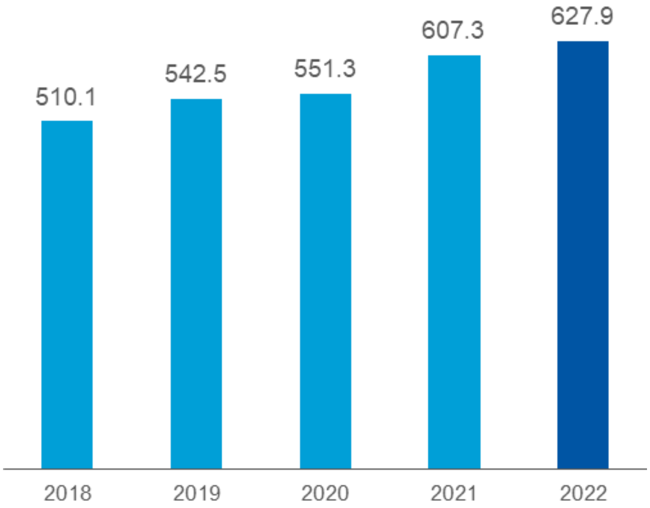
1,295.0
million euro
Ebitda *
(+6.2%)

Adjusted Ebitda rose by 75.6 million euro compared to 2021, up by 6.2%. This trend was due to good performances in the waste management area, which increased by 46.3 million euro, and the overall contribution coming from the energy areas, totalling 28.8 million euro.

For further details, see the analyses of the individual business areas.

Depreciation, amortisation and provisions at 31 December 2022 increased by 9.0% compared to the previous year, settling at 667.1 million euro. Higher depreciation and amortisation were mainly due to new investments, an increase in commissions in sales companies for commercial campaigns, and changes in the scope of operations resulting from the consolidation of companies with gas sales and waste management activities. Allocations to the provision for bad debts also increased overall, mainly due to the protected and gradual protected service markets.

EBIT * (mn€)



627.9
million euro
Ebit *
(+3.4%)

Adjusted Ebit amounted to 627.9 million euro, up 3.4%. The increase resulting from growth in Ebitda was partially reduced by higher depreciation and amortisation, as described above.

Financial operations increase

The result from financial operations at 31 December 2022 came to 125.0 million euro, up 5.2 million euro, or 4.3%, compared to 31 December 2021. This change is mainly due to an increase in net financial debt, which occurred in late 2022, due to an increase in the amount of net working capital related to gas storage and the trend in energy commodity prices compared to 2021 (the impact of this was partially mitigated by lower IAS 37 charges).

Adjusted results before taxes increased by 15.4 million euro, or 3.2%, The growth in the net operating margin was added to the impact of financial operations, as described above.

Tax rate at 26.0%

Taxes for 2022, as shown in the operations statement, amounted to 130.6 million euro (the same amount as in the previous year): the tax rate for adjusted results came to 26%, as against 26.8% in 2021. In this comparison, note that in both years the benefits deriving from the redemption of certain "higher values" originating from an equal number of acquisition transactions were included.
During 2022, note the benefits that the government provided, through numerous regulatory provisions, as a measure to support the expenses incurred for the purchase of electricity and gas (in this regard and for further details, see the note commenting on taxes in paragraph 2.02.03 of the Consolidated financial statements).

+4.3% Net result *

The adjusted net result increased by 4.3%, or 15.4 million euro. Growth in the adjusted pre-tax result remained stable due to the absence of changes in taxes.

In 2021, a special item result was present with a total value of 12.6 million euro. For a detailed description of its content, see the beginning of section 1.04, "Overview of operating and financial trends and definition of APMs".

+0.8% Net profit *

The adjusted net profit thus increased by 2.8 million euro (+0.8%), due to the sum of all the events described above.

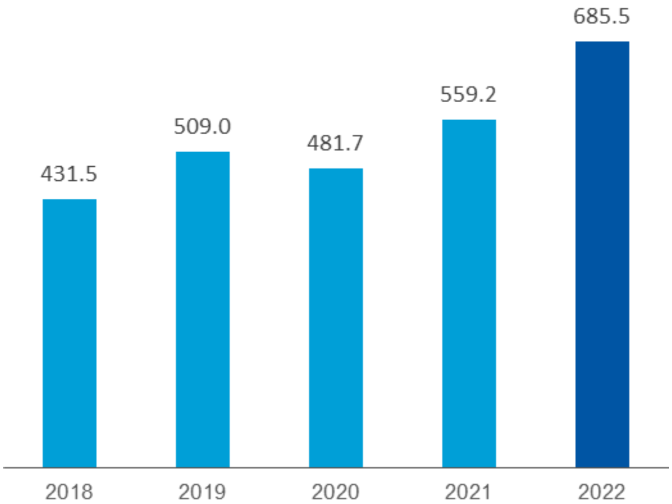
Net investments rise to 688,7 million euro

In 2022, the Group's net investments amounted to 688.7 million euro, up 118.4 million euro compared to the previous year. This includes financial investments coming to 3.2 million euro, due to Marche Multiservizi Spa's equity investment in Aurora Srl, a company currently inoperative, involved in the waste treatment sector. Financial investments decreased by 7.8 million euro compared to the previous year, which included an equity investment in SEA - Servizi Ecologici Ambientali Srl.
Capital grants amounted to 23.9 million euro, of which 17.4 million euro involving FoNI investments, as foreseen by the tariff method for the integrated water service. Net operating investments amounted to 685.5 million euro, up 126.3 million euro compared to the previous year.

The following table provides a breakdown by business area, with separate mention of capital grants:

Total investments (mn€)	Dec 22	Dec 21	Abs. change	% change
Gas area	156.7	141.3	15.4	+10.9%
Electricity area	78.3	55.3	23.0	+41.6%
Integrated water cycle area	208.0	194,6	13.4	+6.9%
Waste management area	149.2	98.2	51.0	+51.9%
Other services area	15.3	14.6	0.7	+4.8%
Headquarters	102.1	84.8	17.3	+20.4%
Total gross operating investments	**709.5**	**588.7**	**120.8**	**+20.5%**
Capital grants	23.9	29.4	(5.5)	(18.7)%
of which FoNi (New Investments Fund)	17.4	16.8	0.6	+3.6%
Total net operating investments	**685.5**	**559.2**	**126.3**	**+22.6%**
Financial investments	3.2	11.0	(7.8)	(70.9)%
Total net investments	**688.7**	**570.3**	**118.4**	**+20.8%**

TOTAL NET OPERATING INVESTMENTS (mn/€)



685.5
million euro
net operating investments (+126.3 mn/€)

Including capital grants, the Group's operating investments amounted to 709.5 million euro, up 120.8 million euro on the previous year, and mainly related to works on plants, networks and infrastructures. In addition, regulatory upgrading was done, especially in the gas distribution sector for the large-scale metre replacement, and in the purification and sewage sector.
Comments on investments in the individual areas are provided in the analysis by business area.

At Group headquarters, investments concerned interventions on corporate buildings, IT systems and the vehicle fleet, as well as laboratories and remote control structures. Overall, investments in structures increased by 17.3 million euro compared to the previous year, mainly due to work on corporate buildings and the vehicle fleet.

1.04.02 Financial structure and adjusted net debt

What follows in an analysis of trends in the Group's net invested capital and sources of financing at 31 December 2022.

Invested capital and sources of financing (mn€)	Dec 22	% Inc.	Dec 21 (redetermined)	% Inc.	Abs. change	% change
Net non-current assets*	7,522.3	+94.5%	7,308.3	+109.4%	214.0	+2.9%
Net working capital*	1,096.0	+13.8%	2.4	+0.0%	1,093.6	+45,566.7%
(Provisions)	(657.6)	(8.3)%	(633.4)	(9.5)%	(24.2)	(3.8)%
Net invested capital*	**7,960.7**	**+100.0%**	**6,677.3**	**+100.0%**	**1283.4**	**+19.2%**
Equity*	(3,710.9)	+46.6%	(3,416.0)	+51.2%	(294.9)	(8.6)%
Long-term borrowings	(5,598.5)	+70.3%	(3,633.1)	+54.4%	(1,965.4)	(54.1)%
Net current financial debt	1.348.7	(16.9)%	371.8	(5.6)%	976.9	+262.7%
Net debt	(4,249.8)	+53.4%	(3,261.3)	+48.8%	(988.5)	(30.3)%
Total sources of financing*	**(7,960.7)**	**(100.0)%**	**(6,677.3)**	**+100.0%**	**(1,283.4)**	**(19.2)%**

* adjusted results, as indicated in the section on Alternative performance measures (APMs)

1,096.0 million euro net working capital

Net working capital* amounted to 1,096.0 million euro at the end of 2022, up from 2.4 million euro seen at the end of 2021. This change was affected by the fair value of commodity derivatives, which increased by 180.4 million euro compared to the previous year, with a corresponding impact on equity for hedging contracts recognised as cash flow hedges and, to a lesser extent, on the income statement for the year for trading derivatives. The changes in net working capital that led to a corresponding increase in net financial debt were mainly due to:

- the higher value of gas storages, both in terms of prices and volumes, which at 31 December 2022 amounted to 503.7 million euro, as well as to the value of withdrawals made in December, with a value coming to over 200 million euro, which while transmitted have not yet been fully translated into the resulting cash flows from sales to end customers;
- a change in the VAT position coming to 89.9 million euro (at 31 December 2022 this figure resulted in a credit of 17.1 million euro while at December 2021 it was a debit of 72.9 million euro).

As far as the value of trade receivables is concerned, there are no critical issues on the performance on collections, which are, on some market segments, better than the previous year thanks to the continuous and careful control of credit management processes including during the acquisition of contracts (origination management).

657.6 million euro provisions

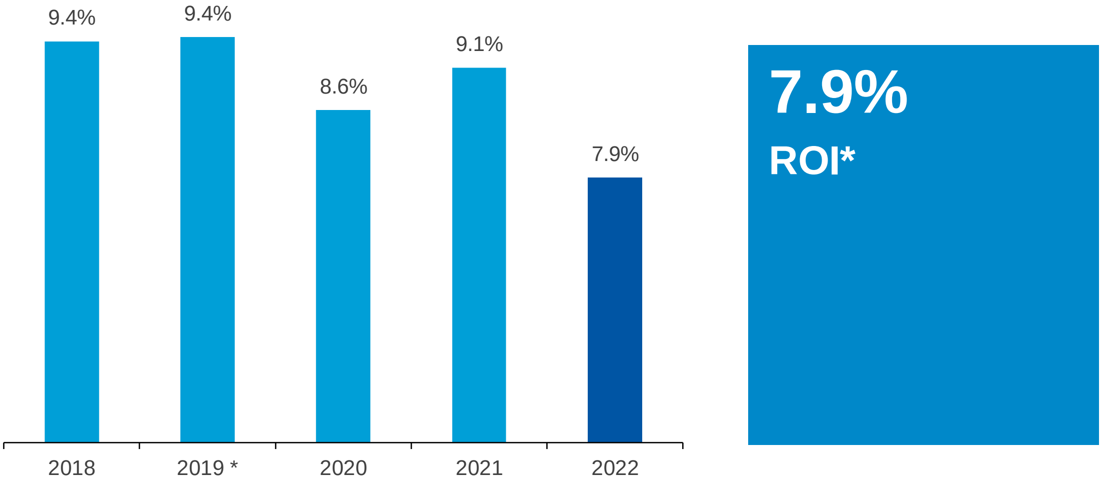
In 2022, provisions amounted to 657.6 million euro, up from 633.4 million euro at the end of the previous year. This result is mainly the consequence of provisions for the period and adjustments to the post-mortem provisions for landfills and restoration of third-party assets, which more than offset releases for utilisation.

3.7 billion euro equity*

Equity* rose from 3,416.0 million euro in 2021 to 3,710.9 million euro in 2022. This equity strengthens the Group's solidity, thanks to the positive net result for 2022 operations, amounting to 372.3 million euro and the effect of cash flow hedge reserves, offset by the impact of dividend payments.

Adjusted return on net invested capital (ROI*) stood at 7.9% in 2022, down from the 2021 ROI, which came to 9.1%, due to an increase in net invested capital (NIC) that was greater than the increase in operating income (Ebit).

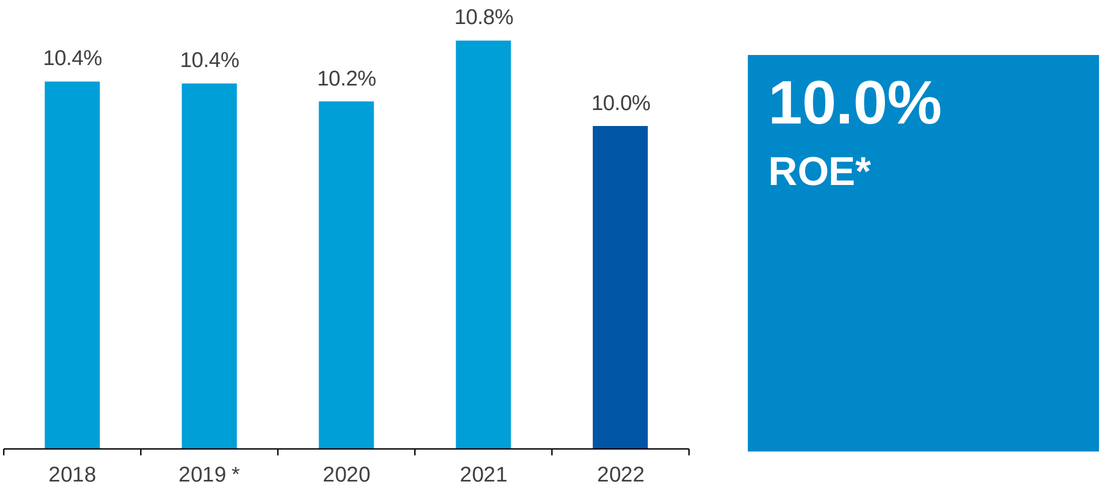
ROI* (%)



* adjusted for non-recurring entries and the Ascopiave transaction

The results of management led to an adjusted return on equity (ROE*) coming to 10.0%, down from the amount seen in 2021. This drop was related to an increase in equity (mainly due to the value of cash flow hedge reserves) greater than the increase in operating profit.

ROE* (%)



* adjusted for non-recurring entries and the Ascopiave transaction

An analysis of adjusted net financial debt is shown in the following table:

mn€		31 Dec 22	31 Dec 21
A	Cash	1,942.4	885.6
B	Cash equivalents	-	
C	Other current financial assets	77.7	29.3
D	**Liquidity (A+B+C)**	**2,020.1**	**914.9**
E	Current financial debt	(563.0)	(443.6)
F	Current portion of non-current financial debt	(108.4)	(99.5)
G	**Current financial indebtedness (E+F)**	**(671.4)**	**(543.1)**
H	**Net current financial indebtedness (G+D)**	**1,348.7**	**371.8**
I	Non-current financial debt	(1,997.0)	(461.0)
J	Debt instruments	(3,197.3)	(2,702.0)
K	Non-current trade and other payables	-	-
L	**Non-current financial indebtedness (I+J+K)**	**(5,194.3)**	**(3,163.0)**
M	**Total financial indebtedness (H+L)**	**(3,845.6)**	**(2,791.2)**
	Non-current financial receivables	151.8	142.7
	Net financial debt (excluding put option)	**(3,693.8)**	**(2,648.5)**
	Nominal amount - fair value put option	(475.9)	(474.2)
	Net financial debt with adjusted put option	**(4,169.7)**	**(3,122.7)**
	Portion of future dividends - fair value put option	(80.1)	(138.6)
	Net financial debt (Net debt)	**(4,249.8)**	**(3,261.3)**

The total amount of net financial debt came to 4,249.8 million euro, with an increase of roughly 988.5 million euro compared to the previous year. This change was mainly due to the cash absorption caused by the variation in net working capital, as mentioned above.

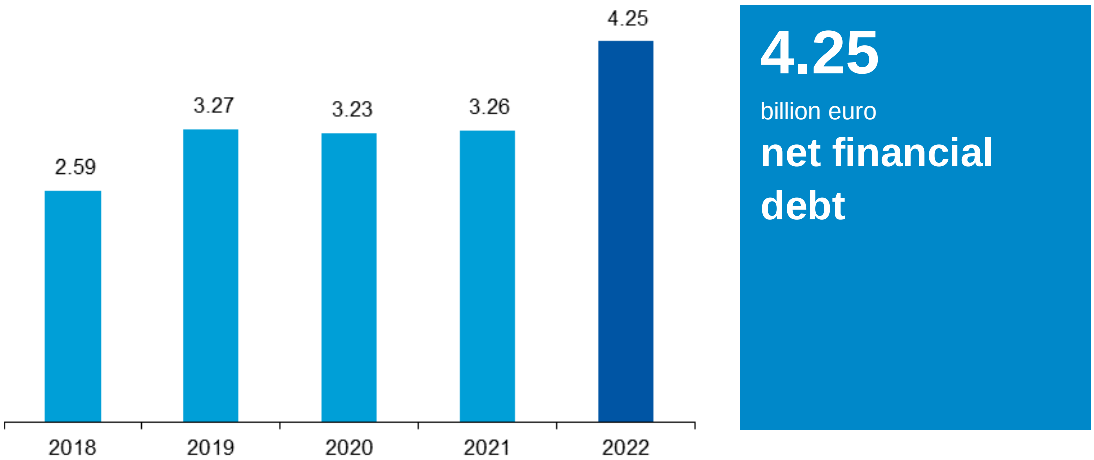
With a view to rebalancing net working capital, considering the tensions affecting commodity prices, during the year the Group routinely carried out rescheduling transactions on trade payables, through reverse factors or letters of credit, amounting to 506.3 million euro overall. At the end of the year, the amount of outstanding transactions, exclusively through letters of credit, amounted to 192 million euro. By means of these transactions, the Group optimised its payment terms, while keeping the same amount recorded under trade payables, since they are part of its typical working capital management. In fact, note that the Group has trade payables, with different payment terms, based on the contractual agreements defined with the individual counterparties of the various businesses in which it operates, ranging from 7 days to 60 days from the date of invoice issuance.

The financial structure shows current debt at 671.4 million euro, of which 316.6 million euro is due to banks, referring to drawdowns on current account lines amounting to roughly 257.4 million euro and passive interest on loans coming to 59.2 million euro.
The current portion of debt to other lenders amounted to 246.4 million euro, of which 145.1 million euro for the daily fair value adjustment of commodity derivatives exchanged on the EEX platform.
As regards the current portion of non-current financial debt, which came to 108.4 million euro, 87.1 million euro was related to the portion of medium-term bank loans due within one year (of which 22.0 million euro is linked to a private placement with a ten-year term maturing in 2023) and 21.3 million euro to current payables related to leasing contracts.
Non-current financial debt increased by approximately 2,031.3 million euro compared to December 2021, mainly due to the placement in May 2022 of a 500 million euro green bond maturing in seven years, and the disbursement of 1,625 million euro in new bank loans as of August 2022. These latter lines were activated to support the gas storage business and to address the potential liquidity risk due to energy price volatility.

Cash and cash equivalents increased from 885.6 million euro in 2021 to 1,942.4 million euro at 31 December 2022.

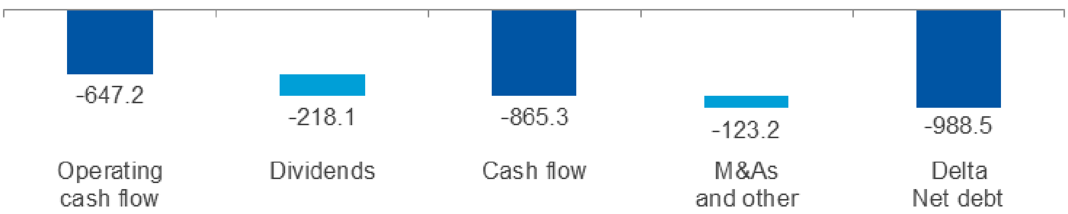
At 31 December 2022, 59.4% of medium/long-term debt consisted of bonds with repayment at maturity. The total debt has an average residual maturity of about five years. 39.4% of debt matures after five years.

NET FINANCIAL DEBT (bn€)



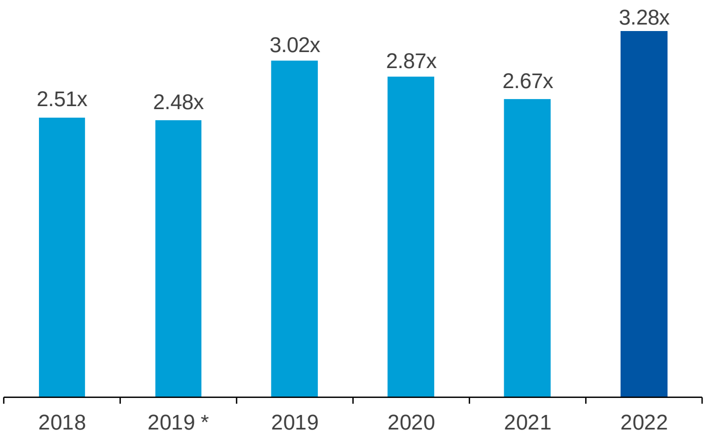
Cash flow from operations was absorbed by the increase in net working capital, mainly influenced by the cash absorbed due to gas storage and the other trends mentioned above, as well as by the significant investments made during the period. In addition, cash absorption was due to the payment of dividends and the purchase of shareholdings, among which above all the acquisition of 100% of Con Energia Spa, specialised in gas and electricity sales to end customers, and the purchase by Marche Multiservizi Spa of 70% of the share capital of Macero Maceratese Srl, specialised in waste recovery and disposal.

CASH FLOW (mn€)



The 2022 Net debt/Ebitda* ratio rose to 3.28, compared to 2.67 in 2021. This indicator was strongly influenced by the cash absorbed due to gas storage, coming to 503.7 million euro. This ratio would come to 2.89, excluding the effect of changes in gas storage.

NET DEBT/EBITDA* (X)



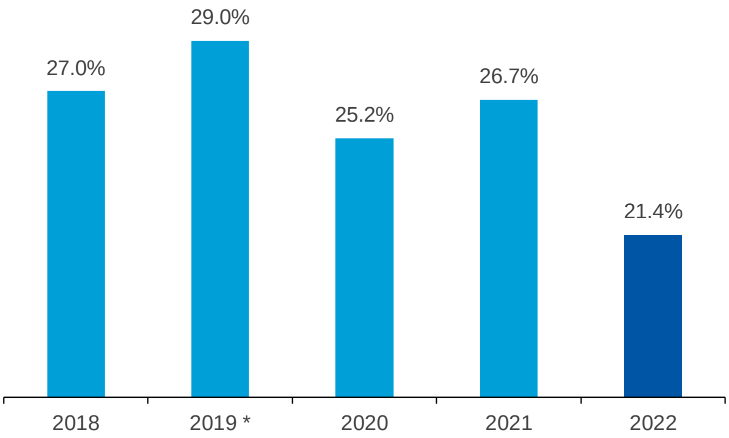
3.28x

Net debt/Ebitda*

* adjusted for non-recurring entries and the Ascopiave transaction

The FFO*/Net debt ratio settled at 21.4%, confirming the Group's financial solidity and its ability to meet its financial obligations. This indicator was also strongly affected by the high value of storage (Ffo/Net debt 23.9% excluding gas storage).

FFO*/NET DEBT (%)



21.4%

FFO*/ Net debt

* adjusted for non-recurring entries and the Ascopiave transaction

1.04.03 Parent company management report

The following table provides the main indicators of operating performance for the year, pursuant to article 2428 of the Italian Civil Code:

(mn€)	2022	2021	Abs. change	% change
Revenues	1,666.3	1,508.6	157.7	10.5%
Ebitda	288.4	286.6	1.8	0.6%
Operating profit	127.3	132.2	(4.9)	(3.7)%
Net profit	271.0	223.8	47.2	21.1%

To understand this performance and the changes with respect to the previous year, the current structure of the Parent Company must be taken into account. This company directly manages certain businesses (municipal waste collection, the integrated water service, cogeneration and district heating) and has shareholdings in Group companies, in addition to carrying out the main corporate governance functions on their behalf.

Ebitda, despite the unfavourable period linked to the socio-economic context, shows the Parent Company's ability to grasp opportunities arising from the economic recovery, particularly in the district heating sector, following the increase in the reference energy index, which is pegged to the price of gas. For more details, see chapter 1.07 "Analysis by business area".

A summary of the adjusted financial information at 31 December 2022 compared to the 31 December 2021 data, is provided below:

Analysis of invested capital and sources of financing (mn€)	31 Dec 22	%	31 Dec 21	%	Abs. change	% change
Net fixed assets	3,864.7	109.0%	3,750.9	107.3%	113.8	3.0%
Net working capital	(154.6)	(6.1)%	(107.3)	(4.3)%	(47.3)	44.1%
Gross invested capital	**3,710.1**	**104.6%**	**3,643.6**	**104.2%**	**66.5**	**1.8%**
Other provisions	(164.4)	(4.6)%	(147.3)	(4.2)%	(17.1)	11.6%
Net invested capital	**3,545.7**	**100.0%**	**3,496.3**	**100.0%**	**49.4**	**1.4%**
Total equity	2,530.3	71.4%	2,469.9	70.6%	60.4	2.4%
Net financial debt	1,015.3	28.6%	1,026.4	29.4%	(11.1)	(1.1)%
Sources of financing	**3,545.6**	**100.0%**	**3,496.3**	**100.0%**	**49.3**	**1.4%**

Regarding the other information required by article 2428 of the Italian Civil Code, note the following:

- Research and development:
  - see paragraph 1.06 of the Directors' report, "Sustainability Results".
- Relations with subsidiaries, associates, parent companies and companies controlled by the latter:
  - as required by article 2428, paragraph 3, point 2 of the Italian Civil Code, see the financial statements contained in paragraph 3.03, prepared in accordance with Consob resolution 15519/2006, relating to the separate financial statements of Hera Spa; lastly, note that these financial statements do not contain atypical or unusual transactions.
- Treasury shares:
  - regarding the information required by article 2428, paragraph 3, points 3 and 4 of the Italian Civil Code, the number and nominal value of the shares comprising the share capital of Hera Spa, the number and nominal value of the treasury shares in its portfolio at 31 December 2022, in addition to changes in these that occurred in 2022, see note 16 of paragraph 3.02.04 and the statement of changes in equity, paragraph 3.01.05, part of the separate financial statements of Hera Spa.
- Foreseeable changes in management:
  - regarding the performance of the businesses units that make up the current structure of the Parent Company, please refer to paragraph 1.01.02 of the Directors' report, "Strategic approach and management policies"
- The Company's use of financial instruments:
  - regarding the Company's objectives and policies on financial risk management, including its hedging policies for each main category of transactions foreseen and the Company's exposure to price risk, credit risk, liquidity risk and the risk of changes in cash flows, see the description provided in paragraph 1.02.03 of the Directors' report, "Risk areas: identification and management of risk factors".
- Secondary offices:
  - the Company does not have secondary offices.
- Significant events occurred after the reporting period:
  - see paragraph, 1.03 "Main events occurred".

1.05 SHARE PERFORMANCE AND INVESTOR RELATIONS

Geopolitical tensions and inflation trigger selling on stock markets

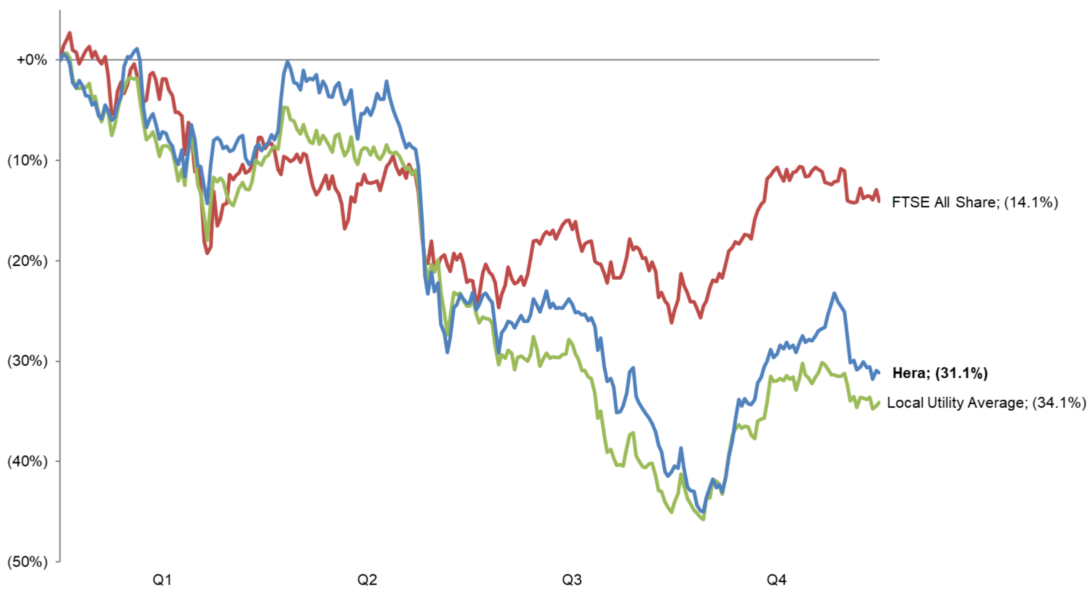
During 2022, the main stock exchanges in Western countries performed negatively, following a downward revision of economic growth prospects, a consequence of the geopolitical tensions that arose with the outbreak of the conflict in Ukraine. As mentioned in previous paragraphs, this conflict exacerbated tensions on energy markets, particularly affected by a reduction, in the present or expected in the future, of gas supplies from Russia. Difficulties in raw material procurement, with supply chains struggling to regain lost ground, also persisted after the disruptions caused by the pandemic. The combination of the conflict and the effects of the pandemic thus triggered an inflationary spiral that led central banks to revise their expansive monetary policies, putting an end to asset purchases on the market (quantitative easing) and raising interest rates.

Against this backdrop, the Italian FTSE All Share index fell by 14.1% during the reporting period, showing the worst performance among major European stock exchanges.

Hera shares perform better than peers

With an official price of 2.529 euro at 31 December, Hera stock was down 31.1%, showing however a more resilient performance than the reference sector. The utilities sector, on the other hand, saw a more pronounced drop than the Italian stock market, due to its higher sensitivity to the effects of the rise in interest rates by the European Central Bank and tensions in the energy markets.

2022 HERA STOCK, LOCAL UTILITY SECTOR AND ITALIAN MARKET PERFORMANCE COMPARISON



12 cent dividend paid

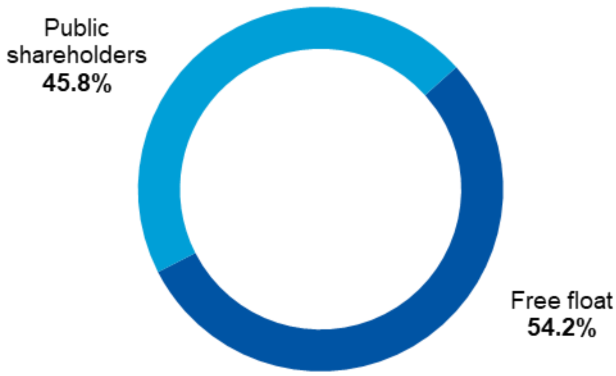
On 20 June 2022, Hera's twentieth dividend was paid. The coupon, amounting to 12 cents per share, increased by 9% year-on-year, respecting the indications set out in the business plan. Hera thus confirmed its ability to remunerate shareholders thanks to the resilience of its business portfolio, which has allowed it to pay steady and growing dividends since its listing.

euro	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dps	0.035	0.053	0.06	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.095	0.10	0.10	0.11	0.12

+235% total shareholders' return since the IPO

The joint effect of continuously remunerating shareholders through dividends and a rise in the price of the stock over the years allowed the total shareholders return accumulated since the IPO to remain consistently positive and to stand at over +234.9% at the end of the reporting period.
The financial analysts covering the stock (Mediobanca, Exane Bnp Paribas, Intermonte, Intesa Sanpaolo, Kepler Cheuvreux, Equita Sim) expressed positive or neutral opinions, with a target price that continued to show significant potential for improvement. At the end of the year, the consensus target price came to 3.60 euro, showing a 42.4%upside potential.

SHAREHOLDER BREAKDOWN AT 31 DECEMBER 2022



45.8% share capital pertaining to the public stockholders agreement

At 31 December 2022, the shareholding breakdown showed its usual stability and balance, with 45.8% of shares belonging to 111 public shareholders located across the areas served and brought together by a stockholders agreement, renewed for three further years and effective from 1 July 2021 to 30 June 2024, and a 54.2% free float. The shareholding structure includes high number of public shareholders (111 municipalities, the largest of which holds shares amounting to less than 10% of the total) and a large number of private institutional and retail shareholders.

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Treasury share plan approved

Since 2006, Hera has adopted a share buyback program, most recently renewed by the Shareholders Meeting held on 28 April 2022 for a further 18 months, for an overall maximum amount of 240 million euro. The purpose of this program is to finance M&A opportunities involving smaller companies, and smoothing out any abnormal market price fluctuations vis-à-vis those of the main comparable Italian companies. As of 31 December 2022, Hera held 38.5 million treasury shares.

Ongoing communication with the market in 2022 as well

The Group continued to engage in intense communications with financial market players in 2022. After presenting the 2021-2025 business plan, the Executive Chairman and the CEO took part in a road show with investors in the main financial centres to update them on business trends and future prospects. Further occasions for contact came about by participating in the sector conferences organised by the brokers covering Hera stock. The intensity of the Group's commitment to dialogue with investors contributes to strengthening its reputation on the markets and constitutes an intangible asset to the benefit of Hera's stock and stakeholders. The intense dedication shown by the Group towards dialoguing with investors contributed to reinforcing its market reputation and represents an intangible asset benefiting Hera stock and stakeholders.

As regards the information required by article 2428, paragraph 3, subparagraphs 3 and 4 of the Italian Civil Code, concerning the number and nominal value of the shares constituting the share capital of Hera Spa, the number and nominal value of the treasury shares held at 31 December 2022, as well as the changes in these shares during 2022, see note 25 of paragraph 3.02.04 and the statement of changes in equity in paragraph 3.01.05 of the Parent Company's separate financial statements.

1.06 SUSTAINABILITY RESULTS

The Group's commitment to reporting to stakeholders as to the results achieved in the areas of creating shared value (CSV) and sustainability was confirmed once again this year by its Sustainability Report, available at bs.gruppohera.it and on the Group's website in the sustainability section. SR

The Sustainability Report contains the Hera Group's consolidated non-financial statement, prepared pursuant to legislative decree 254/16, and acts as a separate report compared to this Directors' report, as provided for in Article 5, paragraph 3, letter b) of legislative decree 254/16. The Sustainability Report also includes indicators and information relating to the environment, personnel and research and development activities.

What follows is a summary of the main results reported in the 2022 Sustainability Report.

During 2022, further progress was made in CSV areas and as regards sustainability, both in terms of results and recognitions obtained and new projects launched. Note, first and foremost, the process of updating the Code of Ethics, begun in June and completed in December, which led to the approval of its sixth edition by Hera Spa's Board of Directors during the meeting held on 8 February 2023. This updating process was the most participative seen since the introduction of the Code, involving management, all employees, with a specific initiative dedicated to younger workers, and trade unions. The "corporate purpose" introduced into Hera Spa's Articles of Association in 2021 characterises the new edition of the Code, which incorporates a commitment to a just ecological and digital transition, attention to the more vulnerable customers, promotion of work and personal well-being and the importance of communication and listening, even in critical moments.

Hera stock was included in 2022, for the third consecutive year, in the Dow Jones Sustainability Index, World and Europe, with a score that confirms the Group as the best company in the "Multi and Water Utilities" sector, and the Group achieved a top ranking internationally, for the second consecutive year, in the ESG Evaluation carried out by S&P Global Ratings;

Creating shared value: CSV Ebitda rises to 670.3 million euro (51.8% of total Ebitda); CSV investments come to 510.0 million euro (62.3% of total investments)

The 2022 Sustainability Report consolidates its representation of content focused on creating shared value. The achievements made and the targets set for the future are accompanied by a summary of the scenario related to the three drivers for creating shared value:

(i) Energy - pursuing carbon neutrality;
(ii) The Environment - regenerating resources and closing the circle;
(iii) Local areas (and Businesses) - enabling resilience and innovating, to which an equal number of chapters are dedicated, representing the most significant part of the report.

One of the strengths of the Group's reporting is its quantification of shared value Ebitda (CSV Ebitda), i.e. the portion of Ebitda that derives from business activities capable of meeting the objectives on the Global Agenda, which refers to calls to action for sustainable growth (relevant to the Group's activities) summarised in the three drivers mentioned above.

In 2022, CSV Ebitda came to 670.3 million euro, corresponding to 51.8% of the Group's total Ebitda. 2022 CSV Ebitda showed a 17% increase compared to the amount seen in 2021. 2022 CSV Ebitda was thus in line with the path set out by the 2022-2026 Business Plan, which was designed so that approximately 62% of 2026 Ebitda will come from business activities that meet the priorities on the Global Agenda. The Group's contribution to creating shared value also comes from the investments made in the three CSV drivers, which in 2022 amounted to 510.0 million euro, roughly 62% of total investments, including corporate acquisitions.

The Group's quantification of shared-value Ebitda and investments for 2022 was audited for the fourth consecutive year by an auditing firm, in order to confirm these distinctive aspects of the Group's reporting to all stakeholders.

Pursuing carbon neutrality: -6.9% in energy consumption; 27.1% of contracts with energy efficiency services; -11.7% greenhouse gas emissions

Hera pursues the carbon neutrality of its own activities and those of its customers by promoting energy efficiency and projects in the area of the energy transition.
With regard to energy efficiency, note that:

- the initiatives included in the ISO 50001 energy improvement plans and already implemented by the end of 2022 have made it possible to reduce energy consumption by more than 19 thousand tons of oil equivalent (corresponding to the annual consumption of more than 13 thousand households), equivalent to 6.9% of 2013 consumption, on the path towards the target set for 2026;
- at the end of 2022, gas and electricity contracts with energy efficiency solutions amounted to 27.1% of total contracts and showed further growth compared to the previous year; initiatives to promote energy efficiency among residential customers include the Consumption Log, a free report to raise customer awareness of energy savings, based on the principles of behavioural economics, in addition to the numerous offers with energy efficiency solutions that were further enhanced in 2022.

With regard to the energy transition and renewable energies, Hera continued to promote its carbon-neutral commercial offer in 2022, achieving at the end of the year:

- an amount of electricity from renewable sources sold on the free market coming to 41.1% of total electricity sold, not far from the 2026 target, set at 44%;
- an amount of methane gas with compensation for CO_2 emissions sold on the free market coming to 14.2%, rapidly increasing compared to the 2026 target set at 21%.

In 2022, the Group continued to promote the Hera Photovoltaic offer launched in 2021, which provides for a "turnkey" installation of photovoltaic panels. During this same year, approximately 1,300 panels were sold for a total capacity coming to roughly 7 MW.
Within the Group, note:

- further progression in the green profile of Hera's own electricity consumption, which as of 2022 is covered by 100% renewable energy;
- the production of 7.7 million cubic metres of biomethane and a new plant, operative as of December 2022 in Spilamberto (Modena), whose annual production is expected to come to 3.7 million cubic metres;
- ongoing work on initiatives for the development of hydrogen and photovoltaics, including the continuation, with positive results, of the first national trials for hydrogen injection into the gas network for household use in Modena; the conclusion of the final design of a power-to-gas plant in Bologna, closely integrated with the wastewater treatment process; the start of construction of the first of a series of photovoltaic plants that will be built within the Group's sites and which, added to those built at external sites, will bring the Group's own installed photovoltaic power to over 90 MW by 2026;
- over 50 million euro obtained in NRRP contributions for developing district heating in Bologna, Ferrara and Forlì, through which the efficiency of the current energy sources used (waste-to-energy plants in the case of Bologna and Forlì, geothermal energy in Ferrara) will be improved, with significant benefits in terms of reducing carbon dioxide emissions.

Lastly, based on the third report drafted according to the Science Based Targets initiative methodology, as mentioned above, the Group's greenhouse gas emissions (scopes 1+2+3 from downstream electricity and gas sales) saw an 11.7% reduction in 2022 (excluding the transitory increase in volumes sold in last resort gas services), compared to the 2019 base year, which is within the path for the 2030 target validated by SBTi. More specifically, 2022 saw reductions in scopes 1+2 (market-based) emissions and carbon intensity of electricity sales (scope 3, upstream) coming to 17.5% and 21.0% respectively.

SUSTAINABLE PRESENT AND FUTURE

WHAT WE SAID WE WOULD DO...

Promoting energy efficiency

28% CUSTOMERS BY 2025 and 34% by 2030 with energy efficiency solutions

Energy transition and renewables

BIOMETHANE, HYDROGEN, PHOTOVOLTAICS
17 million m³ of biomethane production in 2025 and over 30 million in 2030. Continue with hydrogen development initiatives. Internal and external development of photovoltaics

Climate change mitigation

-37% GREENHOUSE GAS EMISSIONS (scopes 1+2+3 from downstream electricity and gas sales) by 2030 with SBTi method, compared to 2019 data

Transition to a circular economy

+125% PLASTIC RECYCLED by Aliplast within 2025 and +150% by 2030 (compared to 2017)

-20% INTERNAL WATER CONSUMPTION by 2025 and -25% by 2030, compared to 2017 consumption

WHAT WE DID...

27.1% CUSTOMERS IN 2022 with at least one energy efficiency solution; vs 24.5% in 2021

7.7 MILLION M³
biomethane produced and new plant launched in Modena in 2022. Continued various hydrogen and photovoltaic development initiatives:
- first trial hydrogen injection into the gas network carried out
- actions for photovoltaic development at Hera sites and other areas initiated

-11.7% GREENHOUSE GAS EMISSIONS to 2022 compared to 2019 level (excluding last resort gas services)

+33% PLASTIC RECYCLED by Aliplast in 2022 (compared to 2017)

-20.5% INTERNAL WATER CONSUMPTION in 2022, compared to 2017 consumption, thanks to specific water-saving initiatives

WHAT WE WILL DO...

34% CUSTOMERS BY 2026 and 37% by 2030 with energy efficiency solutions

BIOMETHANE, HYDROGEN, PHOTOVOLTAICS
12 million m³ of biomethane production by 2026 and over 30 million by 2030. Continue with hydrogen development initiatives. Over 90 MW photovoltaic power installed and 2,300 photovoltaic systems sold by 2026. Energy community development

-37% GREENHOUSE GAS EMISSIONS (scope 1+2+3 from downstream electricity and gas sales) by 2030 with SBTi method, compared to 2019 data. Launch the Hera Net Zero project

+102% PLASTIC RECYCLED by Aliplast within 2026 and +150% by 2030 (compared to 2017). Build a plant to recycle rigid plastics and one to recycle carbon fibres by 2025, partially thanks to Nrrp funds

-22% INTERNAL WATER CONSUMPTION by 2026 and -25% by 2030, compared to 2017 consumption

Regenerating resources and closing the circle: sorted waste at 67.8%; +17.5% of packaging recycled; 7.3% purified wastewater reused; -20.5% in water consumption

Hera regenerates resources and closes the circle through initiatives and projects in three areas: (i) transition towards a circular economy, (ii) sustainable management of water resources, (iii) protection of air, soil and biodiversity.
With regard to the transition to a circular economy, 2022 saw sorted waste collection come to 67.8%, up 2.5 percentage points compared to 2021 (Italian 2021 average: 64%) and use of landfills for the disposal of urban waste at 2.3% (European 2021 average: 23%). In this respect, Hera is almost 20 years ahead of the EU target for the circular economy and ranks among the most virtuous European countries. In October 2022, Hera published the thirteenth edition of its "Tracking Waste" report, verified by DNV, thus providing citizens with a guarantee of the effective recovery of separate waste collection, which came to 91%. This report contains indications as to how the area served by Hera positions with respect to the recycling targets set by the EU as part of the circular economy package: the overall recycling rate, where Hera with 57% has already achieved the target set for 2025, and the packaging recycling rate, where the Group with 68% is close to the target set for 2030.
Once again as regards the circular economy, 2022 saw:

- an 80.6% material and energy recovery rate in Herambiente Spa's sorting plants, stable compared to the previous year;
- a further improvement in the circularity profile of Hasi Srl and its subsidiaries, demonstrated by an increase in the portion of managed waste sent for material and energy recovery, which went from 43.1% in 2021 to 48.6% in 2022;
- the quantity of plastics recycled by Aliplast coming to approximately 79.2 thousand tonnes, slightly down compared to 2021 due to increased energy costs and lesser demand for recycled PET and the ensuing shift of some large companies towards the use of virgin plastics. The figure for 2022 is however 33% higher than in 2017, the baseline of the commitments made in the New Plastics Economy Global Commitment, promoted by the Ellen MacArthur Foundation.

Regarding the sustainable management of water resources, the initiatives to preserve them were significant, such as the internal water management project, which led to a 20.5% reduction in consumption in 2022 (compared to the 2017 baseline), agreements with local authorities to make 7.3% of the water coming out of purification plants reusable, and the Consumption Log, mentioned above, which was distributed to about 35% of domestic water service customers.
As far as air protection is concerned, positive results were confirmed in relation to the environmental performance of the Group's WTE plants, which in 2022 as well recorded very low atmospheric emissions, on average 86% lower than legal limits, and the Imola cogeneration plant, whose average PM10 concentrations were 99% lower than the limits. Finally, with regard to soil protection, note that from 2018 to 2022, the construction of infrastructures involved soil reuse coming to 78%.

Enabling resilience and innovating: 102.8 million euro invested in innovation and digitisation; 2.3 billion euro in economic value distributed to local areas; local suppliers account for 64.5% of the total

Significant results were achieved by the Group in 2022 in the CSV areas related to economic growth and employment in the areas served, social inclusion, innovation and digitalisation. Equally important were the initiatives aimed at ensuring the resilience of its operations and therefore of the areas served.
The total added value distributed to local areas amounted to 2,324 million euro, or 76% of the total economic value. The amount distributed to local suppliers came to 64.5% of the total, reaching 881 million (+9% compared to the previous year), while the induced employment is estimated at over 9 thousand people; these figures confirm the Group's primary role in promoting growth in the local area. With regard to induced employment, the employment of disadvantaged people (amounting to 899) as a result of supplies and partnerships with social cooperatives is estimated at 82.3 million euro in 2022. Once again concerning social inclusion, note the measures put in place by Hera and improving on those defined by ARERA to support customers facing hardship in coping with rising energy prices: the number of bills paid by instalments increased by 36% compared to 2021 and the memoranda of understanding in place with the 135 municipalities served made it possible to prevent suspension of supplies to customers assisted by social services in 58% of cases. All the measures and advice for dealing with the

energy crisis have been summarised in SOStegno Energia, an online guide that supplements the existing SOStegno Hera guide summarising the tools available to customers facing financial difficulty.
In the area of innovation, investments amounting to 102.8 million euro were related to initiatives in two areas: ecological transition and digital transformation. With regard to digital transformation, the 2022 Sustainability Report confirms reporting for 20 projects, as introduced for the first time in the 2020 Annual Report, concerning objectives, results and impacts based on the framework of Corporate digital responsibility, defined as the set of practices and behaviours that help an organisation use data and digital technologies in an ethical and responsible manner, from a social, environmental, economic and technological point of view.
In 2022, the effort to develop digital channels for customer relations continued, with customers registered for online services rising to 29.4% and those who requested electronic billing coming to 34.5%. The Group's engagement in this area, combined with its focus on local communities, continued in 2022 with the fourth edition of the campaign to promote electronic billing and customers' digital behaviour, called Digi e Lode, through which the Group from 2017 to 2022 donated 565 thousand euro for the digitalisation of 226 schools.
As regards climate change resilience, the Group made investments coming to approximately 62.1 million euro in 2022. In this area, note:

- the continued work on upgrading the electricity distribution grid in the Modena Apennines: the amount of network upgraded at the end of 2022 rose to 38 kilometers, equivalent to 57% of the overall resilience plan defined;
- a 14% increase in remote-controlled plants, which went from 7.9 thousand in 2021 to 9 thousand in 2022;
- the planning and construction, in the aqueduct, of numerous interventions in the Triveneto and Emilia Romagna regions to mitigate drought risk, including aqueduct interconnections, optimization of catchment and intake pipes, and new wells and reservoirs; these interventions came in addition to development of predictive algorithms and the use of innovative technologies to support leakage detection; the district-based network for effective leakage monitoring increased from 48% in 2021 to 51% in 2022.

The results achieved in terms of creating shared value came alongside those in the following areas, which complete the Group's sustainability profile and are reported in the "Alongside the protagonists of change" section of the Sustainability Report.
Thanks to awareness-raising programmes and the adoption of ISO 45001 certification, which covers 88% of the Group's workers, the accident frequency rate remained more or less stable (10.5 in 2022) and was 48% lower than the sector average, reported by Utilitalia. A further drop was seen in the frequency rate for manual labourers, which came to 21.8 in 2022 (vs 22.9 in 2021 and 30.5 in 2020). In 2022, workers received more than 6.6 million euro through the Hextra welfare system, to which 99% of employees adhered. The amount of training remains high: in 2022, there were 30.8 average hours of training per capita, in line with 2021, and the role of sustainability objectives in the balanced scorecard system linked to the incentive system involving management remained significant: in 2022, 37% of the variable remuneration of Group executives and middle managers was linked to sustainability target projects, with 24% of sustainability target projects geared towards creating shared value.
In 2022, an overall increase was seen in call centre contacts (+25%, over 1.7 million more calls), which had an impact on waiting times. This was mainly due to the turbulence that occurred in the energy markets in the second half of the year and the resulting impact on bills, which prompted customers to contact the company for clarification and support. There was therefore an increase in the average conversation time required to provide adequate advice to customers, especially concerning payment by instalment options, social bonuses and energy saving opportunities. The average waiting time at call centres for residential customers thus increased from 32 seconds in 2021 to 93 in 2022. The corporate segment also saw an increase in calls to call centres in 2022 (+34%), which affected the average waiting time, which stood at 112 seconds. In 2022, Hera Group help desks handled inflows that increased by 17%, due to both the reasons described above and a return to face-to-face contacts compared to previous years. As a result, average waiting times increased slightly, going from 6 minutes in 2021 to 9 minutes in 2022.
The survey conducted in 2022 on the quality of services provided by the Group (approximately 9,950 interviews conducted with household customers) recorded a customer satisfaction rate coming to 72/100, down one point from the previous year, but still above 70/100, corresponding to high satisfaction.
When selecting suppliers in 2022, the Group used the most economically advantageous bid method for 95% of public tenders and 68% of overall tenders (in terms of value). Considering overall tenders, the

average score reserved for social and environmental factors came to 39/100. The "circular procurement" project also continued in 2022, with the application of the appropriate guidelines and the identification of technical criteria providing an advantage in tenders: eco-efficiency, dematerialisation, renewability and recyclability. As in previous years, in 2022 circularity criteria were included in over 82% of tenders carried out with the most economically advantageous bid method, with an average score of 13.2. Supplier monitoring focused on social responsibility towards workers also continued in 2022, as did monitoring of accidents, which involved 83% (in terms of commissioned value) of suppliers of services and works.

Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)

The recommendations of the Task Force on Climate-related financial disclosures (TCFD) came after its establishment as a result of the 2015 Paris Agreement, in which the member states of the United Nations committed to keeping the global average temperature increase below 2°C compared to pre-industrial levels and if possible limiting the increase to 1.5°C by the end of the 21st century. During the same year, the G20 Financial Stability Board created the TCFD, with the aim of facilitating transparency on the financial opportunities and risks associated with climate change. In 2017, the TCFD published the reporting recommendations mentioned above, which are now an international benchmark for climate change disclosure by companies. The TCFD's recommendations are applicable to organisations across all sectors and are categorised according to four areas: governance, strategy, risk management and metrics & targets.

The Group began its path towards alignment with the TCFD's recommendations in 2020, and this ongoing process has been defined according to three main steps:

- establishing of a dedicated cross-departmental working group;
- carrying out an in-depth analysis of the gaps in the reporting system and the way in which the Hera Group deals with climate opportunities and risks with respect to the recommendations;
- defining a work plan to gradually increase the degree of alignment with the TCFD's recommendations, the results of which can be seen in this consolidated report and in the 2022 Sustainability Report, which can be consulted for an exhaustive illustration of the four thematic reporting areas (see the dedicated section "Hera for the climate").

SR

The European taxonomy of environmentally sustainable activities

The EU Taxonomy is a unique EU-wide classification system introduced with Regulation 2020/852, which establishes a list of environmentally sustainable economic activities. This is a classification tool provided for in the Action plan on sustainable finance, aimed at supporting the EU in increasing sustainable investments and implementing the Green Deal.
Following the recommendations of Delegated Regulation 2021/2178, which introduces disclosure requirements for information linked to the taxonomy in NFS, a multi-step process was developed in 2021 to analyse the Taxonomy's applicability along the entire value chain, taking into account all of the Group's consolidated companies. This process was focused exclusively on climate change mitigation and adaptation targets, for which Delegated Regulation 2021/2139 set out a list of activities that contribute substantially to these objectives, and a list of technical screening criteria that these activities must meet in order to be classified as environmentally sustainable. It thus became possible to go beyond the disclosure requirements established for the 2021 NFS and to quantify and report on the economic KPIs (turnover, opex and capex) of the activities managed by the Hera Group that are eligible for the taxonomy, i.e. activities included in the list envisaged in Regulation 2139, as well as those aligned with the taxonomy, i.e. activities that meet the technical screening criteria, as regards the mitigation target. In addition, the economic KPIs were supplemented with Ebitda coming from activities aligned with the taxonomy (which therefore accompanies and complements CSV Ebitda), and the amount of investments in those activities has been introduced in the Business Plan.
In 2022, this process continued by refining and updating the analysis of the technical screening criteria, by preparing the reporting in greater detail required for the current year and with an in-depth study of the complementary delegated act 2022/1214, which introduced certain nuclear and fossil gas energy production activities in the list of eligible economic activities, by defining the technical screening criteria for their alignment.

SR Once again with reference to the EU Taxonomy, note that in May 2022 Hera issued its third green bond, with a total amount of 500 million euro repayable over seven years, aimed at financing or refinancing numerous investments selected on the basis of the Group's Green Financing Framework, which was aligned with the principles underlying the Taxonomy in 2022.

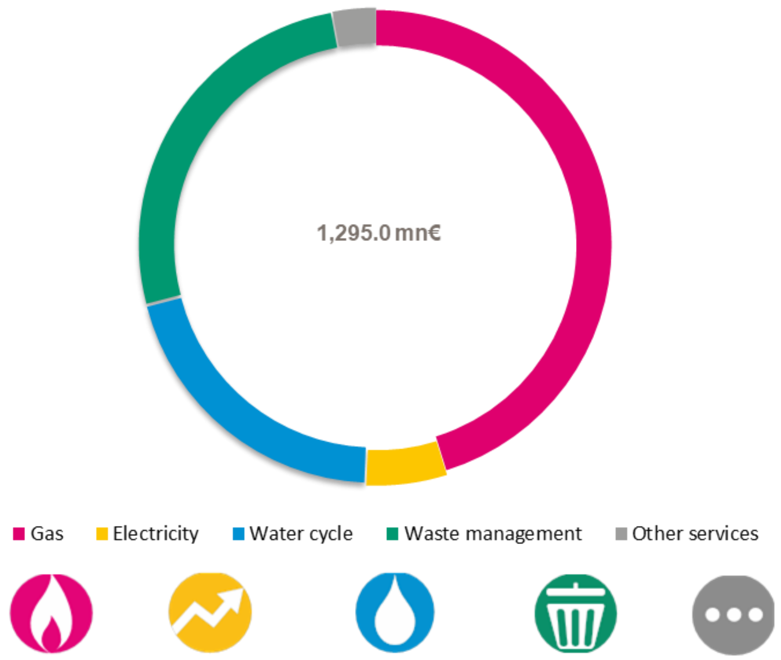
Please refer to the sustainability report for an exhaustive discussion of the topics.

1.07 ANALYSIS BY BUSINESS AREA

A multi-business strategy

An analysis of the operating results achieved in the Group's business areas is provided below, including: the gas area, which covers services in natural gas distribution and sales, district heating and heat management; the electricity area, which covers services in generation, distribution and sales; the integrated water cycle area, which covers aqueduct, purification and sewerage services; the waste management area, which covers services in waste collection, treatment and recovery; the other services area, which covers services in public lighting and telecommunications, as well as other minor services.

EBITDA * DECEMBER 2022



The Group's income statements include corporate headquarter costs and account for intercompany transactions at arm's length.

The following analyses of each single business area take into account all increased revenues and costs, having no impact on adjusted Ebitda, related to the application of IFRIC 12. The business areas affected by this accounting standard are: natural gas distribution services, electricity distribution services, all integrated water cycle services and public lighting services.

The value of adjusted Ebitda, broken down by strategic business areas, reflects the adjustment to the valuation of gas storage described in the introduction to paragraph 1.04. For a detailed identification of the effects of this adjustment, the values of Adjusted Ebitda and Ebitda are provided below:

	Dec 22		Dec 21 (redetermined)	
(mn€)	**Ebitda ***	**Ebitda**	**Ebitda ***	**Ebitda**
Gas Area	585.1	491.1	483.2	487.6
Electricity Area	71.6	71.6	144.7	144.7
Integrated water cycle Area	261.9	261.9	262.4	262.4
Waste management Area	338.0	338.0	291.7	291.7
Other services Area	38.4	38.4	37.4	37.4
Total	**1,295.0**	**1,200.9**	**1,219.4**	**1,223.9**

* refers to the adjusted results as mentioned in chapter 1.04

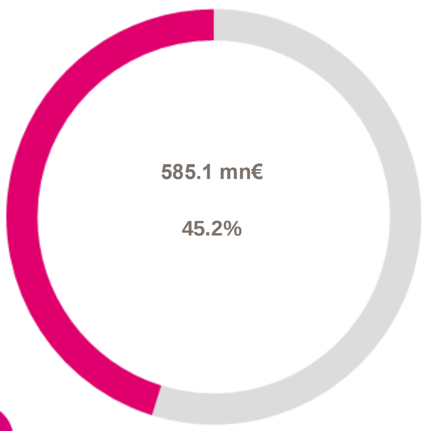
1.07.01 Gas

Ebitda rises

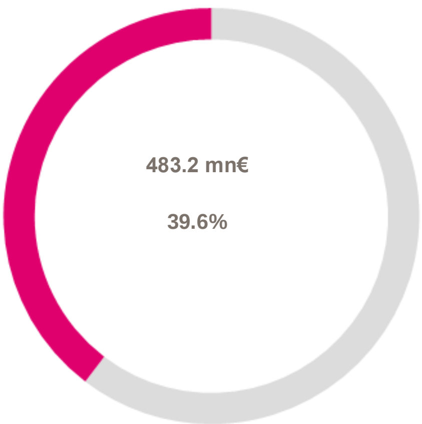
Significant growth was seen in 2022 compared to 2021, both in terms of volumes sold and end customers, thanks to the opportunities provided in the Energy Services segment by energy efficiency incentives, the 110% super-bonus and insulation bonus, the corporate acquisition of Con Energia Spa and the awarding of tenders related to the markets of last resort and Consip. In particular, Hera Comm Spa was awarded the following lots nationwide:

- six of the nine lots of the last resort gas service (for customers involved in public services or without a supplier) for the period from 1 October 2021 - 30 September 2023 in: Valle d'Aosta, Piedmont, Liguria, Trentino A.A., Veneto, Friuli-Venezia Giulia, Emilia-Romagna, Tuscany, Umbria, Marche, Lazio and Campania. In the previous tender, Hera Comm was awarded eight out of nine lots;
- all nine lots of the default gas distribution service (for customers in arrears), for the period 1 October 2021 - 30 September 2023 in: Valle d'Aosta, Piedmont, Liguria, Lombardy, Trentino A.A., Veneto, Friuli-Venezia Giulia, Emilia-Romagna, Tuscany, Umbria, Marche, Abruzzo, Molise, Basilicata, Puglia, Lazio, Campania, Sicily and Calabria. In the previous tender, Hera Comm was awarded five out of nine lots;
- two of the 12 lots of the Consip GAS14 tender for supplying natural gas to public administrations in 2022, both in Lombardy.

EBITDA* GAS AREA 2022



EBITDA* GAS AREA 2021

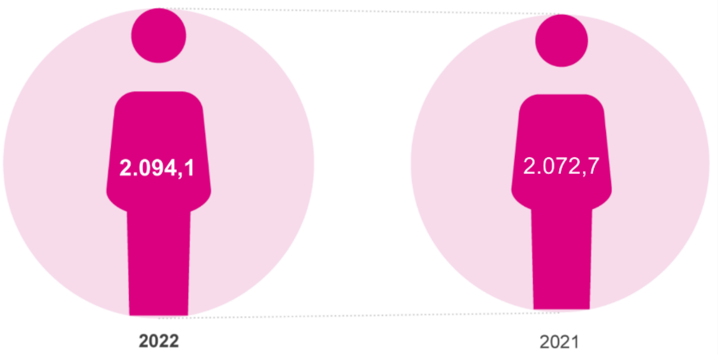


The following table shows the changes occurred in terms of adjusted Ebitda:

(mn€)	Dec 22	Dec 21 (redetermined)	Abs. change	% change
Area Ebitda*	**585.1**	**483.2**	**101.9**	**+21.1%**
Group Ebitda*	1,295.0	1,219.4	75.6	+6.2%
Percentage weight	45.2%	39.6%	+5.6 p.p.	

* refers to the adjusted results as mentioned in chapter 1.04

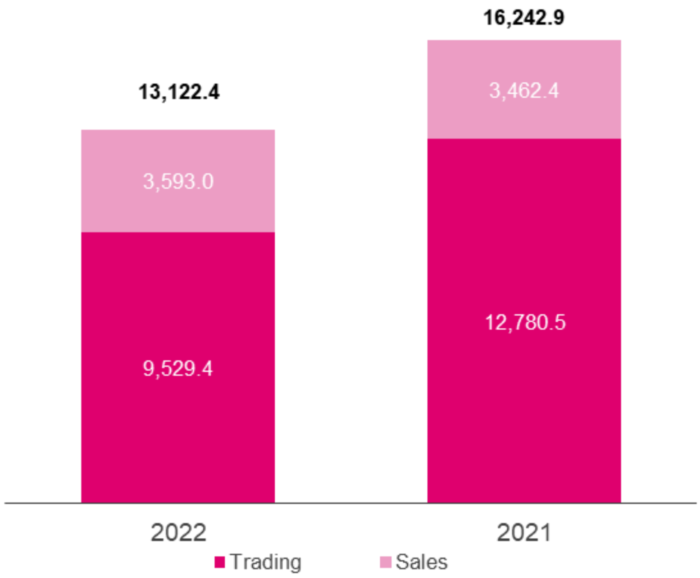
CUSTOMERS (k)



2.1
million
gas customers (+1.0%)

The number of gas customers increased by 21.4 thousand, or 1.0%, compared to the previous year. This growth can be seen mainly in the markets of last resort where the customer base, as a result of the tenders for the 2021-2023 period, increased by 59.8 thousand. Traditional markets are down by -38.3 thousand, despite the positive contribution made by the entrance of Con Energia into the Group's scope of operations.

VOLUMES SOLD (mn/m3)



13.1
Billion m3
sold (-19.2%)

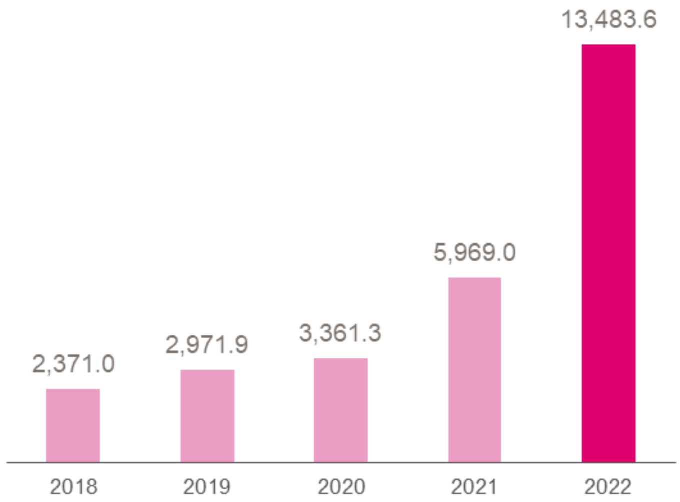
Total volumes of gas sold decreased by 3,120.5 million m^3, or 19.2%, due to reduced trading (-3,251.1 million m^3), limited by the high prices seen during most of 2022. Volumes sold to end customers increased by 130.6 million m^3, or 3.8%, as compared to the same period of the previous year. This growth was due to last resort markets, coming to 296.6 million m^3, or +157.5% (8.6% of total volumes sold), thanks to the positive outcome of the new tenders mentioned above, partially contained by traditional markets, coming to 166.0 million m^3, or -5.1% (-4.8% of total volumes sold). The latter were affected by both a less favorable climate, with average temperatures higher than the previous year, and lesser consumption, mainly involving the measures taken by the industrial sector and changing habits in the household sector, as a result of the high cost of energy commodities.

The following table summarises operating results for the gas area:

Income statement (mn€)	Dec 22	% inc.	Dec 21 (redetermined)	% inc.	Abs. change	% change
Revenues	13,483.6		5,969.0		7,514.6	+125.9%
Operating costs	(12,780.4)	(94.8)%	(5,377.5)	(90.1)%	7,402.9	+137.7%
Personnel costs	(134.4)	(1.0)%	(126.9)	(2.1)%	7.5	+5.9%
Capitalised costs	16.4	+0.1%	18.6	0.3%	(2.2)	(11.8)%
Ebitda *	**585.1**	**4.3%**	**483.2**	**8.1%**	**101.9**	**+21.1%**

* refers to the adjusted results as mentioned in chapter 1.04

REVENUES (mn€)



13.48
billion euro
revenues
(+125.9%)

Revenues increased by 7,514.6 million euro, nearly triple those of the previous year. The reasons mainly lie in the increased price of the raw material gas, which began rising in October 2021. This trend generated higher revenues in trading coming to 4,973 million euro and in sales coming to 2,388 million euro. The CMEM tariff component, which in the protected market represents trends in the cost of raw materials, more than tripled on average compared to the previous year.

Higher revenues were related to the increase in volumes sold in the amount of 58 million euro, due to the new lots won in the tenders mentioned above, the change in the scope of Con Energia Spa in the amount of 26 million euro, and the Energy Services business area in the amount of 273 million euro, thanks to activities related to energy efficiency, insulation incentives and the 110% super-bonus.

In addition, increased revenues from activities in Bulgaria came to 38 million euro.

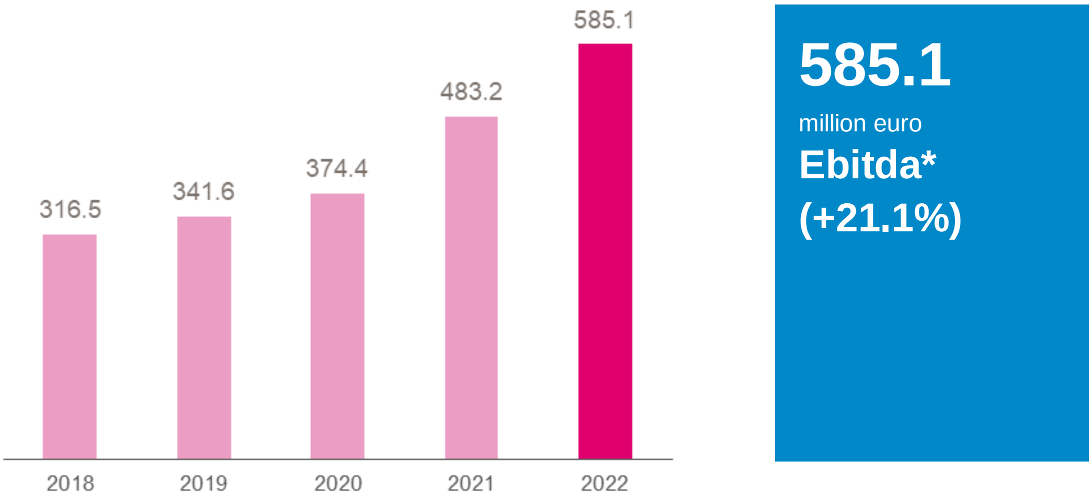
Also note the higher revenues from energy efficiency certificates amounting to 60 million euro compared with the previous year, limited by a decrease in the number of energy efficiency certificates as per obligations for 2020 and 2021 specified by the 21 May 2021 Ministerial Decree.

This growth was contained by lower revenues mainly related to system charges, with an equal effect on costs, amounting to 414 million euro, as a result of Resolutions 635/2021/R/com, 35/2022/R/eel, 141/2022/R/com, 295/2022/R/com. As of 2021, the government has progressively reinforced the extraordinary measures to contain the effects of raw material price increases, with significant impacts on general system charges, which have progressively decreased since the fourth quarter of 2021.

Regulated revenues were substantially in line with the previous year. From a regulatory point of view, through Resolution 614/2021/R/com, published in late 2021, ARERA adjusted the criteria for determining and updating the rate of return on invested capital (WACC) by reducing it from 6.3% in 2021 to 5.6% in 2022. This reduction was offset by increased investments and their remuneration as part of tariffs and higher premium revenues obtained thanks to security recoveries (Resolution 383/2022/R/gas).

This increase in revenues was proportionally reflected by growth in operating expenses, which increased by 7,402.9 million euro overall. This trend was mainly due to the increase in raw material gas prices mentioned above, including the higher costs for energy efficiency certificates, and increased activity in the area of Energy Services.

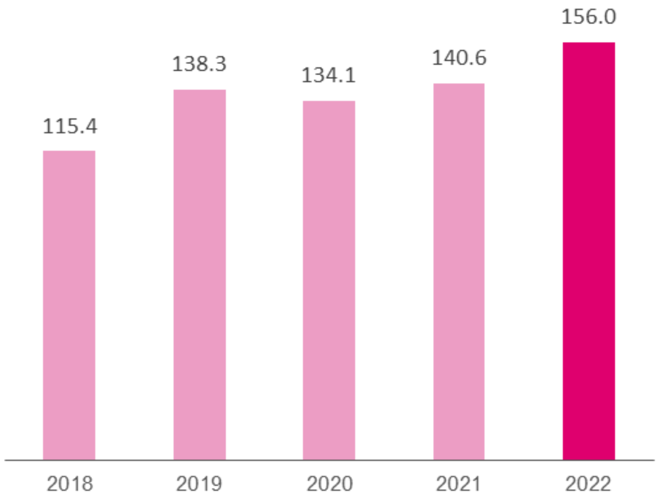
EBITDA* (mn€)



* refers to the adjusted results as mentioned in chapter 1.04

Adjusted Ebitda increased by 101.9 million euro, or 21.1%, mainly due to higher sales and brokerage activities, with a contribution amounting to approximately 80.3 million euro, mainly due to the enlargement of the scope of areas served as a result of last resort markets, as mentioned above. The remaining growth was related to incentivized energy efficiency activities and district heating.

NET INVESTMENTS GAS (mn€)



156.0
million euro
net investments gas

Net investments in the gas area amounted to 156.0 million euro in 2022, up 15.4 million euro compared to the previous year. In gas distribution, the overall increase came to 12.3 million euro, mainly due to non-recurring maintenance on networks and plants, which was up compared to the previous year, even considering the lower effect of the large-scale meter replacement pursuant to Resolution 554/15, relating to the commissioning of smart gas meters. In gas sales, investments coming to 13.3 million euro were recorded for activities related to the acquisition of new customers, up by 3.1 million euro compared to the previous year. Investments were largely in line with the previous year in district heating and heat management services, with a decrease in district heating by Hera Spa that offsets the increase in energy services in the activities of the companies Hera Servizi Energia Srl and AcegasApsAmga Servizi Energetici Spa. Requests for new connections were also up compared to the previous year.

Details of operating investments in the gas area are as follows:

Gas (mn€)	Dec 22	Dec 21	Abs. change	% change
Networks and plants	116.2	103.9	12.3	+11.8%
Acquisition gas customers	13.3	10.2	3.1	+30.4%
DH/heat management	27.2	27.1	0.1	+0.4%
Total gas gross	**156.7**	**141.3**	**15.4**	**+10.9%**
Capital grants	0.7	0.7	-	+0.0%
Total gas net	**156.0**	**140.6**	**15.4**	**+11.0%**

The Regulatory asset base (RAB) for assets owned in the gas area, which defines the value of the assets recognised by the Authority as regards return on invested capital, increased compared to 2021.

RAB (BN€)

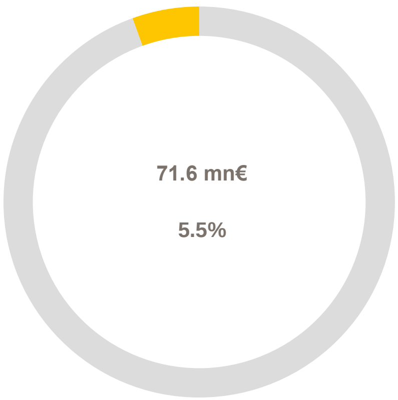
1.07
billion euro
2022 RAB

1.07.02 Electricity

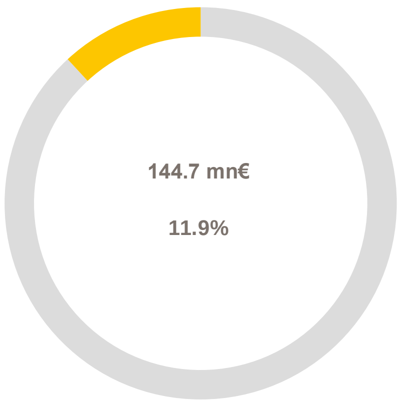
At the end of 2022, the result was lower than in 2021, mainly due to the different conditions of energy markets, related to the exceptional context of rising raw material prices, which affected procurement activities, and a lower contribution from production due to reduced use of the dispatching services market. However, there is evidence of solid business development, which is confirmed by the growth in customers, mainly in the free market, and the number of sign-ups for innovative offerings (related to electric mobility, photovoltaics, heating and air conditioning) and value-added services. In addition, Hera Comm Spa was awarded the following lots nationwide:

- four of the eighteen lots of the Consip GAS19 tender for supplying electricity to public administrations in 2022, in the Provinces of Rome, Campania, Calabria and Sicily. In the previous tender, Hera Comm was not awarded any lots;
- three of the nine lots of the gradual protection service for supplying electricity to public administrations for the period from 1 July 2021 to 30 June 2024, in Campania, Marche, Umbria, Abruzzo, Molise, Basilicata, Calabria, Sicily and Sardinia;
- one of the nine lots of the safeguarded market for the years 2021 and 2022 in Campania, Abruzzo and Umbria, compared to seven lots in the previous two years.

EBITDA ELECTRICITY AREA 2022



EBITDA ELECTRICITY AREA 2021

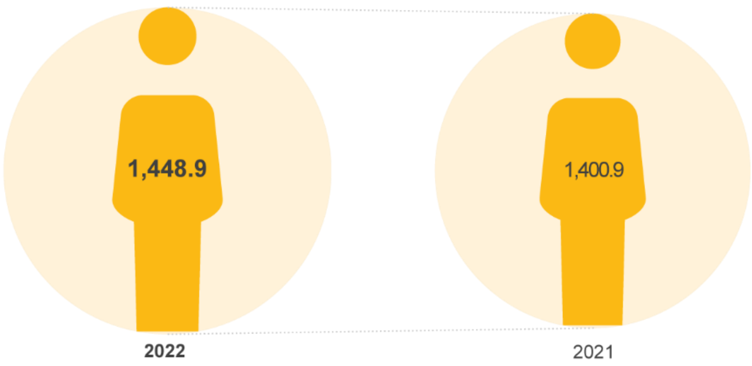


The following table shows the changes occurred in terms of Ebitda:

(mn€)	Dec 22	Dec 21 (redetermined)	Abs. change	% change
Area Ebitda	**71.6**	**144.7**	**(73.1)**	**(50.5)%**
Group Ebitda*	1,295.0	1,219.4	75.6	6.2%
Percentage weight	5.5%	11.9%	(6.4) pp	

* refers to the adjusted results as mentioned in chapter 1.04

CUSTOMERS (K)

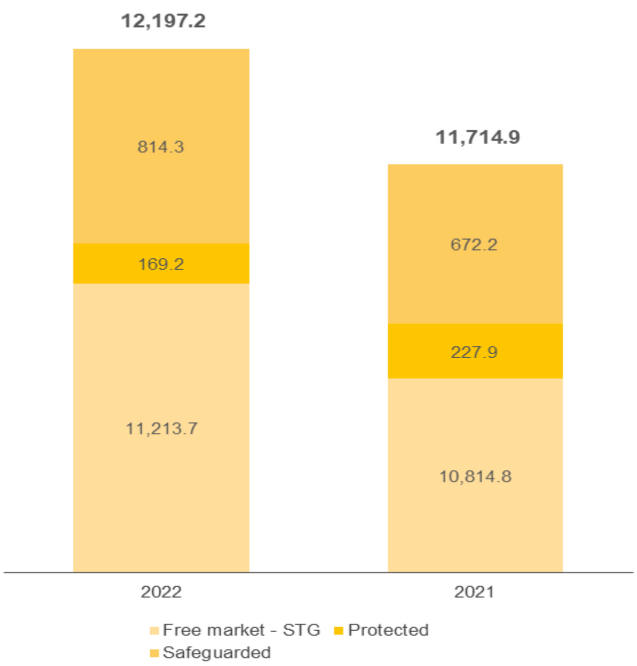


1.4
million
electricity customers (+3.4%)

The number of electricity customers increased by 3.4% (up 48.0 thousand) compared to the same period in 2021. This growth occurred mainly on the free market (+4.6%, amounting to +4.1% of the total) due to the reinforced commercial action implemented in the amount of approximately 58.1 thousand customers. The safeguard market was also up by 2,900 (+16.2%, or +0.2% of the total) compared to the same period of the previous year. These effects largely succeeded in offsetting the decline, coming to approximately 13 thousand customers (-12.1%, or -0.9% of the total), that occurred in the safeguarded market.

There was a significant increase in sales of value-added services, with around 95.9 thousand customers requesting these services, with a 29% increase compared to the previous year, demonstrating the increasing loyalty of the customer base.

VOLUMES SOLD (GWh)



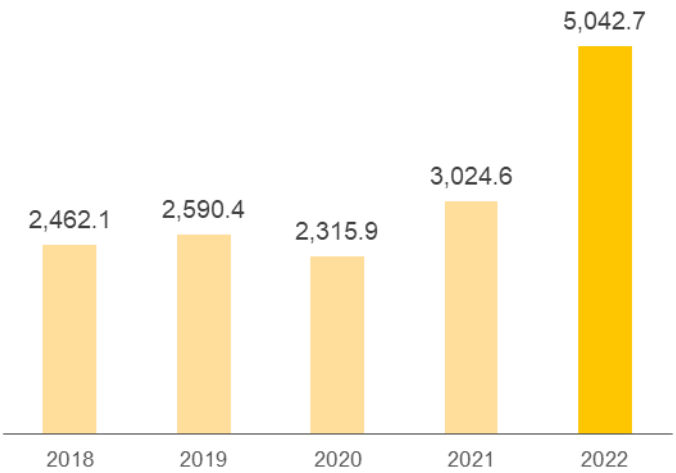
12.2
TWh
Sold (+4.1%)

Volumes of electricity sold increased by 482.3 GWh, or 4.1%, compared to the same period of the previous year. This trend was caused by the increase in volumes sold in the traditional markets in the amount of 340.2 GWh (2.9% of the total), from 11,042.8 GWh in 2021 to 11,383.0 GWh in 2022, mainly driven by the free market, which was partially offset by a slight decrease in the safeguarded market. There was an increase of 142.1 GWh or 1.2% in the safeguarded market as compared to the total.

The following table summarises operating results for the electricity area:

Income statement (mn€)	Dec 22	% inc.	Dec 21	% inc.	Abs. change	% change
Revenues	5,042.7		3,024.6		2,018.1	66.7%
Operating costs	(4,950.9)	(98.2)%	(2,846.8)	(94.1)%	2,104.1	73.9%
Personnel costs	(44.0)	(0.9)%	(47.0)	(1.6)%	(3.0)	(6.4)%
Capitalised costs	23.7	0.5%	13.8	0.5%	9.9	71.6%
Ebitda	**71.6**	**1.4%**	**144.7**	**4.8%**	**(73.1)**	**(50.5)%**

REVENUES (mn€)



5.0
billion euro
revenues
(+66.7%)

Revenues increased by 2,018.1 million euro, approximately double those of the previous year. This trend is mainly related to the higher price of the raw material amounting to approximately 2,292 million euro, resulting from the growth of the average value of SNP (single national price) seen in 2022.

In addition, higher power generation revenues came to 108 million euro and higher revenues for value-added services for customers totalled 30 million euro.

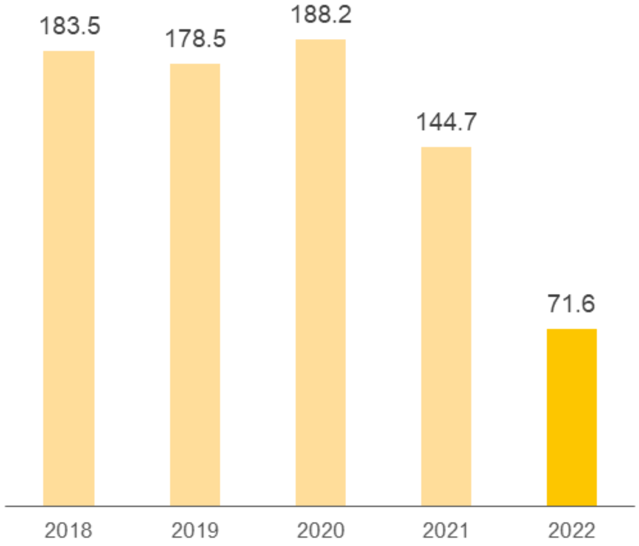
Lastly, higher volumes sold and trading activities registered a growth of 79 million euro.

This growth was contained by lower revenues mainly related to system charges, with an equal effect on to costs, coming to 503 million euro, following Resolutions 635/2021/R/com, 35/2022/R/eel, 141/2022/R/com, 295/2022/R/com and 462/2022/R/com. Starting in 2021, the government progressively reinforced its extraordinary measures to contain the effects of raw material price increases, with significant impacts on general system charges, which progressively decreased since the third quarter of 2021.

Adjusted revenues were substantially in line with the previous year. From a regulatory point of view, through Resolution 614/2021/R/com, published in late 2021, ARERA adjusted the criteria for determining and updating the rate of return on invested capital (WACC), reducing it from 5.9% in 2021 to 5.2% in 2022. This reduction was wholly offset by increased investments and their remuneration in tariffs.

The increase in revenue was reflected more than proportionally by operating costs, which rose by 2,104.1 million euro. This trend is mainly due to the increase in raw material prices that impacts on the sales and production activities mentioned above.

EBITDA (MN€)



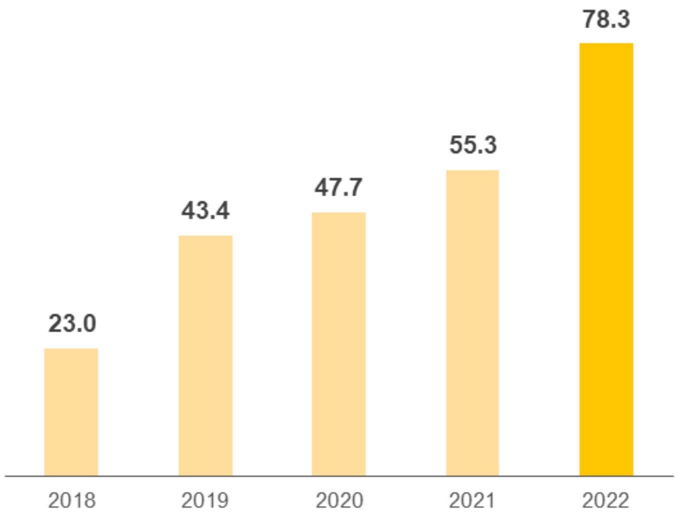
71.6
million euro
Ebitda
(-50.5%)

Ebitda declined by 73.1 million euro compared to 2021, or 50.5%, mainly due to lower margins on sales activities amounting to 67.1 million euro, related to complex modulation activities, in a year which saw particular increases and volatility in raw material prices. This is compounded by a 15.8 million euro decline in the generation business, mainly due to fewer requests in the dispatching services market. Value-added services activities are up in the amount of 8.4 million euro.
In the electricity area, 2022 investments amounted to 78.3 million euro, up 23.0 million euro compared to the previous year.

The interventions carried out mainly concerned non-recurring maintenance on distribution plants and networks in the Modena, Imola, Trieste and Gorizia areas.

Compared to the previous year, a 18.0 million euro increase was seen in electricity distribution, mainly due to more extraordinary maintenance and strengthening of networks and plants and ongoing large-scale meter replacement activities, as well as measures to improve the resilience of the network. In energy sales, investments coming to 5.0 million euro were recorded for activities related to the acquisition of new customers. Requests for new connections increased slightly compared to the previous year.

NET INVESTMENTS ELECTRICITY (mn€)



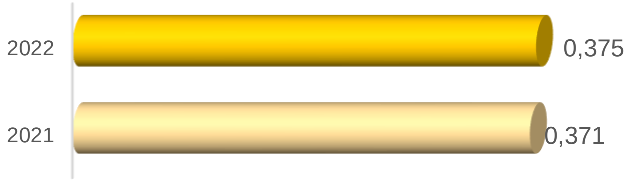
78.3
million euro
net investments electricity

Operating investments in the electricity area were as follows:

Electricity (mn€)	Dec 22	Dec 21	Abs. change	% change
Networks and plants	54.1	36.1	18.0	+49.9%
Acquisition electricity customers	24.2	19.2	5.0	+26.0%
Total electricity gross	**78.3**	**55.3**	**23.0**	**+41.6%**
Capital grants	-	-	-	+0.0%
Total electricity net	**78.3**	**55.3**	**23.0**	**+41.6%**

RAB, which defines the value of the assets recognised by the Authority as regards return on invested capital, increased compared to 2021.

RAB (bn€)



0.375
billion euro
2022 RAB

1.07.03 Integrated water cycle

Results largely unchanged in 2022

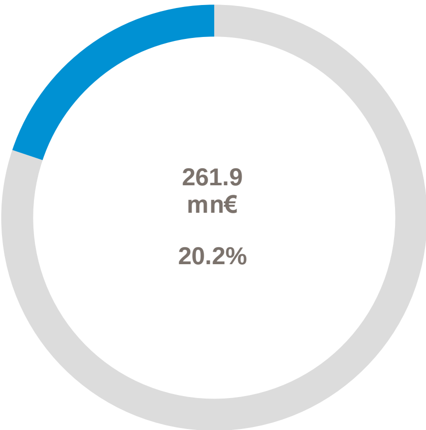
In 2022, results for the integrated water cycle area were largely in line with the previous year, with Ebitda coming to 261.9 million euro. The result is particularly positive because it shows that the Hera Group was able to offset the reduction in WACC with the Technical bonuses awarded for the excellence of the service provided to citizens.

On this matter, note that during 2022, the regulatory authority ARERA published via Resolution 183/2022/R/idr the results related to the incentive mechanism in the regulation of Technical Quality established by Resolution 917/2017 for the years 2018 and 2019. Each of the water service operators was analysed and ranked with respect to the following 6 macro-indicators: water leakage, service interruptions, quality of water delivered, adequacy of sewage system, quality of purified water, and sludge disposal. With reference to the level of Technical Quality excellence that identifies and rewards the top three positions nationwide considering all the macro-indicators mentioned above, Hera Group was awarded the second and third rankings for the year 2018, and in 2019 it was awarded the first, second and third rankings in the overall ranking of Italian utilities, proof of the very high quality standards adopted by the Group in managing the service it provides.

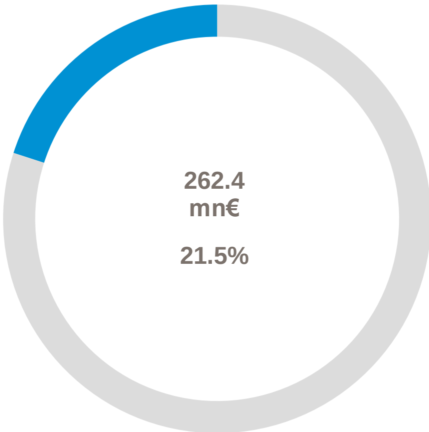
As regards regulations, note that 2022 was the third year in which the tariff method defined by the Authority for the third regulatory period (Mti-3), 2020-2023 (resolution 580/2019), was applied. A revenue (VRG) is assigned to each operator, defined on the basis of operating costs and capital costs, according to the investments made, with a view to increasing efficiency in costs, in addition to measures intended to promote and valorise interventions for sustainability and resilience. Finally, following ARERA's Resolution 639/2021/R/idr, note the reduction in remuneration of invested capital (WACC) from 5.24% to 4.8%.

Finally, with regard to concessions, note that ATERSIR, as an outcome of the specific tender, definitively awarded Hera the integrated water service in the Province of Rimini, excluding the Municipality of Maiolo, for the years 2022-2039. The Hera Group, already the outgoing operator in the 24 municipalities, will maintain ownership of the service for the next 18 years, and will manage it under the principles of sustainability and innovation.

EBITDA WATER CYCLE 2022



EBITDA WATER CYCLE 2021

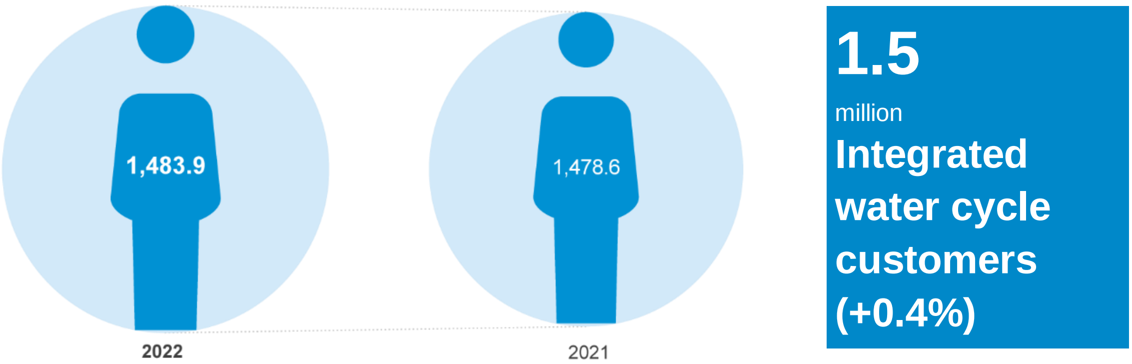


The following table shows the changes occurred in terms of Ebitda:

(mn€)	Dec 22	Dec 21 (redetermined)	Abs. change	% change
Area Ebitda	**261.9**	**262.4**	**(0.5)**	**+(0.2)%**
Group Ebitda*	1,295.0	1,219.4	75.6	+6.2%
Percentage weight	20.2%	21.5%	+(1.3) pp	

* refers to the adjusted results as mentioned in chapter 1.04

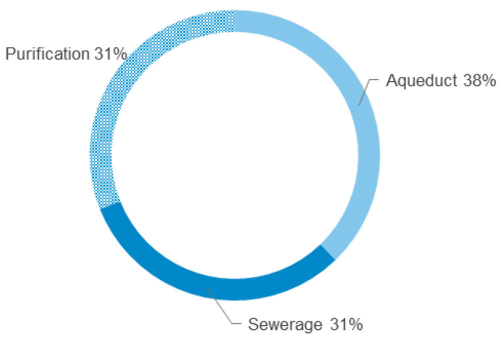
CUSTOMERS (K)



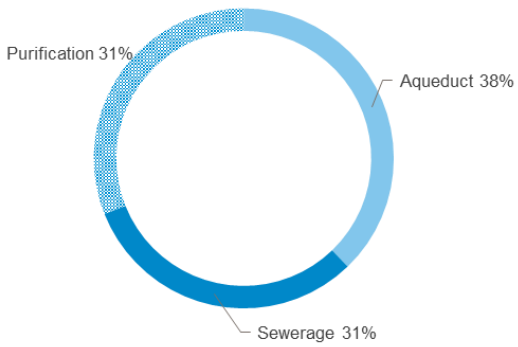
The number of water customers increased by 5.3 thousand over 2021, or 0.4%, confirming the moderate trend of internal growth in the Group’s reference areas. The Emilia-Romagna area managed by Hera Spa accounted for 76% of this growth, while the area served by AcegasApsAmga Spa accounted for 13% and the remainder involved the area served by the Marche Multiservizi Spa Group.

The main indicators for the area are as follows:

AMOUNT MANAGED 2022 (mn/m3)



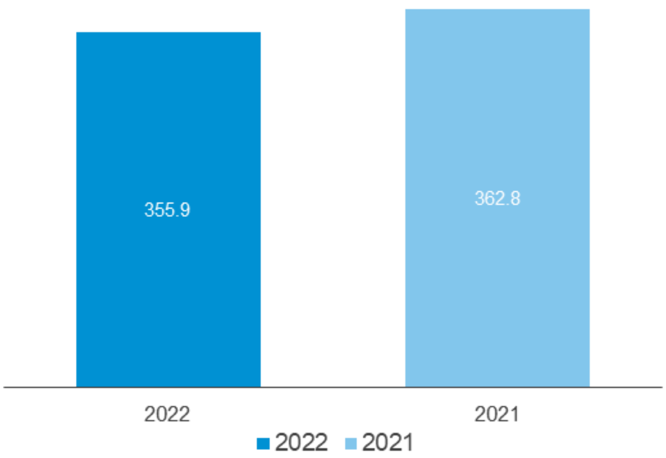
AMOUNT MANAGED 2022 (mn/m3)



289.3 million m3: amount managed in the aqueduct

The volumes supplied through the aqueduct, which amounted to 289.3 million m3, decreased by 0.8% compared to December 2021, amounting to 2.2 million m3. In December 2022, the quantities managed relating to sewerage amounted to 238.1 million m3, down 0.2% compared to the previous year, while purification volumes amounted to 237.6 million m3, an increase of 1.1% compared to 2021. The volumes supplied, following the Authority's resolution 580/2019, are an indicator of the activity of the areas in which the Group operates and are subject to equalisation, owing to legislation that provides for a regulated revenue, recognised independently from volumes distributed.

ELECTRICITY CONSUMED (GWh)



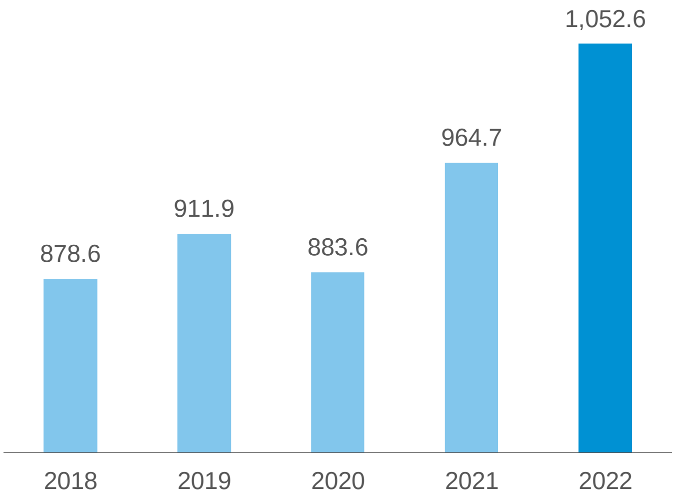
355.9 GWh **electricity consumed in plants (-1.9%)**

Electricity consumed in plants decreased by 6.9 GWh. This decrease is related mainly to the Group's commitment to increasingly efficient and prudent management of energy resources, carried out by implementing innovative measures in plants.

The following table summarises operating results for the water cycle area:

Income statement (mn€)	Dec 22	% inc.	Dec 21	% inc.	Abs. change	% change
Revenues	1,052.6		964.7		87.9	+9.1%
Operating costs	(611.9)	(58.1)%	(521.3)	(54.0)%	90.6	+17.4%
Personnel costs	(185.6)	(17.6)%	(185.9)	(19.3)%	(0.3)	+(0.2)%
Capitalised costs	6.7	0.6%	4.9	0.5%	1.8	+36.9%
Ebitda	**261.9**	**24.9%**	**262.4**	**27.2%**	**(0.5)**	**+(0.2)%**

REVENUES (mn€)

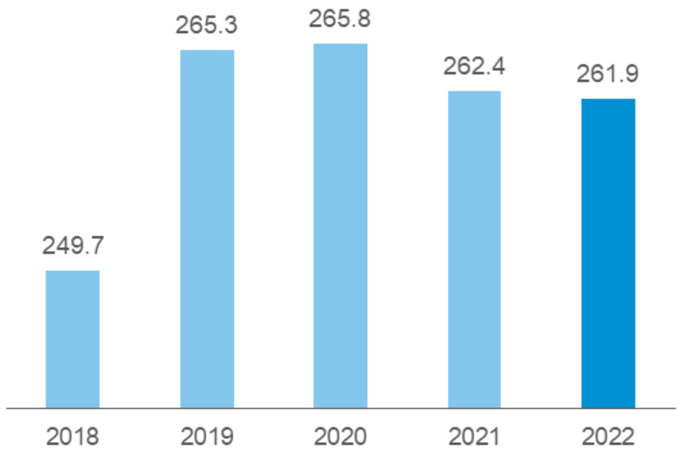


1,052.6
million euro
revenues
(+9.1%)

The growth in revenues was related, for a total amount of 59.0 million euro, to higher regulated revenues. This increase is due in the amount of 12.6 million euro to the excellent performance the Group achieved in terms of Technical Quality in managing the Integrated Water Service. The remainder of the growth in tariff revenues is due to equalizable tariff components, particularly electricity, and is contained by the reduction in the return on capital employed (WACC) and the continuous and progressive increase in inflation.
Lastly, note the approximately 28.1 million euro of higher revenues for contracts and works on behalf of third parties carried out up to December 2022.

The increase in operating costs as of December 2022 was mainly impacted by the current energy scenario, with energy commodity prices rising sharply as compared to the previous year, and rising prices for all major supplies of materials and services. The above-mentioned effects resulted in higher costs for a total of 62.8 million euro. The last point to note is the higher costs related to the completed works described above, under revenues, for a total of 28.1 million euro.

EBITDA (mn€)



261.9
million euro
Ebitda
(-0.2%)

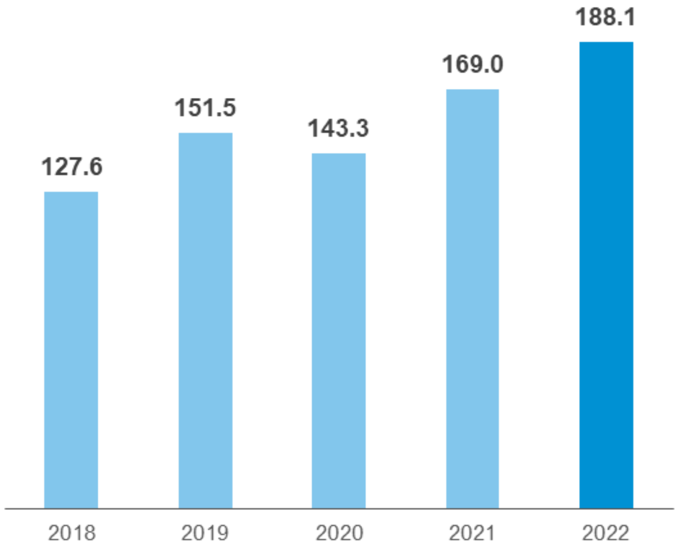
Ebitda was broadly in line with the previous year, declining slightly by 0.2% or 0.5 million euro. Higher procurement costs for energy components and an increase in network and plant operating costs due in part to higher prices for material and service suppliers were nearly offset by recognition of the Hera Group's commitment to the highest possible standards of technical quality.

In 2022, net investments in the integrated water cycle area amounted to 188.1 million euro, up 19.1 million euro compared to the previous year. Including the capital grants received, investments totalled 208.0 million euro, up 13.4 million euro.

These investments mainly involved extensions, reclamations and improvements to networks and plants, as well as regulatory upgrading, especially in the water and sewerage area.

Investments amounted to 126.8 million euro in the aqueduct, 45.5 million euro in sewerage and 35.6 million euro in purification.

NET INVESTMENTS WATER CYCLE (mn€)



188.1
million euro
net investments water cycle
(+19.1)

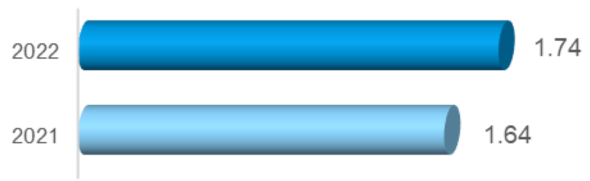
The main interventions included: in the aqueduct, continued remediation work on networks and connections related to ARERA Resolution 917/2017 on the regulation of the technical quality of the integrated water service, including the early implementation of specific renewal and upgrade measures aimed at countering the risks of water shortages related to the particular drought conditions that are becoming increasingly frequent, such as the construction of hydraulic connections capable of expanding the interconnections of water systems. Major maintenance continued on the intake works for the Setta stream serving the Sasso Marconi drinking water treatment plant, along with work to reduce interference between the water network and the suburban railway line in the municipality of Ferrara, as well as the upgrading of water networks in other areas served and the large-scale replacement of meters. In sewerage, in addition to continuing to implement the Rimini seawater safety plan (PSB), maintenance work was carried out to upgrade the sewerage network in other areas served along with work to update drains to comply with Regional Decree no. 201/2016. In purification, worthy of note were the upgrades to the Lido di Classe purification plant, the revamping of the anaerobic digestion system at the Gramicia purification plant in Ferrara, the installation of centrifuges at the Savignano purification plant, and the work carried out on the San Giovanni in Persiceto purification plant. Requests for new water and sewerage connections increased slightly compared to the previous year. Capital grants, amounting to 19.8 million euro, are down by 5.8 million euro and include 17.4 million euro deriving from the tariff component of the tariff method for the New Investments Fund (FoNI).

Details of operating investments in the integrated water cycle area are as follows:

Integrated water cycle (mn€)	Dec 22	Dec 21	Abs. change	% change
Aqueduct	126.8	113.5	13.3	+11.7%
Purification	35.6	36.1	(0.5)	+(1.4)%
Sewerage	45.5	45.0	0.5	+1.1%
Total integrated water cycle gross	**208.0**	**194.6**	**13.4**	**+6.9%**
Capital grants	19.8	25.6	(5.8)	+(22.7)%
of which FoNI (New Investments Fund)	17.4	16.8	0.6	+3.6%
Total integrated water cycle net	**188.1**	**169.0**	**19.1**	**+11.3%**

RAB, which defines the value of the assets recognised by the Authority as regards return on invested capital, increased compared to 2021.

RAB (bn€)



1.07.04 Waste management

Ebitda rises

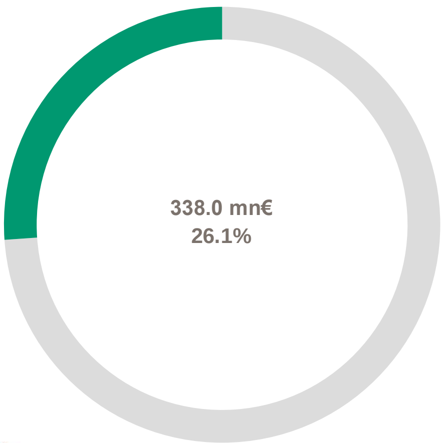
In 2022, the waste management area accounted for 26.1% of the Hera Group's overall Ebitda, with this area's Ebitda up by 46.3 million euro compared to the previous year. In 2022, therefore, the Group continued to ensure a significant level of growth, facilitated by geographic expansion and sound management and business policies, despite the current challenging economic and geopolitical environment. In Italy, in fact, the progressive and persistent increase in inflation, energy costs and difficulties in sourcing raw materials led to a slowdown in production in many manufacturing sectors during 2022, with repercussions in the production of waste as well.

In the markets covered by the Group, Herambiente's leadership was consolidated in particular in the industry market with the signing at the end of 2022 of an agreement to acquire, in 2023, 60% of the company A.C.R. di Reggiani Albertino Spa, one of the largest Italian companies operating in the field of reclamation, industrial waste treatment, the decommissioning of industrial plants, and civil works related to the oil and gas sector.

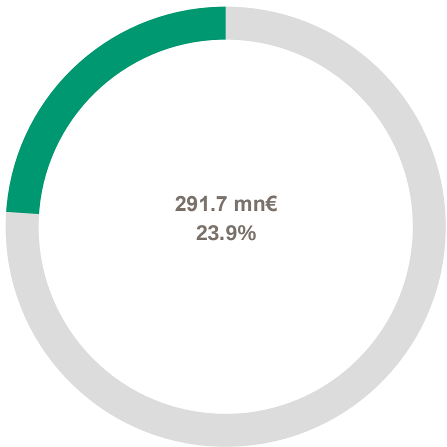
All the main circular economy initiatives, from material recovery to renewable energy production, also continued during 2022. As part of the Ministry for the Environment and Energy Security's "Lighthouse" series of circular economy projects, the Group was also awarded PNRR grants to build platforms catering to material recovery. In particular, two of these projects are absolutely innovative at the European level, not only technologically but also by virtue of the strategic relevance of the materials involved: namely, the carbon fibre regeneration plant that will be built in Imola (BO) and the rigid plastics recovery plant that will be located in Modena.

Protecting environmental resources has been confirmed as a priority objective in 2022, along with maximizing their reuse; this is also demonstrated by the special attention the Groups has devoted to developing sorted waste collection. Thanks to the Group's substantial commitment to this area in all the areas it manages, sorted waste collection increased by more than two percentage points as compared to 2021 figures.

EBITDA WASTE MANAGEMENT AREA 2022



EBITDA WASTE MANAGEMENT AREA 2021



The following table shows the changes occurred in terms of Ebitda:

(mn€)	Dec 22	Dec 21 (redetermined)	Abs. change	% change
Area Ebitda	**338.0**	**291.7**	**46.3**	**+15.9%**
Group Ebitda*	1,295.0	1,219.4	75.6	+6.2%
Percentage weight	26.1%	23.9%	+2.2 p.p.	

* refers to the adjusted results as mentioned in chapter 1.04

Volumes marketed and treated by the Group in 2022 are as follows:

Quantity (k tons)	Dec 22	Dec 21	Abs. change	% change
Municipal waste	2,207.1	2,241.8	(34.7)	(1.5)%
Market waste	2,554.2	2,334.3	219.9	+9.4%
Waste commercialised	4,761.2	4,576.1	185.1	+4.0%
Plant by-products	2,161.7	2,200.5	(38.8)	(1.8)%
Waste treated by type	6,922.9	6,776.6	146.3	+2.2%

An analysis of this data shows a rise in waste commercialised, due mainly to an increase in market waste. As regards municipal waste, 2021 saw a decrease of 1.5% compared to the previous year.

Market volumes increased compared to 2021 by 9.4%, due to the consolidation of previously existing commercial relations, growth in the customer portfolio and recent corporate acquisitions.

Finally, the figures for plant by-products decreased by 1.8% from the previous year due mainly to lower levels of rainfall.

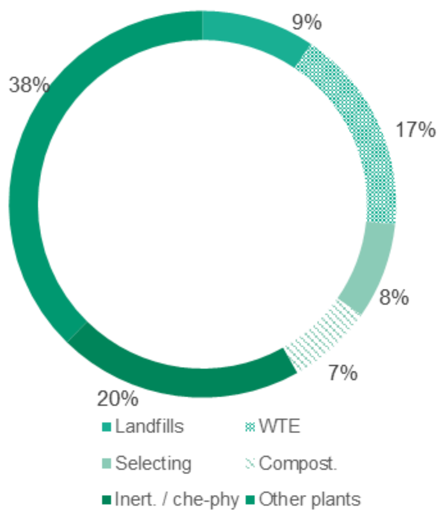
SORTED WASTE (%)

+2.5
percentage points
sorted waste

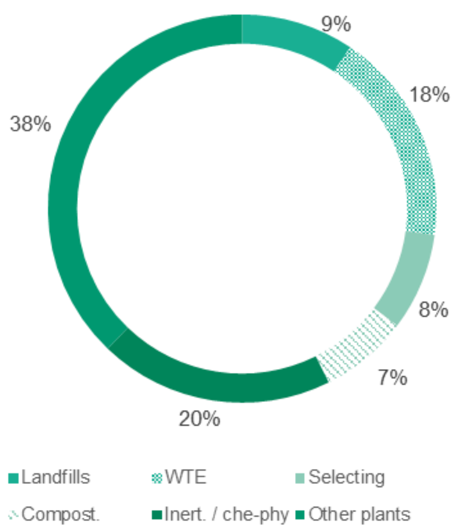
As previously mentioned, municipal sorted waste collection stood at 67.8%, up +2.5 percentage points from the previous year, thanks to the development of projects in the areas managed by the Group.

The Hera Group operates in the entire waste cycle, with 100 plants for treating municipal and special waste and regenerating plastic materials. The main plants include: 9 waste-to-energy plants, 13 composting/digestion plants and 17 selecting plants.
The close attention paid to the set of plants has always been a distinctive element of the Group’s propensity for excellence: operations are indeed ongoing to provide plants with the best available technologies.

WASTE TREATED BY TYPE OF PLANT 2022



WASTE TREATED BY TYPE OF PLANT 2021



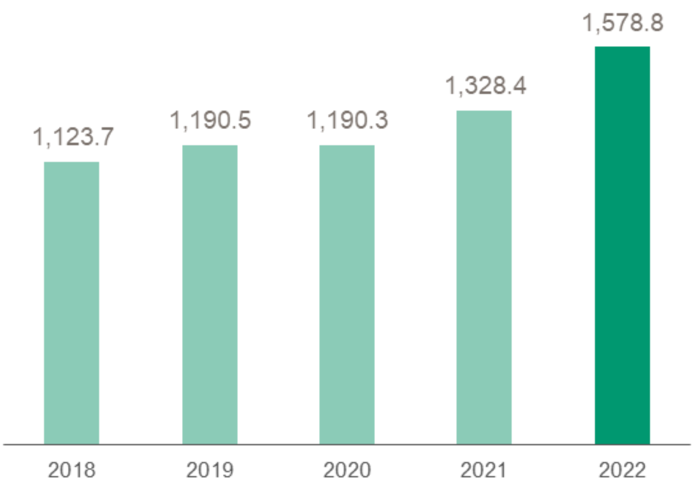
Quantity (k tons)	Dec 22	Dec 21	Abs. change	% change
Landfills	648.5	636.4	12.1	+1.9%
WTE	1,180.2	1,205.2	(25.0)	(2.1)%
Selecting plants and other	603.8	550.8	53.0	+9.6%
Composting and stabilisation plants	490.4	498.1	(7.7)	(1.5)%
Inertisation and chemical-physical plants	1,405.1	1,322.4	82.7	+6.3%
Other plants	2,594.9	2,563.8	31.1	+1.2%
Waste treated by plant	6,922.9	6,776.7	146.2	+2.2%
Plastic recycled by Aliplast Spa	**81.0**	**80.9**	**0.1**	**+0.1%**

Waste treatment showed an overall growth of 1.2% compared to 2021. Analysing the individual sectors, an increase was seen in the quantity disposed of in landfills whereas, with regard to waste-to-energy plants, the downward trend is due mainly to the revamping of the Ravenna F3 plant and Trieste plant. The increased quantity in sorting plants was due to the greater quantities treated in all plants, thanks to the rise in sorted waste collection. In the composting and stabilization plants, volumes are decreasing mainly due to lower quantities at the Ostellato plant, which was shut down for reconversion to stabilization, while in the inertisation and chemical-physical plants chain, the increased quantities were mainly due to higher volumes treated at the recently acquired plants. Lastly, note the increase in the other plants sector.

The table below summarises the area's operating results:

Income statement (mn€)	Dec 22	% inc.	Dec 21	% inc.	Abs. change	% change
Revenues	1,578.8		1,328.4		250.4	+18.8%
Operating costs	(1,058.0)	(67.0)%	(846.5)	(63.7)%	211.5	+25.0%
Personnel costs	(215.8)	(13.7)%	(211.8)	(15.9)%	4.0	+1.9%
Capitalised costs	33.0	2.1%	21.7	1.6%	11.3	+52.2%
Ebitda	**338.0**	**21.4%**	**291.7**	**22.0%**	**46.3**	**+15.9%**

REVENUES (mn€)



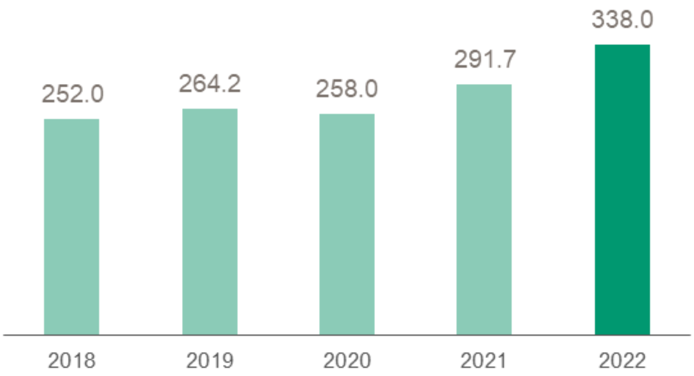
1,578.8
million euro
revenues
(+18.8%)

Revenues increased by 18.8% compared to the previous year. Revenues from energy production were up by +68.0 million euro, mainly due to the increase in market prices, despite a 25.0 thousand ton reduction in volumes in waste treated in WTEs. A higher contribution also came from Aliplast Spa, up

+56.5 million euro compared to 2021, or +35%, as a result of the increase in prices in all areas due to the elevated value of virgin polymer and high market demand. The price increase has positively affected the Industry market and material valorisation revenues in the amount of approximately 6.7 million euro, particularly for paper, cardboard and plastic.
The 32.4 million euro increase in revenues related to recent acquisitions in the Industry market is also of note.

Operating costs for 2022 grew by 25.0%. In the treatment market, there was an increase in the costs of purchasing raw materials as well as consumables (especially chemicals) and for changes in the scope of operations compared to the previous year. There are also higher transportation and treatment costs for by-product management due to higher supplier prices. In the recovery market, an increase was seen in the purchasing costs for raw materials sustained by Aliplast Spa, related to the trend in revenues mentioned above. As far as municipal waste collection is concerned, the increased activities were related to developing new sorted waste collection projects.

EBITDA (mn€)



338.0
million euro
Ebitda
(+15.9%)

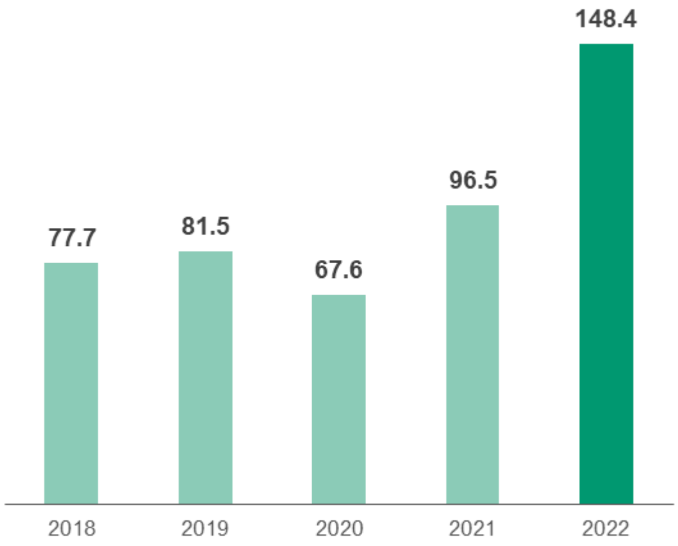
The rise in Ebitda was mainly due to increased revenues in energy management, coming to approximately 30 million euro, expansion in the industrial waste market accounting for approximately 4 million euro, and new acquisitions, in the amount of approximately 3 million euro. Also contributing positively has been an increase in the prices of treated waste, partly offset by increases in the purchase prices of consumables as well as treatment and transportation costs.
Net investments in the waste management area were related to maintenance and upgrading on waste treatment plants and amounted to 148.4 million euro, up 51.9 million euro compared to the previous year. Including the capital grants received, the investments made amounted to 149.2 million euro, up 51 million euro.

The composting/digester plants sector showed an increase of 12.3 million euro, mainly due to Biorg Srl starting work to construct a plant producing biomethane.
Investments in landfills increased by 9.0 million euro, due to work carried out on the Ravenna plant and Cordenons landfills, as well as Marche Multisiervizi Spa's building of the Cà Asprete plant.

The WTE sector showed a 5.4 million euro increase, due to revamping on line two of the Trieste plant, as well as non-recurring maintenance carried out on the Bologna and Rimini plants, while the 11.1 million euro increase in the industrial waste plants sector is related to revamping activities at the F3 plant in Ravenna.

Investments in the collection area and equipment sector increased by 2.5 million euro compared to the previous year and included the construction of underground waste collection areas, while the 10.5 million euro increase seen in the sorting and recovery plants sector was due to higher investments for the work on the new PE regenerator and replacement of the PELD regenerator belonging to Aliplast Spa, as well as the start of the Vallortigara company's construction of the new Marano Vicentino plant.

NET INVESTMENTS WASTE MANAGEMENT (MN€)



148.4
million euro
Waste management (+51.9 mn€)

Details of operating investments in the waste management area are as follows:

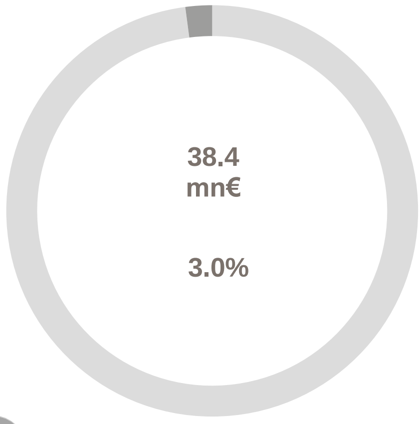
Waste management (mn€)	Dec 22	Dec 21	Abs. change	% change
Composters/digesters	19.8	7.5	12.3	+164.0%
Landfills	17.3	8.3	9.0	+108.4%
WTE	30.0	24.6	5.4	+22.0%
RS plants	28.4	17.3	11.1	+64.2%
Collection areas and equipment	19.1	16.6	2.5	+15.1%
Transshipment, selecting and other plants	34.5	24.0	10.5	+43.8%
Total waste management gross	**149.2**	**98.2**	**51.0**	**+51.9%**
Capital grants	0.8	1.7	(0.9)	(52.9)%
Total waste management net	**148.4**	**96.5**	**51.9**	**+53.8%**

1.07.05 Other services

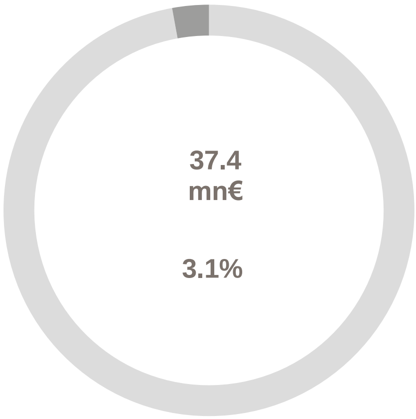
Ebitda rises

The other services area covers all minor businesses managed by the Group, including: public lighting, in which the Hera Group's efforts go towards planning, constructing and maintaining lighting structures, contributing to safety across the areas served through avant-garde technologies and constant attention towards the circular economy and sustainability; telecommunications, in which the Group offers connectivity for private customers and companies, telephone and Data Centre services through its own digital company; and, lastly, cemetery services. At December 2022, results in this area stood at 38.4 million euro, up 1 million euro over the previous year.

OTHER SERVICES EBITDA 2022



OTHER SERVICES EBITDA 2021



The changes occurred in terms of Ebitda are as follows:

(mn€)	Dec 22	Dec 21 (redetermined)	Abs. change	% change
Area Ebitda	**38.4**	**37.4**	**1.0**	**+2.7%**
Group Ebitda*	1,295.0	1,219.4	75.6	+6.2%
Percentage weight	3.0%	3.1%	(0.1) pp	

* refers to the adjusted results as mentioned in chapter 1.04

The following table shows the area's main indicators as regards public lighting services:

Quantity	Dec 22	Dec 21	Abs. change	% change
Public lighting				
Lighting points (k)	614.3	563.2	+51.1	+9.1%
of which LED	40.7%	35.2%	+5.5	+0.0%
Municipalities served	197.0	184.0	+13.0	+7.1%

In 2022, the Hera Group acquired approximately 65.4 thousand lighting points in 30 new municipalities. The most significant acquisitions were approximately 9.2 thousand lighting points in Lombardy, approximately 16.1 thousand in Tuscany, approximately 14.0 thousand in Umbria, and approximately 12.0 thousand in other regions of central Italy. Finally, acquisitions were made in the Triveneto area amounting to approximately 12.2 thousand lighting points and in Sardinia amounting to approximately 1.2 thousand. The year's increases fully offset the loss of about 14.3 thousand lighting points and 17 municipalities, mainly in the Triveneto area and Emilia Romagna.

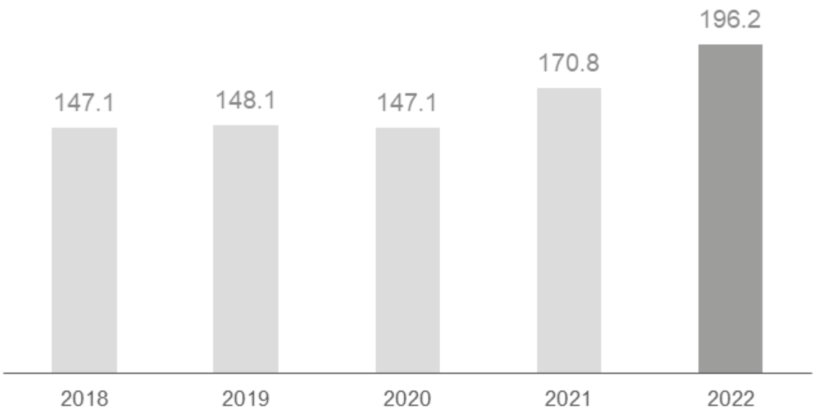
The percentage of lighting points using LED lamps is also growing, standing at 40.7%, up 5.5 percentage points. This trend highlights the Group's continued focus on the increasingly efficient and sustainable management of public lighting.

Quantitative indicators in the other services area also include the 4,520 km of proprietary ultra-wideband fibre optic network that the Hera Group owns through its digital company, Acantho Spa. This network serves the main cities in Emilia-Romagna, Padua and Trieste, and provides companies and individuals with high-performance connectivity, high reliability and maximum security for systems, data and service continuity.

The area's operating results are provided in the table below:

Income statement (mn€)	Dec 22	% inc.	Dec 21	% inc.	Abs. change	% change
Revenues	196.2		170.8		25.4	+14.9%
Operating costs	(139.2)	(71.0)%	(114.1)	(66.8)%	25.1	+22.0%
Personnel costs	(21.3)	(10.9)%	(21.2)	(12.4)%	0.1	+0.5%
Capitalised costs	2.7	1.4%	1.9	1.1%	0.8	+42.9%
Ebitda	**38.4**	**19.6%**	**37.4**	**21.9%**	**1.0**	**+2.7%**

REVENUES (mn€)

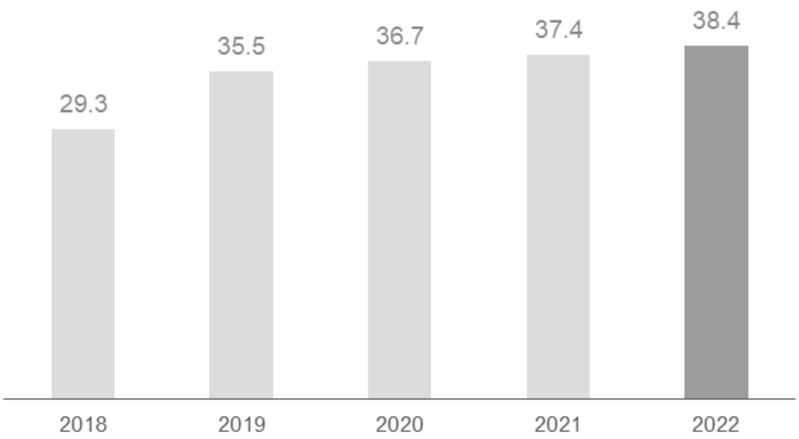


196.2
million euro
revenues
(+14.9%)

The growth in revenues was mainly due to public lighting, where there was an increase of 22.5 million euro, primarily as a result of energy adjustments on public lighting fees. Other contributions to this area's growth came from telecommunications, which accounted for a total of 2.3 million euro due to increased activities in telephone and connectivity services.

The growth in operating costs is mainly due to the public lighting business and is affected by the significant rise in energy carrier prices, as well as the increased costs of materials and services required for energy upgrading.

EBITDA (mn€)

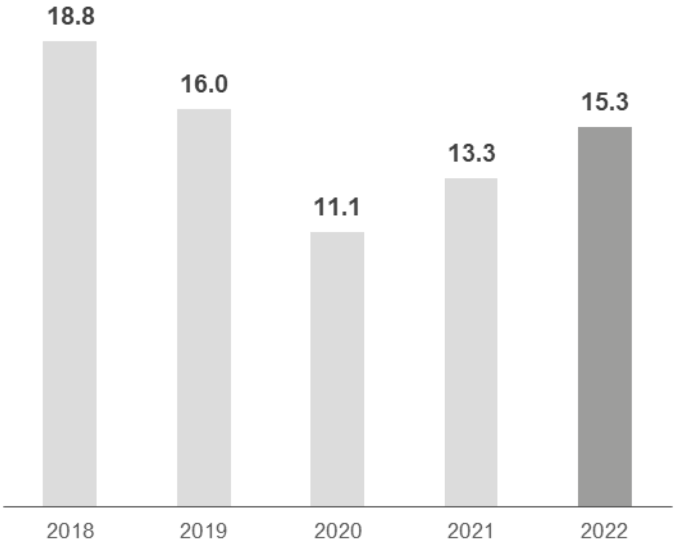


38.4
million euro
Ebitda
(+2.7%)

Ebitda for the other services business increased by 2.7% overall, or 1 million euro, thanks to the telecommunications business, despite the lower contribution made by public lighting due to the increase in the price of the raw materials and services used in carrying out energy upgrades in the related plants. Net investments in the other services business for 2022 amounted to 15.3 million euro, up 2.0 million euro compared to the previous year. Including the capital grants received, the investments made rose by 0.7 million euro.

In telecommunications, 9.1 million euro in investments were made in network and TLC services, up 0.5 million euro compared to the previous year. In public lighting, investments were related to maintenance, upgrading and modernisation for lighting systems in the areas managed and amounted to 6.2 million euro, up 0.3 million euro compared to the previous year.

NET INVESTMENTS OTHER SERVICES (mn€)



Details of operating investments in the other services area are as follows:

Other services (mn€)	Dec 22	Dec 21	Abs. change	% change
TLC	9.1	8.6	0.5	+5.8%
Public lighting and traffic lights	6.2	5.9	0.3	+5.1%
Total other services gross	**15.3**	**14.6**	**0.7**	**+4.8%**
Capital grants	-	1.3	(1.3)	(100.0)%
Total other services net	**15.3**	**13.3**	**2.0**	**+15.0%**

1.08 SHAREHOLDERS MEETING RESOLUTIONS

The Hera Spa Shareholders Meeting:

- having acknowledged the Board of Directors' report on management;
- having acknowledged the Board of Statutory Auditors' report;
- having acknowledged the Independent Auditors' report;
- having examined the financial statements at 31 December 2022, which close with profits totalling 270,976,394.86 euro;

resolves:

- to approve Hera Spa's financial statements at 31 December 2022 and the report on management prepared by the Board of Directors;
- to allocate profits for the 1 January 2022 – 31 December 2022 financial year, amounting to a total of 270,976,394.86 euro, as follows:
  - 13,548,819.74 euro to the legal reserve; and
  - a dividend amounting to 0.125 euro gross paid to each ordinary share outstanding (excluding, that is, treasury shares held in the company's portfolio) on the day of payment for said dividend; and
  - 71,235,231.99 euro to the extraordinary reserve.

The total dividend paid out therefore amounts to 186,192,343.13 euro, corresponding to 0.125 euro for each ordinary share outstanding (excluding, that is, treasury shares held in the company's portfolio);

  - to establish 21 June 2023 as the initial date for dividend payment, and 19 June 2023 as ex-dividend date for coupon no. 21, dividends being paid to shares recorded at 20 June 2023;
  - to grant a mandate to the Board of Directors, and its Chairman, to ascertain in due time, in accordance with the definitive number of shares outstanding, the exact amount of profits to be distributed, and therefore the exact amount of the extraordinary reserve.

1.09 NOTICE CONVENING THE SHAREHOLDERS MEETING

GRUPPO HERA

HERA S.p.A.
Holding Energia Risorse Ambiente
Viale Carlo Berti Pichat no. 2/4 40127 Bologna
tel. 051.287.111 fax 051.287.525
www.gruppohera.it

Shareholders are asked to attend the Ordinary Shareholders' Meeting at the head office of *Hera S.p.A.* - *Viale C. Berti Pichat no. 2/4, Bologna* – at "*Spazio Hera*" - **on 27 April 2023 at 10.00 on a single call** to discuss and decide on the items on the following:

Agenda

1. Financial statements as at 31 December 2022 of Hera S.p.A.: related and consequent resolutions. Presentation of the consolidated financial statements as at 31 December 2022 Reports of the Board of Directors, the Board of Statutory Auditors and the Independent Auditors.

   Presentation of the Sustainability Report – the Non-Financial Consolidated Statement prepared pursuant to Legislative Decree no. 254/2016.
2. Proposed allocation of profit for the period: related and consequent resolutions.
3. Report on the remuneration policy and fees paid: resolutions relating to Section I – Remuneration policy.
4. Report on the remuneration policy and fees paid: resolutions relating to Section II – Fees paid.
5. Renewal of the authorisation to purchase treasury shares and disposal procedure thereof: related and consequent resolutions.
6. Appointment of the members of the Board of Directors: related and consequent resolutions.
7. Determination of the remuneration of the members of the Board of Directors: related and consequent resolutions.
8. Appointment of the members of the Board of Statutory Auditors and of the Chairman: related and consequent resolutions.
9. Determination of the remuneration of the members of the Board of Statutory Auditors: related and consequent resolutions.

The full text of the proposed resolutions, together with the explanatory reports, and the documents that are to be submitted to the Shareholders' Meeting will be made available to the public at the Company's registered office and on the Company's website (www.gruppohera.it), as well as on the authorised storage web site 1Info (www.1info.it) within the term set out in law for each of the items on the agenda.

Appointment of the Board of Directors and of the Board of Statutory Auditors
For the appointment of the Board of Directors, the procedure is in accordance with current legislation and pursuant to Article 17 of the Articles of Association:

1) shareholders who represent at least 1% of the share capital in the Ordinary Shareholders' Meeting have the right to submit lists aimed at the appointment of fifteen members of the Board of Directors. Each list must contain a number of candidates belonging to the least represented gender that ensures, for the composition of the Board of Directors, compliance with the gender balance at least to the minimum extent required by the applicable law and regulations and by the Articles

Tax Code / Register of Companies no. 04245520376
"Hera Group" VAT Group no. 03819031208
Fully paid up Share Capital € 1,489,538,745.00

of Association.

2) the lists referred to above, in which the candidates must be listed and marked by a progressive number, may not contain a number of candidates greater than the number of members to be elected, must be submitted at the registered office, under penalty of forfeiture, at least twenty-five days before the date of the Shareholders' Meeting and, therefore, by 2 April 2023. The lists can be submitted in the following ways: i) by delivery to the company's registered office in Viale C. Berti Pichat no. 2/4, Bologna, by contacting the Central Legal and Corporate Department during normal office hours (Monday to Friday from 9:00 a.m. to 5:00 p.m.) or ii) by email to societario@gruppohera.it, provided that the persons who submit the lists can be identified. The lists will be made available to the public at the company's registered office, on the Company's website and on the authorised storage site 1Info by 6 April 2023. Eleven members of the Board of Directors shall be taken from the list that has obtained the highest number of votes, according to the progressive order in which they are listed, at least four of which from the least represented gender. For the appointment of the remaining four members, the votes obtained by each of the lists other than the list that received the largest number of votes, and who were not submitted or voted by shareholders associated with, in accordance with the law in force, the shareholders who submitted or voted for the same list, are then divided by one, two, three and four. The quotients thus obtained are progressively awarded to the candidates of each list, in the order indicated by the list. The candidates are then placed in a single decreasing ranking, according to the quotients awarded to each candidate. The candidates elected are those who have obtained the highest quotients up to the remaining members to elect, at least two of which should be of the least represented gender. If there is a draw of quotients of candidates on different lists, for the last member to be elected preference will go to the member on the list that has obtained the highest number of votes or, in the case of further parity, the most senior candidate, in compliance with the gender balance provided by the applicable law and regulations.
   If the minimum number of directors belonging to the least represented gender is not elected, the candidate of the most represented gender who ranks last in the ranking of candidates elected from the most voted list will be replaced by the candidate of the least represented gender who was ranked first of the candidates not elected of the same list and so on up to the minimum number of directors of the least represented gender. If, even after applying this criterion, the minimum number of directors belonging to the least represented gender is still not attained, the replacement criterion indicated will be applied to the minority lists, starting from the most voted list.
3) together with the lists, the presenters must also submit:
   i) a description of the candidates' professional CV;
   ii) irrevocable acceptance of office by the candidates (a condition for their appointment);
   iii) certification of the non-existence of any causes of ineligibility and/or forfeiture;
   iv) certification that they meet the requirements of integrity pursuant to Art. 147-quinquies of Legislative Decree no. 58/1998;
   v) if appropriate, the declaration of meeting the requirements of independence established by Art. 147-ter, paragraph 4, of Legislative Decree no. 58/1998 and those provided for by the Corporate Governance Code drawn up by the Corporate Governance Committee;
4) each list must include at least two candidates that meet the requirements of independence required for Auditors by Article 148, paragraph 3 of Italian Legislative Decree no. 58/1998, and at least half the candidates must meet the requirements of independence required by the Corporate Governance Code drawn up by the Corporate Governance Committee;
5) any list for which the above provisions are not complied with or which does not include candidates of different genders in accordance with current legislation shall be considered as not submitted;
6) no one may be a candidate in more than one list and acceptance of candidacy in more than one

list are grounds for ineligibility;

7) each Member may submit or take part in submitting and voting only one list; adherence to and votes cast in breach of this prohibition shall not be allocated to any list.

The Board of Directors has decided to express to the Shareholders its guidelines regarding the managerial and professional figures whose presence in the new administrative body is deemed appropriate. These guidelines have been made available well in advance on the company's website (www.gruppohera.it) and on the authorised storage site 1Info (www.1Info.it).

For the appointment of the Board of Statutory Auditors, the procedure is in accordance with current legislation and pursuant to Article 26 of the Articles of Association:

1) Shareholders, who alone or together with others represent at least 1% of the share capital in the Ordinary Shareholders' Meeting, have the right to submit lists for the appointment of the members of the Board of Statutory Auditors. In particular:
   i) the Municipalities, Provinces or Consortia established pursuant to Article 31 of Legislative Decree no. 267/2000, or other public bodies or authorities, as well as the consortia or joint-stock companies directly or indirectly controlled by them, will jointly submit a single list;
   ii) the other Shareholders shall have the right to submit lists for the appointment of one standing statutory auditor and one alternate auditor.

   Each list must contain a number of candidates belonging to the least represented gender that ensures compliance with the gender balance at least to the minimum extent required by the applicable law and regulations.

   Two standing statutory auditors and one alternate auditor shall be taken from the list that has obtained the highest number of votes, according to the progressive order in which they are listed, at least one standing auditor of which from the least represented gender. The third standing auditor and the other alternate auditor will be drawn from the other lists, electing respectively the first and second candidate in the list which gained the second highest quotient, of which at least one alternate auditor of the least represented gender. The chairmanship of the Board of Statutory Auditors goes to the first candidate on the list which has gained the second highest quotient;
2) the above lists shall contain a number of candidates not exceeding the number of members to be elected, listed in progressive order; each candidate may appear in only one list on pain of ineligibility;
3) each Shareholder may submit or participate in submitting one list only.
4) in the event of a breach of this rule, the vote of the Shareholder with respect to any of the lists submitted shall not be taken into account;
5) such lists must be filed at the company's registered office, under penalty of forfeiture, at least twenty-five days before the date of the Shareholders' Meeting and, therefore, by 2 April 2023. The lists can be submitted in the following ways: i) by delivery to the company's registered office in Viale C. Berti Pichat no. 2/4, Bologna, by contacting the Central Legal and Corporate Department during normal office hours (Monday to Friday from 9:00 a.m. to 5:00 p.m.) or ii) by email to societario@gruppohera.it, provided that the persons who submit the lists can be identified. The lists will be made available to the public at the company's registered office, on the Company's website and on the authorised storage site 1Info by 6 April 2023;
6) the submitted lists must be accompanied by:
   i) the declaration certifying the absence of agreements or links of any kind with other shareholders who have submitted other lists;
   ii) comprehensive information on the personal and professional characteristics of the candidates;
   iii) the declarations with which the individual candidates accept their candidacy and declare,

under their own responsibility, the non-existence of causes of ineligibility, forfeiture and incompatibility provided for by law as well as the existence of the requirements of integrity and professionalism prescribed by law for members of the Board of Statutory Auditors, and provide the list of administrative and control positions held by them in other companies;

7) any list for which the above provisions are not complied with or which does not include candidates of different genders in accordance with current legislation shall be considered as not submitted;
8) each person entitled to vote may vote for only one list.

Each list submitted for the appointment of the members of the Board of Directors and the Board of Statutory Auditors must be accompanied by the identity of the Shareholders submitting it and the overall percentage shareholding held by them. The communication from the intermediary certifying ownership of the shareholding held on the date of submitting the list may also be sent at a later date, provided that it is before the deadline for publication of the lists, and therefore by 5 p.m. on 6 April 2023, by email to hera@pecserviziotitoli.it.
Pursuant to Art. 144-*sexies* paragraph 5 of the Consob Issuers' Regulation, in the event that on the deadline of 2 April 2023 only one list has been submitted for the appointment of the Board of Statutory Auditors, or only lists that are connected to each other have been submitted, the shareholding percentage necessary for submitting a list is reduced to 0.5% of the share capital and the submission may be made up to 5 April 2023 in the following ways: i) by delivery to the registered office in Viale C. Berti Pichat no. 2/4, Bologna, by contacting the Central Legal and Corporate Department during normal office hours (Monday to Friday from 9:00 a.m. to 5:00 p.m.) or ii) by email to societario@gruppohera.it, provided that the persons who submit the lists can be identified.

Right to attend and participate by proxy

Anyone who holds voting rights at the end of the accounting day of 18 April 2023 (*record date*) and for whom the related notices from the authorised intermediaries have been received by the end of the third day of trading prior to the date established for the Shareholders' Meeting, namely by 24 April 2023, shall be entitled to attend the Shareholders' Meeting. Attendees shall in any case have the right to speak and vote even if the above communications have been received beyond said term, provided they are received before the start of the shareholders' meetings. Anyone who has become a shareholder after 18 April 2023 will not have the right to attend and vote at the Shareholders' Meeting.
Any person entitled to intervene may be represented at the Shareholders' Meeting pursuant to the law with the right to use the proxy form available on the Company's website (www.gruppohera.it), where the methods that interested parties may use to notify the Company of proxies also electronically can also be found.
The Company has appointed Computershare S.p.A. as a representative to whom the holders of voting rights may confer, by 25 April 2023, a proxy with voting instructions on all or some of the proposals on the agenda. The proxy to the aforementioned representative must be conferred according to the procedures and using the specific proxy form available through the Company's website (www.gruppohera.it).
The proxy to the designated representative shall not have effect with respect to proposals for which voting instructions have not been given.

Other rights of Shareholders

Shareholders may raise questions on the items on the agenda before the Shareholders' Meeting, provided they do so no later than 18 April 2023, following the procedure indicated on the Company's website (www.gruppohera.it).
Questions received within the above deadline will be answered by the end of 25 April 2023, following

verification of their relevance and the legitimacy of the applicant, via publication in the section of the aforementioned website dedicated to the Shareholders' Meeting.
Shareholders who, even jointly, represent one fortieth of the share capital may request, within 10 days of the publication of this notice, that items be added to the agenda, specifying the additional topics proposed in their request, or may submit proposed resolutions for items already on the agenda. Requests must be submitted in writing in the manner indicated on the Company's website (www.gruppohera.it).

Bologna, 23 February 2023

The Executive Chairman of the Board of Directors
(Mr. Tomaso Tommasi di Vignano)

GRUPPO HERA


2
CONSOLIDATED
FINANCIAL STATEMENTS

2.01 FINANCIAL STATEMENT FORMATS

2.01.01 Income statement

mn €	notes	2022	2021
Revenues	1	20,082.0	10,555.3
Other operating revenues	2	548.2	400.1
Raw materials and materials	3	(16,730.0)	(6,668.5)
Service costs	4	(2,105.8)	(2,464.6)
Personnel costs	5	(601.1)	(592.8)
Other operating costs	6	(74.9)	(66.5)
Capitalised costs	7	82.5	60.8
Amortisation, provisions and depreciation	8	(667.1)	(612.1)
Operating revenues		**533.8**	**611.7**
Share of profits (losses) pertaining to joint ventures and associated companies	9	10.0	13.2
Financial income	10	82.2	82.3
Financial expenses	11	(217.2)	(300.3)
Financial management		**(125.0)**	**(204.8)**
Earnings before taxes		**408.8**	**406.9**
Taxes	12	(103.5)	(34.2)
Net profit for the period		**305.3**	**372.7**
Attributable to:			
parent company shareholders		255.2	333.5
minority shareholders		50.1	39.2
Earnings per share			
basic	17	0.175	0.228
diluted	17	0.175	0.228

Pursuant to Consob Resolution no. 15519 of 27 July 2006, the effects of relationships with related parties are accounted for in the appropriate income statement outlined in paragraph 2.03.01 of this consolidated financial statement.

2.01.02 Statement of comprehensive income

mn €	notes	2022	2021
Net profit (loss) for the period		**305.3**	**372.7**
Items reclassifiable to the income statement			
Fair value of derivatives, change for the period	29	229.1	124.7
Tax effect related to reclassifiable items		(65.9)	(35.3)
Items not reclassifiable to the income statement			
Actuarial income (losses) employee and post-employment benefits	30	3.1	1.6
Shareholdings valued at fair value	26	(12.1)	(2.1)
Tax effect related to not reclassifiable items		(0.7)	(0.2)
other components of business comprehensive income valued at net equity			
Total comprehensive profit (loss) for the period		**458.8**	**461.4**
Attributable to:			
parent company shareholders		406.7	420.5
minority shareholders		52.1	40.9

2.01.03 Statement of financial position

mn €	notes	31 Dec 22	31 Dec 21
ASSETS			
Non-current assets			
Tangible assets	21, 25	1,984.4	1,941.0
Rights of use	22, 25	84.2	101.6
Intangible assets	23, 25	4,417.4	4,126.7
Goodwill	24, 25	848.1	842.9
Shareholdings	26, 27	190.3	198.5
Non-current financial assets	18	151.8	142.7
Deferred tax assets	14	240.4	229.4
Derivative instruments	29	1.0	6.9
Total non-current assets		**7,917.6**	**7,589.7**
Current assets			
Inventories	32	995.1	368.0
Trade receivables	33	3,875.0	2,918.0
Current financial assets	18	77.7	29.3
Current tax assets	13	46.0	21.2
Other current assets	35	642.5	422.3
Derivative instruments	29	1,622.2	1,797.4
Cash and cash equivalents	18	1,942.4	885.6
Total current assets		**9,200.9**	**6,441.8**
TOTAL ASSETS		**17,118.5**	**14,031.5**

Pursuant to Consob Resolution no. 15519 of 27 July 2006, the effects of relationships with related parties are accounted for in the appropriate statement of financial position outlined in paragraph 2.03.02 of this consolidated financial statement.

mn €	notes	31 Dec 22	31 Dec 21
NET EQUITY AND LIABILITIES			
Share capital and reserves			
Share capital	15	1,450.3	1,459.6
Reserves	15	1,692.9	1,407.1
Profit (loss) for the period	15	255.2	333.5
Group net equity		**3,398.4**	**3,200.2**
Non-controlling interests	16	246.3	216.6
Total net equity		**3,644.7**	**3,416.8**
Non-current liabilities			
Non-current financial liabilities	19	5,689.9	3,716.0
Non-current lease liabilities	22	55.1	53.2
Post-employment and other benefits	30	92.0	105.4
Provisions for risks and charges	31	565.6	528.0
Deferred tax liabilities	14	215.7	132.1
Derivative instruments	29	6.3	13.5
Total non-current liabilities		**6,624.6**	**4,548.2**
Current liabilities			
Current financial liabilities	19	650.1	499.7
Current lease liabilities	22	21.3	43.4
Trade payables	34	3,093.1	2,356.6
Current tax liabilities	13	17.1	27.9
Other current liabilities	36	1,720.0	1,435.6
Derivative instruments	29	1,347.6	1,703.3
Total current liabilities		**6,849.2**	**6,066.5**
TOTAL LIABILITIES		**13,473.8**	**10,614.7**
TOTAL NET EQUITY AND LIABILITIES		**17,118.5**	**14,031.5**

Pursuant to Consob Resolution no. 15519 of 27 July 2006, the effects of relationships with related parties are accounted for in the appropriate statement of financial position outlined in paragraph 2.03.02 of this consolidated financial statement.

2.01.04 Cash flow statement

mn €	notes	31 Dec 22	31 Dec 21
Earnings before taxes		**408.8**	**406.9**
Adjustments to reconcile net profit to the cashflow from operating activities			
Amortisation and impairment of assets	8	478.6	469.9
Allocation to provisions	8	188.5	142.2
Effects from valuation using the net equity method	9	(10.0)	(13.2)
Financial (income) expenses	10	135.0	218.0
(Capital gains) losses and other non-monetary elements		41.6	25.5
Change in provision for risks and charges	31	(27.8)	(31.2)
Change in provision for employee and post-employment benefits	30	(12.7)	(12.6)
Total cash flow before changes in net working capital		**1,202.0**	**1,205.5**
(Increase) decrease in inventories	37	(627.4)	(196.7)
(Increase) decrease in trade receivables	37	(1,280.7)	(893.8)
Increase (decrease) in trade payables	37	727.8	858.5
Increase/decrease in other current assets/liabilities	37	252.7	279.8
Changes in working capital		**(927.6)**	**47.8**
Dividends collected	37	13.4	12.0
Interest income and other financial income collected	37	41.8	32.6
Interest expenses, net charges on derivatives and other paid financial charges	37	(128.0)	(96.2)
Taxes paid	37	(165.9)	(156.3)
Cash flow from operating activities (a)		**35.7**	**1,045.4**
Investments in tangible assets	21	(225.6)	(171.9)
Investments in intangible assets	23	(483.9)	(416.8)
Investments in subsidiary companies and business units net of cash holdings	28	(50.1)	(64.1)
Other equity investments	28	(3.2)	(11.0)
Sale price of tangible and intangible assets	28	3.3	2.5
Divestments of shareholdings and contingent consideration	28	-	0.2
(Increase) decrease in other investment activities	28	1.1	(1.5)
Cash flow from (for) investing activities (b)		**(758.4)**	**(662.6)**
New issue of long-term bonds	20	2,127.0	525.1
Repayments of non-current financial liabilities	20	-	(519.8)
Repayments and other net changes in financial liabilities	20	(47.3)	(252.9)
Repayments of leasing liabilities	20	(43.4)	(22.5)
Acquisition of Interests in consolidated companies	20	(10.6)	(21.0)
Dividends paid out to Hera shareholders and non-controlling interests	20	(219.5)	(193.0)
Changes in treasury shares	15	(26.7)	(0.2)
Cash flow from (for) financing activities (c)		**1,779.5**	**(484.3)**
Increase (decrease) in cash holdings (a+b+c)		**1,056.8**	**(101.5)**
Cash and cash equivalents at the beginning of the period	18	885.6	987.1
Cash and cash equivalents at the end of the period	18	1,942.4	885.6

Pursuant to Consob Resolution no. 15519 of 27 July 2006, the effects of relationships with related parties are accounted for in the appropriate cash flow statement outlined in paragraph 2.03.03 of this consolidated financial statement.

2.01.05 Statement of changes in net equity

mn €	Share capital	Reserves	Reserves derivatives valued at fair value	Reserves actuarial income (losses) employee and post-employment benefits	Reserves shares valued at fair value	Profit for the period	Net equity	Non-controlling interests	Total
Balance at 1 Jan 21	**1,460.0**	**1,230.8**	**5.9**	**(35.1)**	**(3.5)**	**302.7**	**2,960.8**	**194.5**	**3,155.3**
Profit for the period						333.5	333.5	39.2	372.7
Other components of comprehensive income:									
fair value of derivatives, change for the period			87.7				87.7	1.7	89.4
Actuarial income (losses) employee and post-employment benefits				1.4			1.4		1.4
fair value shareholdings, change for the period					(2.1)		(2.1)		(2.1)
Overall profit for the period	**-**	**-**	**87.7**	**1.4**	**(2.1)**	**333.5**	**420.5**	**40.9**	**461.4**
change in treasury shares	(0.4)	0.2					(0.2)		(0.2)
change in equity investments		(19.8)					(19.8)	(1.2)	(21.0)
other movements							-		-
Allocation of revenues:									
dividends paid out						(161.1)	(161.1)	(17.6)	(178.7)
allocation to reserves		141.6				(141.6)	-		-
Balance at 31 Dec 21	**1,459.6**	**1,352.8**	**93.6**	**(33.7)**	**(5.6)**	**333.5**	**3,200.2**	**216.6**	**3,416.8**
Balance at 1 Jan 22	**1,459.6**	**1,352.8**	**93.6**	**(33.7)**	**(5.6)**	**333.5**	**3,200.2**	**216.6**	**3,416.8**
Profit for the period						255.2	255.2	50.1	305.3
Other components of comprehensive income:									
fair value of derivatives, change for the period			161.7				161.7	1.5	163.2
Actuarial income (losses) employee and post-employment benefits				1.9			1.9	0.5	2.4
fair value shareholdings, change for the period					(12.1)		(12.1)		(12.1)
Overall profit for the period	**-**	**-**	**161.7**	**1.9**	**(12.1)**	**255.2**	**406.7**	**52.1**	**458.8**
change in treasury shares	(9.3)	(17.4)					(26.7)		(26.7)
change in equity investments		(8.6)	1.2				(7.4)	(3.2)	(10.6)
other movements		0.2	0.1				0.3	(0.1)	0.2
Allocation of revenues:									
dividends paid out						(174.7)	(174.7)	(19.1)	(193.8)
allocation to reserves		158.8				(158.8)	-		-
Balance at 31 Dec 22	**1,450.3**	**1,485.8**	**256.6**	**(31.8)**	**(17.7)**	**255.2**	**3,398.4**	**246.3**	**3,644.7**

2.02 EXPLANATORY NOTES

2.02.01 Introduction

Hera S.p.A. is a joint-stock company established in Italy, listed on the Milan Stock Exchange and with registered office in Bologna, Viale Berti Pichat 2/4. Hera Spa and its subsidiaries (the Hera Group) operate mainly in Italy in the waste management (waste management and treatment), water (aqueduct, sewerage and purification) and energy (distribution and sale of electricity, gas and energy services) sectors; it also offers services for public lighting and telecommunications.

The consolidated financial statement at 31 December 2022 was prepared in compliance with Regulation (EC) No. 1606/2002 of 19 July 2002, observing the International Accounting Financial Reporting Standards (IFRSs) issued by the International Accounting Standard Board (IASB) and endorsed by the European Commission, as well as the provisions enacted in implementing Article 9 of Italian Legislative Decree no. 38/2005. IFRSs also include the International Accounting Standards (IAS) currently in force, the interpretative documents issued by the International Financial Reporting Standards Interpretation Committee (IFRSIC) and the previous Standing Interpretation Committee (SIC).

The directors considered the applicability of the assumed going concern in drafting the consolidated financial statement, and decided that such assumption is appropriate in that there are no doubts about the going concern. This assessment took into account the current context provoked by the conflict between Russia and Ukraine.

Sufficient obligatory information to present a true and fair view of the Group's capital-financial conditions as well as its economic performance. Information on the Group's activities and on significant events after year end is provided in the Directors' report, in paragraph 1.03 "Main significant events".

The general principle adopted in preparing these consolidated financial statements is the cost principle, except for the financial assets and liabilities (including the derivative instruments), which were measured at fair value. In drawing up the consolidated financial statements, management was required to use estimates; the major areas characterised by valuations and assumptions of particular significance together with those having notable effects on the situations accounted for here are provided in the paragraph "Significant estimates and valuations" at the end of this section.

These consolidated financial statements at 31 December 2022 were drawn up by the Board of Directors and approved by the same at the meeting held on 21 March 2023. These financial statements were audited by Deloitte & Touche Spa.

Financial statement content and format

These consolidated financial statements comprise:

- primary reporting formats; they are the same as those used for the consolidated financial statements for the year ended 31 December 2021 and have the following features:
  - the income statement includes individual items analysed by type. We believe that this type of presentation, which is also used by our major competitors and is in line with international practice, best represents company results;
  - the statement of comprehensive income is presented in a separate document and distinguishing items that may and may not be reclassified subsequently to profit and loss.
  - the statement of changes in net equity reports separately the other items of the comprehensive income statement;
  - the statement of financial position makes the distinction between current and non-current assets and liabilities.
  - the cash-flow statement has been prepared using the indirect method;
- explanatory notes; compared with 31 December 2021, the explanatory notes have been reorganized by aggregating them by topic covered, in order to make the information presented more effective and organized. In any case, direct references to the financial statement formats have been retained.

In the financial statements any non-recurring costs and revenues are indicated separately. Moreover, with reference to Consob resolution 15519 of 27 July 2006 on financial statements, specific supplementary formats of income statement, statement of financial position and cash flow statement have been included, highlighting the most significant balances with related parties, in order to avoid altering the overall clarity of the financial statements.

The financial statement formats and the information included in the explanatory notes are expressed in millions of euro with a decimal point, unless otherwise indicated.

Scope of consolidation

The consolidated financial statements at 31 December 2022 include the financial statements of the Parent Company Hera S.p.A. and those of its subsidiaries. Control is obtained when the Parent Company has the power to determine the financial and operational policies of a company, by way of currently valid rights, in such a way as to obtain benefits from the company's activity. Equity investments in joint ventures in which the Hera Group exercises joint control with other companies as well as the companies over which the Group exercises significant control are consolidated with the equity method.
Small-scale subsidiaries and associated companies are excluded from overall consolidation and valued at fair value. These companies are reported in note 26, item "Other shareholdings".

Changes in the scope of consolidation

The table below shows changes in the scope of consolidation introduced during the 2022 financial year as compared to the consolidated financial statements at 31 December 2021:

Acquisition of control	Company/business unit
	Alibardi Fiorenzo Srl
	Con Energia Spa
	Macero Maceratese Srl
	"Bfeng" business unit
	"Nonantola" business unit

Exited the scope	Company/business unit
	Vegri Scarl in liquidation

For an overview of the control acquisition transactions carried out during the period, see Section 1.03 "Main Events Occurred" of the Directors' Report and the "Business Combinations (supplementary information)" section of Section 2.2.10 "Other Information" for accounting considerations and the valuation details of assets and liabilities acquired.

On 12 July 2022, the shareholder's meeting of Vegri Scarl authorised the act of early dissolution of the company. The liquidation process was completed in the month of November and the company was removed from the applicable commercial register.

Changes in equity investments

On 16 December 2021, the shareholder's meeting of Feronia Srl authorised, pursuant to Article 2482-ter of the Italian civil code, the coverage of the losses for the financial period, as well as the reconstitution of the share capital in the amount of 100,000 euro by means of cash injections. Following the failure of the minority shareholder to exercise the capital increase option, Herambiente Spa, on 31 January 2022, also took on the latter's share, becoming the sole shareholder of Feronia Srl.

On 12 January 2022, Atlas Utilities EAD purchased from a minority shareholder 500 ordinary shares of Primagas AD, equal to 0.43% of the share capital. The percentage of participation in the latter increased from 96.9% to 97.34%.

On 18 January 2022, the parent company Hera Comm Spa acquired a minority stake of 16% in Hera Comm Marche Srl, thereby becoming the sole shareholder.

The difference between the adjustment of these minority shareholdings and the fair value of the equivalent amount paid was reported directly in net equity and attributed to the parent company's shareholders.

Other corporate operations

On 7 February 2022, the shareholder TEA Spa sold its stake in Sinergie Italiane Srl in liquidation to the remaining shareholders on a pro rata basis, leaving the company. As a result of this transaction, EstEnergy Spa changed its shareholding from 31% to 32.56%.

On 14 June 2022, the plan to merge Ascopiave Energie Spa, Ascotrade Spa and Blue Meta Spa into the parent company EstEnergy Spa and Amgas Blu Srl into the parent company Hera Comm Spa was approved. The merger took place on 1 October 2022, with accounting effects backdated to 1 January 2022.

On 1 December 2022, with effect from 23 December 2022, Ascopiave Spa transferred to Hera Comm Spa a stake in EstEnergy Spa equal to 8% of the share capital, following the partial exercise of the put option it held. As a result of this transaction, Hera Comm Spa increased its stake in EstEnergy Spa from 52% to 60%, but with no effect on minority interests, since the Group's policy is to not expose minority interests when there is a put option, since the related financial debt for the purchase of these is already exposed.

Accounting policies and consolidation principles

The financial statements used for the preparation of the consolidated statement of financial position and income statement schedules were those which the companies included within the scope of consolidation reclassified and adjusted (on the basis of specific instructions issued by the Parent Company) for the purposes of consistency with the accounting standards and principles of the Group. In processing the values referred to the companies valued at net equity, adjustments to their respective financial statements were considered in order to adapt them to IFRS standards, in case these companies do not adopt them.

When drawing up the consolidated statement of financial position and income statement schedules, the assets and liabilities as well as the income and expenses of the companies included in the scope of consolidation are included on a line-by-line basis. However, the receivables and payables, income and expenses, gains and losses resulting from operations carried out between companies included in the scope of consolidation have been eliminated. The book value of the equity investments is eliminated against the corresponding portion of investees' shareholders' equity.
On first-time consolidation, the positive difference between the book value of the equity investments and the fair value of the assets and liabilities acquired, was allocated to the asset and liability items and on a residual basis to goodwill. The negative difference was immediately recorded in the income statement, as illustrated in the following section "Business combinations".

The total of capital and reserves of subsidiaries pertaining to non-controlling interests is recorded within equity in the line item "Non-controlling interests". The portion of the consolidated result relating to non-controlling interests is recorded in the account "Minority shareholders".

The valuation of the financial statement items has been carried out on the basis of the general criteria of prudence and on an accrual basis, with a view of the business as a going concern. For the purposes of the accounting entries, priority is given to the economic substance of the transactions rather than their legal form.

In preparing these consolidated financial statements, the accounting policies and principles were the same as those adopted in the previous year, considering the new accounting standards reported in the section "Changes to accounting standards" of section 2.02.10 "Other information." As far as the income statement is concerned, the costs and revenues stated include those recorded at year-end, which have a balancing entry in the statement of financial position. In this regard, income is included only if realised by said year-end date, while account has been taken of the risks and losses even if known after said date.

The transactions with minority shareholders are recognised as equity transactions. Therefore, for purchases of additional shares after control is attained, the difference between the cost of acquisition and the book value of the shares purchased from non-controlling interests is recognized in Group net equity.

The functional and presentation currency adopted by the Group is the euro. The assets and liabilities of foreign companies denominated in currencies other than the euro which are included in the scope of consolidation are translated using the exchange rates prevailing on the balance sheet date. Income and expenses are translated at the average exchange rate for the year. Exchange rate differences are included in a reserve until the relevant foreign operation is sold. The main exchange rates used to convert the value of the investees outside the Euro zone are as follows:

	2022	31 Dec 22	2021	31 Dec 21
	Average	Specific	Average	Specific
Bulgarian Lev	1.9558	1.9558	1.9558	1.9558
Polish Zloty	4.6861	4.6808	4.5650	4.5970

The criteria and principles adopted are outlined here below.

Tangible assets - Tangible assets are recorded at cost or production cost, including accessory costs, or at the value based on expert appraisals, if relating to purchased companies, net of the related accumulated depreciation and any impairment. The production cost includes the portion of direct and indirect costs reasonably attributable to the asset (e.g. personnel costs, transport, customs duty, costs for the preparation of the installation location, final test & inspection costs, notary fees, land registry expenses). The cost includes any professional fees and, for certain assets, capitalised financial charges up to the moment the asset enters into service. The cost also comprises the possible costs for dismantling, recovering and reclamation of the site that hosts the item of property, plant and equipment, if it complies with the provisions of IAS 37. Ordinary maintenance costs are charged in full to the income statement. Improvement, upgrading and transformation costs which increase the value of the assets are recorded as assets.

The book value of intangible assets is subject to assessment so as to identify any losses in value, particularly when events or changes in circumstances indicate that the book value cannot be recovered (for details, see the section "Losses in value").
Depreciation starts to be applied when the assets enter the production cycle. Tangible assets are classified as in progress when the process of economic use has not yet begun. The property, plant and equipment are systematically depreciated in each accounting period using the depreciation rates considered representative of the remaining useful lives of the assets.

The rates of the amortisation for tangible assets are outlined here below:

Category	rates
Buildings	1.8% - 2.8%
Distribution plants	1.4% - 5.9%
Production plants	2.5% - 25.0%
Other plants	3.9% - 7.5%
Equipment	5.0% - 20.0%
Electronic machines	16.7% - 20.0%
Vehicles	10.0% - 20.0%

The estimated useful lives of tangible assets are reviewed each year so as to assess the need to revise them. In the event that the estimated useful lives do not provide a truthful representation of the expected future economic benefits, the relative depreciation schedule must be redefined according to the new assumptions. These changes are made prospectively to the income statement.

Land is not depreciated, with the exception of land in which landfills are located, which is depreciated based on the quantity of waste disposed of with respect to the total conferrable capacity.

Gains and losses on disposal of assets are calculated as the difference between proceeds from the sale and the book value of the relevant investment and are recognized in the income statement as the control of the asset is transferred to the buyer.

Investment property - An item of property is recognized as investment property when it generates cash flows largely independently of the other assets held by the Company, as it is held to earn rentals and/or for capital appreciation or both, not to be utilized in production of for the provision of goods or services or in connection with company operations. As permitted by IAS 40, investment property has been recognized at cost. As such, these assets are reported at cost minus depreciation and any impairment.

Rights of use - The right of use of a good or service is initially valued by the Group at cost. This cost includes: (a) the initial value of the lease liability (calculated as outlined in the section "Lease liabilities"); (b) payments related to the lease contract made before the effective date; (c) initial direct costs related to property, plant and equipment; (d) an estimate of the costs to be incurred by the lessee in dismantling and restoring the asset.
Service components that may be included in the contract are excluded from projections of future lease payments and accounted for separately under operating expenses on a straight-line basis.
After the initial recognition, the value of the right of use is reduced by accrued depreciation and impairment and is adjusted for any restatements of the lease liability. If the lease transfers the ownership of the underlying asset at the end of the lease term, the right of use is depreciated beginning from the effective date until the end of the useful life of the underlying asset, otherwise the depreciation is calculated on the basis of the lease duration.
The asset consisting of the right of use is subject to an impairment test to identify any loss in value.

Intangible assets and goodwill - Intangible assets which are identifiable and can be monitored, and whose cost can be reliably determined based on the assumption that said assets will generate future economic benefits, are recorded in the accounts. These assets are stated at cost in accordance with the policies indicated for property, plant and equipment and, if they have a definite useful life, they are amortised systematically over the period of the estimated useful life. The depreciation begins when the asset is available for use or in any case begins to generate economic benefit for the Group. Work in progress includes costs relating to intangible assets for which the process of economic use has not yet commenced. If the Intangible assets have an indefinite useful life, they are not amortised but rather subjected to an annual impairment test, even in the absence of indicators signalling losses in value.

Research costs are recorded in the income statement. Any development costs for new products and/or processes are booked to the income statement in the year they are incurred, unless their use extends over several years.

IT applications are representative of assets that are identifiable and capable of generating future economic benefits under the control of the Group. These rights are depreciated over their relevant useful lives.

Concessions mainly comprise the rights associated with networks, plants and other facilities related to gas and integrated water cycle services managed by the Group and are instrumental to the management of these services. These concessions were listed as intangible assets even before the IFRIC 12 - Agreements for concession services - interpretation was first applied.
The depreciation of the concessions are calculated on the basis of the provisions of the respective conventions, and namely: i) according to a constant rate for the shorter of the following two periods: the useful life of the assets granted in concession and the duration of that same concession, provided that, when this concession expires, the outgoing operator is not granted any compensation value (Residual industrial value, or RIV); ii) according to the useful life of the individual assets if, at the moment the concessions expire, the assets in question are expected to pass into the hands of the operator.

Public services under concession include the rights over networks, plants and other facilities related to gas, integrated water cycle, and electricity (with the sole exception of the assets related to the territory of Modena, which are classified among the assets owned by virtue of the associated acquisition) and public lighting services (for the latter, except for what highlighted in the following note describing the accounting principles applied to the "Payables and financing" item) linked to services managed by the Group. These arrangements are accounted for by applying the intangible asset model provided for the IFRIC 12 interpretation, since it was considered that the underlying concession arrangements do not guarantee the existence of an unconditional right in favour of the concessionaire to receive cash or other financial assets. Construction and improvement services carried out on behalf of the grantor are accounted for as contract work in progress. Considering that most works are contracted out externally and that on construction activities carried out internally the job margin cannot be identified individually from the benefits included in the remuneration for the service, these infrastructures are reported on the basis of costs actually incurred, net of any contributions paid by the entities and/or private customers.

This category also includes improvements made and infrastructure constructed on the goods instrumental to the management of these services, which are the property of the Holding Companies (so called Asset Companies, pursuant to Art. 113 of Legislative Decree no. 267/00), yet managed by the Group by virtue of business branch leasing contracts. These contracts, in addition to establishing the fees due, also include clauses governing the restitution of assets, normally maintained, upon payment of a balance corresponding to the net book value or the Industrial Residual Value (also taking into account the recovery funds) of these assets.

The depreciation of these rights is carried out based on the useful life of the individual assets, also in view of the relevant legislation which, in the event of a change in service provider, calls for compensation to be paid to the outgoing operator in the amount of the Residual Industrial Value (RIV) for assets constructed under their ownership, or at Net Book Value (NBV), for assets manufactured under a business unit leasing contract.

The intangible assets acquired following a business combination are recorded separately from goodwill if their fair value can be reliably determined and are depreciated over the useful life estimated in the purchase price allocation.

The depreciation begins when the asset is ready for use according to the needs of the corporate management.

Gains or losses on disposal of intangible assets are calculated as the difference between proceeds from the sale and the carrying amount of the asset and are recognized in the income statement when the control of the asset is transferred to the buyer.

The depreciation rates of intangible assets are outlined here below:

Category	rates
IT applications	20.0%
Patents and trademarks	10.0%
Buildings under concession	1.8% - 3.5%
Distribution plants under concession	1.8% - 10.0%
Other plants under concession	2.5% - 12.5%
Equipment under concession	12.5%

Cost of acquiring new contracts - As required by IFRS 15, incremental costs, represented by commissions paid to agents for the acquisition of new energy supply contracts, are recognized as intangible assets and are amortised according to the average useful life of the acquired customers (churn rate). For this purpose, only the types of commissions related to new customers not present in the Group's customer base are recognized.

Business combinations - Business combination operations are accounted for by applying the acquisition method foreseen by IFRS 3, as a consequence of which the buyer acquires the equity and takes over the assets and liabilities of the acquired company. The cost of the operation is shown as the fair value of the transferred assets, liabilities assumed and equity instruments issued in exchange for the control of the acquired company, as at the date of acquisition. The expenses related to the business combination are generally recognised in the income statement at the time they are incurred.
Any positive difference between the cost of the transaction and the fair value at the date the assets and liabilities are acquired is attributed to goodwill (subject to impairment test, as indicated in the following section). If the process of allocating the purchase price shows a negative difference, such difference is immediately charged to the income statement at the date of acquisition.

Any consideration subject to conditions set forth in the business combination contract is measured at fair value on the acquisition date and considered in the value of the consideration paid for the business combination, for the purposes of calculating the goodwill.

Non-controlling interests on the acquisition date are measured at fair value or according to the pro rata amount of the net assets of the acquired company. The valuation method selected is stated for each transaction.

In the case of business combinations that take place in phases, the equity investment previously held by the Group in the acquired company is valued at the fair value on the date control was acquired and any resulting profit or loss is recognised in the income statement.

Losses in value (impairment) - As of each balance sheet date and when events or situation changes indicate that the book value cannot be recovered, the Group takes into consideration the book value of property, plant and equipment and intangible assets in order to assess whether these assets have suffered an impairment. If there is any indication in this sense, the recoverable amount of said assets is estimated so as to determine the total write-down. The recoverable amount is either the fair value, less sales costs or the usage value, whichever is the greater. Where it is not possible to estimate the recoverable value of an asset individually, the Group estimates the recoverable value of the unit generating the cash flows to which said assets belong. Future cash flows are discounted to present value at a rate (net of taxation) that reflects the current market value and takes into account the risks associated with the specific business activities.
If the recoverable amount of an asset (or of a cash generating unit) is estimated as lower than the related book value, the book value of the assets is reduced to the lower recoverable value and the impairment is booked to the income statement. When there is no longer any reason for a write-down to be maintained, the book value of the asset (or the unit generating financial flows), with the exception of goodwill, is restated at the new value deriving from the estimate of its recoverable value; however, this new value cannot exceed the net book value that the asset would have had if the write-down had not been made for the loss in value. The write-back of the value is charged to the income statement.

Investments valued at shareholders' equity method - Investments entered in this item refer to long-term investments in associated companies and joint ventures. An associated company is a company over which the Group is able to exercise remarkable influence, but not control, by means of participation in the decisions on the financial and operating policies of the investee company. A joint venture is a jointly controlled arrangement in which the entities that share joint control have rights to the net assets of the arrangement. Under the equity method, investments are recognised at cost, as adjusted for any changes following acquisition in the associated companies' net assets, minus any impairment. The excess price over the Group's share of the fair value of an associated company's identifiable assets, liabilities and contingent liabilities at the date of acquisition is recognised as goodwill. Goodwill is included in the carrying amount of the investment and is tested for impairment.

Other investments - This category includes investments that are not included in the scope of consolidation, including investments in negligible size subsidiaries, associates and joint ventures. For these investments, upon initial recognition, it is irrevocably determined whether subsequent changes in fair value are recognised in other comprehensive income; otherwise, changes in fair value are periodically recognised in profit or loss. This approach does not include equity investments held exclusively for the purpose of subsequent disposal, whose changes in fair value are recognized in profit (loss) for the fiscal period. The risk deriving from any losses exceeding the book value of the investment is recorded in a specific reserve to the extent that the holder is obliged to fulfil legal or implicit obligations vis-à-vis the investee company or in any event cover its losses.

Financial assets - The Group classifies financial assets through the business model adopted for managing them and on the basis of the features of contractual cashflows In relation to the previous conditions, financial assets are subsequently valued as follows:

- depreciated cost;
- fair value of the other comprehensive income components;
- fair value of the profit (loss) for the fiscal period.

Management determines their classification when they are first recorded.

Receivables and loans - This category includes assets not represented by derivative instruments and not listed on an active market, from which fixed or determinable payments are expected. Since the business model generally adopted by the Group provides for the holding of these financial instruments solely for the purpose of collecting the contractual cash flows, these assets are valued at depreciated cost on the basis of the effective interest rate method. The value of the assets is reduced on the basis of the expected losses, using information that is available without unreasonable charges or efforts, including historical, current and prospective data. Losses determined by an impairment test are recognized in the income statement, as are any subsequent reversals of impairment losses. These assets are classified as current assets, except for the portions accruing after 12 months, which are included amongst the non-current assets.
This category includes, as provided by the interpretation IFRIC 12, the financial assets associated to those public service under concession for which the Group has the unconditional contractual right to receive liquidity from the issuer for the construction services rendered. The Group uses the financial asset model for the contracts of public lighting service provision, in view of their characteristics, in which increasingly frequently the issuer guarantees the area provider a specific amount, or at any rate an amount which can be reliably determined, not depending on the use of the infrastructure by the final customer. Under that model, the financial asset reported in the balance sheet in relation to the issuer for an amount equal to the fair value of the construction services rendered.

Financial assets at fair value recorded in the comprehensive income components - This category includes assets, other than derivatives, held by the Group for the purpose of receiving contractual cash flows (represented by equity and interest payments) or for monetisation through sale. These assets are valued at fair value, the latter determined by referring to the market prices at the balance sheet date or using financial measurement techniques and models, recording their change in value in a specific equity reserve. The changes in value due to the impairment test as well as of profit/loss on the exchange rate are recorded in the profit (loss) for the fiscal period This reserve is reclassified to income only when the financial asset is actually sold. Classification as a current or non-current asset depends on management's plans and on the real tradability of the security. Those whose sale is expected during the next 12 months are recorded as current assets.

Should there be objective proof of indicators of impairment, the value of the assets is reduced to such an extent as to be equal to the discounted value of the flows that can be obtained in the future. The impairment previously booked is restored if the circumstances that brought about its recording no longer exist.

Assets valued at fair value recorded as profit (loss) for the fiscal period - This category includes the financial assets acquired for short-term trading purposes, in addition to the derivatives, which are described in the specific paragraph below. The fair value of these instruments is determined by referring to the market value on the date the registration period ends. Classification under current and non-current reflects management 's expectations regarding their trading: current assets include those whose trading is expected within 12 months or those identified as held for trading.

Cash and cash equivalents - The item regarding cash holdings and cash equivalents includes cash and bank accounts and deposits repayable on demand and other short-term financial investments with high liquidity that are readily convertible into cash and are subject to an insignificant risk regarding their change in value.

Trade receivables - These refer to financial assets arising from the provision of goods and services and are valued at amortised cost, adjusted for any impairment. These assets are derecognized in the event of sale which transfers all risks and benefits associated with their management to third parties.

Other current assets - These are stated at par value, and possibly adjusted for any losses in value corresponding to the amortised cost.

Environmental bonds - The Group complies with the various regulations issued in relation to the environment that require compliance with restrictions established through the use of certificates or bonds. Therefore, the Group is obliged to meet a need in terms of grey certificates (emission trading) and white certificates (energy efficiency instruments). The development of markets in which these bonds/certificates are traded has also made it possible to initiate a trading activity. These bonds are valued according to the intended use.
The bonds held to meet the company's requirement are recorded as assets at cost. If the bonds in the portfolio prove to be insufficient to meet the need, a liability is recorded to guarantee adequate coverage when the certificates are delivered to the operator. Bonds held for trading are recognised as assets and are measured at fair value through profit or loss.

Contract work in progress - Where the outcome of a construction contract can be estimated reliably, contract work in progress is measured on the basis of revenues accrued with reasonable certainty, according to the percentage of completion method of accounting, so as to apportion revenues and costs to the relevant financial years in proportion to the stage of completion of the work in question. Contract revenues, in addition to the contractual payments, include the variations, the price review and the recognition of the incentives to the extent it is probable that they represent effective revenues which can be determined reliably.
When the result of a contract cannot be reliably estimated, the revenues referable to the related contract are recorded solely within the limits of the contract costs incurred which will probably be recovered. The contract costs are recorded as expenses during the accounting period in which they are incurred. When it is probable that the total contract costs will be greater than the contractual revenues, the expected loss is immediately stated at cost.

Inventories - Inventories are recorded at cost, including directly attributable costs, or net estimated realizable value, whichever is the lower. The cost configurations used for the valuation of stocks are the average cost measured on a continuous basis (used for raw materials and consumables) and the specific cost of other inventories. The net realisable value is calculated on the basis of the current costs of the inventories at year end, less the estimated costs necessary for achieving the sale.
The value of obsolete and slow-moving stock is written down in relation to the possible use or realization, by means of the provision of a specific materials obsolescence allowance.
Inventories of work in progress are valued at weighted average manufacturing cost for the period, which comprises the raw materials, the consumables and the direct and indirect production costs excluding general expenses.

Share capital - share capital is recorded at par value, reduced, if necessary, by costs directly attributable to transactions involving the issuing or repurchase of equity instruments.

Treasury shares - treasury shares are recognised as a reduction in shareholders' equity, and any differences generated by future purchase or sale transactions are recorded directly as changes in shareholders' equity, without passing via the income statement.

Earnings per share - The earnings per share are represented by the net profit for the year attributable to the shareholders holding ordinary shares, taking into account the weighted average of the ordinary shares outstanding during the year. The diluted earnings per share are obtained by means of the adjustment of the weighted average of the shares outstanding, taking into account all the potential ordinary shares with dilution effect.

Financial liabilities - This item is initially stated at cost, corresponding to the fair value of the liability net of the transaction costs which are directly attributable to the issue of said liability. Following their initial recognition, financial liabilities, with the exception of derivatives, are valued on the basis of amortised cost, using the original effective interest rate method. If the estimates of payments are revised, the adjustment of the liability is stated as income or expense in the income statement, except for lease liabilities.

Lease liabilities - As at the effective date of the contract, lease liabilities are calculated as the present value of payments due, discounted using the interest rate of the lease or, in case it is not easily identifiable, the marginal lending rate. The payments included in the calculation of the liability are: (a) fixed payments; (b) variable payments depending on an index or a rate; (c) amounts expected to be paid to secure the residual value; (d) the exercise price of the purchase option, if any, if the term of the lease considers it; (e) any penalties for terminating the contract, if the term of the lease considers them.
The marginal lending rate refers to the average rate at which the Group borrows, broken down by contractual maturity. It is determined annually in the budget on the basis of the final figures for previous financial year and is applied to contracts signed from 1 January of each subsequent financial year. It is updated during the period in the event of significant changes to the Group's average borrowing rate. For contracts with a life of more than 4 years, the Group uses the medium/long-term borrowing rate, while for contracts with a life of 4 years or less, the equivalent short-term rate is adopted.
After the initial date, lease liabilities are modified as a result of: a) accrued financial expenses recorded to the income statement; b) payments made to the lessor; c) any new valuations or changes to the lease or the revision of the assumptions regarding the payments due to the lessor.

Post-employment benefits - Liabilities related to defined-benefit plans (such as the employee severance accrued before 1 January 2007) are reported net of any plan assets on the basis of actuarial assumptions and on an accrual basis, in keeping with the service necessary to obtain benefits. The liability is valued by independent actuaries. Independent actuaries assess financial liabilities. The liability is valued by independent actuaries. Actuarial gains and losses are reported as other comprehensive income/losses. Following Law 296 of 27 December 2006, for companies with more than 50 employees, the severance amounts accruing after 1 January 2017 qualify as a defined-benefit plan.

Provisions for risks and charges - The provisions for risks and charges comprise the amounts set aside as recorded in the financial statements on the basis of current obligations (as emerging from past events) which the Group believes it probably will have to meet. The provisions are set aside on the basis of the best estimate of the costs required to meet the obligation, as of the balance sheet date (assuming that there are sufficient elements for being able to make this estimate) and are discounted to present value when the effect is significant and the necessary information is available. In such event, the provisions are determined by discounting to present value the future cash flows at a pre-tax discount rate that reflects the current market valuation and takes into account the risk associated with the business activities.
When the discounting to present value is carried out, the increase in the provision due to the passing of time is recorded amongst the financial charges. If the liability relates to property, plant and equipment (e.g. restoration of sites), the contra-entry to the provision made is an increase of the asset to which the liability refers; on the other hand, the financial charges are expensed out through the depreciation process of the item of property, plant and equipment to which the charge refers. The methods envisaged by IFRIC 1 are adopted if liabilities are recalculated.

Trade payables - These refer to payables derived from commercial supply transactions and are recorded at amortised cost.

Other current liabilities - These concern sundry transactions and are stated at nominal value, corresponding to the amortised cost.

Derivative instruments - The Group holds derivative instruments for the purpose of hedging its exposure to the risk of interest rate and exchange rate fluctuations and the risk of changes in methane gas and electricity prices. In relation to said activities, the Group must handle the risks associated with the misalignment between the index-linking formulas relating to the purchase of gas and electricity and the index-linking formulas linked to the sale of said commodities. The instruments the Group uses for handling price risk, both with regards to the price of the goods and the related Euro/Dollar exchange rate, are aimed at pre-establishing the effects on the sales margins irrespective of the changes in the aforementioned market conditions.

In relation to commodity derivatives, operations are managed through OTCs - over the counter financial instruments (index swaps), currency derivatives (forward purchases in dollars), derivative instruments traded on the regulated platform Eex, as well as through brokerage contracts that provide for the physical delivery of the underlying (so-called physical contracts). In particular, the accounting method used for physical contracts varies according to their purpose: contracts related to procurement activities are subject to the own-use exemption and the related economic effects are recognised on an accrual basis only at the time of actual delivery, while contracts signed with reference to price or volume risk management activities are considered derivative financial instruments and measured at fair value from the time they are signed. Given the nature of physical contracts, in order to give a more consistent representation of the actual transactions carried out, at the time they become operational, regardless of their purpose, the settlement is recorded in the income statement either in the item "Revenues" or in the item "Raw materials and materials" depending on whether the sale or procurement of commodities was involved.

From an operational point of view, a commercial portfolio has been identified, which includes physical and financial contracts signed for the management of procurement, and a trading portfolio, which includes physical and financial contracts signed for speculation, based on pure position taking logics whenever there is a market opportunity, always within the risk limits defined by the Board of Directors of the parent company.

The fair-value changes pertaining transactions that, in observance of the risk management policies, meet the requirements laid down by the accounting standards for hedge accounting treatment are recorded (in the terms indicated below) as part of the other components of comprehensive income, while those that despite being entered into for hedging purposes, do not meet the requirements set by the standards are recognises in profit or loss in the period in which they occur. Operations identified from their outset as speculative are recognised in profit or loss in the reporting period. Fair value is established with adequate valuation models for each type of instrument, according to the reference market value as more fully described below.

For hedge accounting purposes, the Group formally designates and documents the hedging relationship, its risk management objectives and the strategy pursued, identifying: i) the hedging instrument, ii) the nature of the risk being hedged, and iii) the way the effectiveness of the hedge will be assessed. The hedging relationship is effective if: i) there is an economic relationship between the hedging instrument and the hedged item; ii) the credit risk does not prevail over the changes in fair value resulting from the economic relationship; and iii) the hedge ratio is the same as the ratio between the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of the hedged item and no imbalance is identified.

For accounting purposes, the hedging transactions are classified as fair value hedges if they cover the risk of fluctuations in the market value of the underlying asset or liability; or as cash flow hedges if they cover the risk of changes in cash flows deriving both from an existing asset or liability, or from a future transaction, including transactions on commodities.

As far as derivative instruments classified as fair value hedges are concerned, which observe the conditions for the accounting treatment as hedging transactions, the gains and losses deriving from the determination of their market value are recognized through profit or loss. The gains and losses deriving from the adjustment to fair value of the element underlying the hedge are also recognized through profit or loss.

For instruments classified as cash flow hedges and that qualify as such, the fair value changes are recorded, only as far as the effective amount is concerned, in a reserve called "Cash flow hedge reserve" through the statement of comprehensive income. This reserve is recorded to income as soon as the underlying hedged instrument is realised. The change in fair value referring to the ineffective portion is immediately recorded in the income statement of the period. If the underlying transaction should no longer be considered highly probable, or the hedging relationship can no longer be demonstrated, the corresponding portion of the "Reserve of derivatives valued at fair value" is immediately reversed to income.
If, on the other hand, the derivative instrument is sold and therefore the hedging of the risk for which the transaction was created no longer qualifies as effective, the amount of "Reserve of derivatives valued at fair value" relating to it is kept until the economic effects of the underlying contract arise.

Whenever applicable, the Group adopts the fair value option.

Assets and liabilities held for sale - Assets and liabilities held for sale are those whose value will be recovered mainly through sale rather than use. Assets and liabilities are classified under this category the moment the sale operation is considered highly likely and the assets and liabilities are immediately available for sale in their current condition. These assets are valued at either cost or fair value, whichever is lower, net of sales costs.

Revenue and cost recognition - Revenues and income are recognized net of returned items, discounts and rebates, and net of taxes directly related to the sales of products and services rendered. These are broken down into revenues deriving from operating activities and financial income which accrues between the sale date and the payment date.

Specifically:
- revenues from energy, gas and water sales are recognised and recorded at the moment of the provision of the service and include the services provided but not yet invoiced (estimated on the basis of historical analyses determined according to previous consumption levels);
- revenues from the distribution are recognized on the basis of the tariffs paid by the Aeegsi and are subject to equalization at year end to reflect in accordance with the competence criterion the compensation recognised by the Authority in relation to the investments made;
- revenues are booked at the time (or as) the obligation is fulfilled, transferring the promised good or service to the customer. The transfer occurs when (or as) the customer gains control over the good or service. The revenue recorded corresponds to the price attributed to the obligation to be recorded. Revenue is recorded only if the consideration for the goods or services transferred to the customer is likely to be received;
- costs are accounted for in accordance with the accruals principle.

Grants - Capital grants are recognized in the income statement over the period necessary for correlating them to the related costs. They are represented in the statement of financial position by recording the grant as deferred revenue. Operating grants, including those received from users for connection purposes, are considered to be revenues for services rendered during the fiscal period and are therefore recorded on an accruals basis.

Lease payments - As defined by IFRS 16, lease payments relating to lease contracts for low-value assets and leases with a contract duration of 12 months or less (short-term leases) are recorded in the income statement as charges for the period. The Group has set a threshold of 10,000 euro for deeming the individual underlying asset to be of modest value.

Financial income and expense - Financial income and expense are recognised on an accrual basis. Dividends from "Other shareholdings" are recorded in the income statement, at the time the right to receive payment is established, the economic benefits arising from the dividends are likely to be received by the Group and their value can be assessed reliably.

Taxes - Taxes are the sum of current, deferred and possible substitute taxes. Current taxes are calculated on the taxable income for the financial period. Taxable income differs from the result recorded in the income statement, as it may exclude both positive and negative components which will be taxable or deductible in other periods (temporary changes), and components that will never be taxable or deductible (permanent changes). “Current tax liabilities” are calculated on the basis of the tax rates applicable on the balance sheet date.

In determining tax rates for the period, the Group took into due consideration the effects of the IAS tax reform introduced by Law 244 of 24 December 2007 and in particular the reinforced derivation principle established by Article 83 of the TUIR. This regulation calls for entities that use IFRSs to apply, including in a departure from the provisions of the TUIR, the criteria for the determination, recognition and classification in the financial statements provided for by said accounting standards.

Deferred taxes are calculated having regard to timing differences in taxation, and are recorded under item “Deferred tax liabilities”. “Deferred tax assets” are recognised to the extent that the existence of a taxable income at least equal to the amount of the differences to be offset is considered probable when the timing differences will reverse. Deferred taxes are determined on the basis of the tax rates foreseen to be in force during the financial year in which the tax asset will be conferred or the tax liability will be extinguished, on the basis of tax rates established by provisions in force or substantively in force at the date of the financial statements. These changes are recognised in profit or loss or in equity, depending on how the difference in question was originally recorded.
Finally, substitute taxes may be recorded when legal provisions exist that allow the Group to take advantage of special tax regimes. These are, by nature, non-recurring taxes, which may be attributed to the Group's desire to opt or not for the related tax regime.
In the event that the substitute tax is paid pursuant to a tax regulation that allows the balance sheet value of a utility to be aligned, in whole or in part, with the corresponding tax value of the utility, the Group proceeds to recognize the total value of future tax benefits (tax assets) and, at the same time, the entire substitute tax in the financial year in which management makes the decision to take advantage of this opportunity.

Translation of foreign currency balances - Foreign currency transactions are initially recorded using the exchange rate in force as of the transaction date. Foreign currency assets and liabilities, with the exception of fixed assets, are recorded using the exchange rate in force as at the period end date and the related exchange gains and losses are recognized through profit or loss. Any net gain that might arise is set aside in a specific restricted reserve until the date of realization.

Transactions with related parties - Transactions with related parties take place on an arms'-length basis, in observance of efficiency and cost-effectiveness criteria. Some specific transactions are remunerated on the basis of rates established by ARERA resolutions.

Risk management

Credit risk
The credit risk faced by the Group originates from the broad structure of the client portfolios in the main business areas in which it operates; for the same reason, this risk is spread out over a large number of clients. In order to manage the credit risk, the Group established procedures for selecting, monitoring and evaluating its customer portfolio. The Italian market is the benchmark market.
The Group's credit management model makes it possible to analytically determine the different risks associated with the collectability of trade receivables as soon as they arise and progressively according to their increasing seniority.
This approach allows the company to reduce the concentration and exposure to credit risk posed by both business and household customers. With regard to receivables from small-sized customers, write-downs are carried out on the basis of future-oriented analysis regarding the amount of probable future income, taking into consideration the seniority of the receivables, the type of recovery action undertaken and the status of the creditor. From time to time, analyses are conducted on the individual credit positions yet to

be resolved, identifying any criticality, and if the amounts outstanding are uncollectible, in whole or in part, the related receivables are written down.

Liquidity risk
Liquidity risk concerns the inability to meet the financial obligations taken on due to a lack of internal resources or an inability to find external resources at acceptable costs. Liquidity risk is mitigated by adopting policies and procedures that maximise the efficiency of management of financial resources. For the most part, this is accomplished through the centralised management of cash inflows and outflows (centralised treasury service); in the prospective assessment of the liquidity conditions; in obtaining adequate lines of credit; and preserving an adequate amount of liquidity.
The financial planning of requirements, focused on medium-term borrowings, and the availability of abundant funds in credit facilities, allow effective management of liquidity risk.

Interest rate risk and currency risk on financing operations
The cost of financing is affected by interest rate fluctuations. In the same way, the fair value of financial liabilities is also subject to interest rate and exchange rate fluctuations.
The Group regularly assesses its exposure to such risks and manages them by means of derivative financial instruments, in accordance with its risk management guidelines. To mitigate interest rate volatility risk and simultaneously ensure a correct balance between fixed rate debt and variable rate debt, the Group has stipulated interest rate derivatives in relation to a portion of its financial liabilities. At the same time, to mitigate exchange rate volatility risk, the Group has signed foreign exchange derivatives to fully hedge loans in foreign currencies.
Under these guidelines, derivative financial instruments may only be used to manage its exposure to interest and exchange rate fluctuations related to cash flows and balance sheet assets and liabilities. . These policies do not enable speculative activities to be carried out.

Market risk and currency risk on commercial operations
Concerning the wholesale business carried on by Hera Trading Srl, the Group manages risks related to the misalignment between indexation formulas related to the purchase of gas and electric energy and the indexation formulas related to the sales of the same commodities (including contracts entered into at fixed prices) as well as exchange rate risks in case the trading contracts for the commodities are denominated in currencies other than the euro (U.S. dollar).
In relation to these risks, the Group has set up a number of instruments, including different types of commodity derivatives (which may also include physical delivery) aimed at pre-establishing the effects on sales margins irrespective of changes in market conditions. The organisational model adopted and the supporting management systems make it possible to identify the nature of the operation (hedging vs. trading) and produce the information required for a formal identification of the purpose of these instruments. Specifically, from a managerial standpoint, the Group identified a commercial portfolio, including contracts signed to manage the Group's procurement activities, and a trading portfolio, including instruments whose purpose cannot be strictly related to the underlying procurement activities.

For an exhaustive discussion of how the Group analyses, measures, monitors and manages exposure to these risks, please refer to paragraph 1.02.03 "Risk areas: identification and management of risk factors" in the management report.

Significant estimates and valuations

Preparation of the consolidated financial statements and related notes requires the use of estimates and valuations by the directors, with effects on the balance sheet figures, based on historical data and on the forecasts of specific events that are reasonably likely to occur on the basis of currently available information. These estimates, by definition, are an approximation of the final figures. Hence the main areas characterised by valuations and assumptions that could give rise to variations in the values of assets and liabilities by the next accounting period are set forth below.
Specifically, information is provided on the nature of these estimates and the assumptions on which they have been based, with indication of the reference book values.

Recognition of revenues

Revenues for the sale of electricity, gas and water are recognised and accounted for at supply only if the consideration is expected to be collected. They include the allocation for services rendered between the date of the last reading and the end of the financial year, but not yet billed. This allocation is based on estimated of the customer's daily consumption, based on the historic profile, adjusted to reflect the weather conditions or other factors which might affect consumption under evaluation.

Provisions for risks

These provisions were made by adopting the same procedures as in previous years, with reference to reports by the legal advisors and consultants that are following the cases, and on the basis of developments in the relevant legal proceedings as well as of the updates of the hypotheses concerning future expenses for post-mortem costs of the landfills, following the revision of the estimated costs identified by external consultants.

Depreciation

Depreciation is calculated on the basis of the useful life of an asset. The useful life is determined by Management at the time the asset is recognized in the balance sheet; valuations of the duration of useful life are based on historical experience, market conditions and the expectation of future events that could affect the useful life itself, including technological changes. Therefore, the actual useful life might differ from the estimated useful life.

Impairment test

The Group carries out an analysis of the recoverable value of goodwill as well as of its investment (not majority investment) in companies holding assets for generating thermoelectric energy, through impairment tests, at least once a year. This test is based on the calculation of its value in use, which requires the use of estimates as specified in note 27 of the comments to the financial statement formats.

Deferred tax assets

Accounting for deferred tax assets takes place on the basis of expectations of taxable income in future years. The evaluation of the taxable income expected for the purposes of accounting for deferred tax assets depends on factors that may vary over time and significantly affect the recoverability of deferred tax assets.

Fair value assessment and evaluation process

The fair value of financial instruments, both on interest rates and foreign exchange rates, derives from market prices. In the absence of prices quoted in active markets, the method of discounting back future cash flows is used, taking the parameters observed on the market as reference. The fair value of contracts on commodities are determined using directly observable market inputs, where available. The methodology for calculating the fair value of these instruments includes the assessment of the non-performance risk, where relevant. All derivative contracts entered into by the Group are with leading institutional counterparties.

Fair Value Hierarchy

The financial instruments measured at fair value are classified through a three-level hierarchy based on the way the fair value was determined, i.e., with reference to the factors used in determining the value:

- **level 1**, financial instruments the fair value of which is determined on the basis of quoted prices in active markets;
- **level 2**, financial instruments the fair value of which is determined using valuation techniques that employ parameters that are directly or indirectly observable on the market. Instruments valued on the basis of the market forward curve and short term differential contracts are classified in this category;
- **level 3**, financial instruments the fair value of which is determined using valuation techniques that employ parameters that cannot be observed on the market, using internal estimates exclusively.

2.02.02 Operational and financial performance

Please note that paragraphs 1.04 and 1.07 of the Directors' report provide an analysis of the business management performance for the financial period, also by business area; please refer to these for a specific analysis of the changes in the main categories of operating expenses and revenues, as well as the Group's overall financial management.

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The financial results for the year by comparison with the previous year are outlined below.

	notes	2022	2021
Revenues	1	20,082.0	10,555.3
Other operating revenues	2	548.2	400.1
Raw materials and materials	3	(16,730.0)	(6,668.5)
Service costs	4	(2,105.8)	(2,464.6)
Personnel costs	5	(601.1)	(592.8)
Other operating costs	6	(74.9)	(66.5)
Capitalised costs	7	82.5	60.8
EBITDA		**1,200.9**	**1,223.8**
Amortisation, provisions and depreciation	8	(667.1)	(612.1)
Operating revenues		**533.8**	**611.7**
Share of profits (losses) pertaining to joint ventures and associated companies	9	10.0	13.2
Financial income	10	82.2	82.3
Financial expenses	11	(217.2)	(300.3)
Financial management		**(125.0)**	**(204.8)**
Earnings before taxes		**408.8**	**406.9**

A breakdown of the most significant economic items by business sector is provided in the section "Reporting by operational sector" under 2.02.10 "Other Information."

Operating revenues and costs showed a significant increase during the year, due mainly to the significant increase in energy commodity prices in the reference markets, as well as the change in the scope of customers served in the energy-sector markets of last resort. The Group EBITDA is an alternative indicator of performance the definition of which can be found in Section 1.04 "Overview of operating and financial trends and definition of alternative performance measures." It was positive in the amount of 1,200.9 million euro, and it decreased as compared to last year mainly due to the more subdued performance of the electricity business, which suffered from the particularly variable conditions of the wholesale market and did not benefit in the 2022 financial year, unlike the previous year, from the contribution of the dispatching services market. This effect was only partially offset by the better results achieved by the waste management business.

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"Amortization, provisions and depreciation" increased both as a result of investments entering into depreciation and amortization during the year, and as a result of higher allocations to the provision for bad debts and the provisions for risks and charges.

The significant change in financial management is affected by various events occurring in the current and previous fiscal years. In the second part of the 2022 fiscal year, the Group underwrote short- to medium-term loans and short-term cash lines to meet contingent financial needs, particularly related to the increase in methane gas storage needed to supply its customers for the 2022-2023 thermal year. On the other hand, during 2021, it is worth mentioning the operation of renegotiating five bonds, which resulted in the recognition of charges amounting to 82.6 million euro.

1 Revenues

	2022	2021	Change
Revenues from sales and services	19,871.3	10,377.1	9,494.2
Changes in work in progress and semi-finished products	210.7	178.2	32.5
Total	**20,082.0**	**10,555.3**	**9,526.7**

Due to the particular types of activities that the Group oversees, "Revenues from sales and services" include substantial allocations for services provided to end customers and not yet invoiced as of the financial statement date. Below are the values of invoices to be issued pertaining to the reference period in relation to the three commodities most significantly impacted by the estimated year-end accruals.

	2022	2021	Change
Gas sales	730.2	447.1	283.1
Electricity sales	371.3	283.8	87.5
Water	159.8	132.2	27.6
Total	**1,261.3**	**863.1**	**398.2**

The breakdown of revenues from sales and services by geographical area is shown below.

	2022	2021	Change
Italy	14,102.2	7,873.9	6,228.3
European Union	2,874.3	924.3	1,950.0
Outside European Union	2,894.8	1,578.9	1,315.9
Total	**19,871.3**	**10,377.1**	**9,494.2**

The revenues generated outside Italy mainly refer to natural gas brokerage activities, the value of which amounted to 5,617.8 million euro at 31 December 2022 (2,405.6 million at 31 December 2021). It should also be noted that, of the total value of revenues, 4,064.6 million refer to counterparties operating in the Dutch TTF market (1,577.4 million at 31 December 2021).

For "Changes in work in progress and semi-finished products", the increase compared to the previous year is mainly attributable to the energy efficiency works the Group carried out for customers, mainly apartment blocks; this business area, developed in line with strategic choices associated with the fight against climate change, increased significantly in the 2022 financial year as well.

Revenues from related parties are presented in note no. 2.03.01 "Income statement as per Consob resolution 15519/ 2006".

2 Other operating revenues

	2022	2021	Change
Long-term contracts	397.6	341.9	55.7
Operating grants	52.9	26.9	26.0
Grants related to plants	12.8	12.4	0.4
Gains from asset disposals	0.9	1.2	(0.3)
Other revenues	84.0	17.7	66.3
Total	**548.2**	**400.1**	**148.1**

"Long-term contracts" include revenues generated from the construction or improvement of infrastructures held in concession as per the application of the accounting model for intangible assets for public services held under concession.

"Operating grants" increased as a result of gas and electricity subsidies, amounting to 38 million euro, recognized in the form of tax credits by the series of governmental aid decrees issued over the course of 2022 to deal with the high energy costs emergency. The remaining part mainly include Fer incentives recognised by the GSE for energy produced from renewable sources and grants awarded by public bodies, authorities or institutions for specific projects and activities carried out by the Group.

"Grants related to plants" represent the proceeds for the period associated with the depreciation rate of the assets subject to grants.

"Other revenues" mainly consist of insurance reimbursements, recovery of fees and white certificates. White certificates represent the revenues calculated on the basis of energy efficiency objectives as established by the GSE and regulated in relation to the Cassa per i Servizi Energetici e Ambientali, amounting to 14.5 million euro at 31 December 2022. The change from the comparison period is mainly due to the negative adjustment of white certificate revenue recognized at 31 December 2021 in compliance with the provisions introduced in May 2021, which both set a significantly lower number of certificates for the 2021 obligation than in previous periods and retroactively reduced the number of certificates planned for the 2020 obligation year by 60%.

3 Raw materials and materials

	2022	2021	Change
Raw materials earmarked for sale	16,725.0	6,612.1	10,112.9
Plastic materials	93.6	65.8	27.8
Materials for industrial use	41.4	35.9	5.5
Environmental certificates	35.1	(23.5)	58.6
Charges and revenues from derivatives	(371.4)	(175.7)	(195.7)
Maintenance and other materials	206.3	153.9	52.4
Total	**16,730.0**	**6,668.5**	**10,061.5**

"Raw materials earmarked for sale", net of changes in stocks, include supplies of natural gas, electricity and water. The natural gas brokerage business on the Dutch TTF market generated costs of 4,364.9 million euro (1,690.3 million euro at 31/12/2021). The increase in the period is driven by the sharp rise in energy commodity supply prices to which is added the increase in volumes marketed to electricity end customers. These effects are only partially offset by the decrease in total gas volumes purchased by the Group in the 2022 financial year, in relation to the significant reduction in brokering activities in wholesale markets, only partially mitigated by the higher volumes handled in the gas markets of last resort and the awarding of Consip tenders.

"Plastic materials", net of changes in stocks, include the cost of purchasing plastic raw materials destined for subsequent processing, transformation and sales as part of the Aliplast Spa company activities. The change in costs is consistent with the increase in sales revenue due to the performance of the plastics market which showed a significant price increase for both virgin and, to a larger degree, recycled polymer as compared to the same period of the previous year.

"Materials for industrial use" mainly include the procurement of methane gas and electricity to power the Group's production plants, as well as the purchase of fuels and lubricants for fleet management.

"Environmental certificates" include the purchase cost of white certificates, which are supplied in accordance with the obligations assigned to the distribution companies. This item also includes the environmental certificates in stock, mainly made up of white and grey certificates as well as the valorisation of commitments for purchasing electricity from renewable sources in relation to contracts signed with end customers and greenhouse gas emission allowance trading contracts. The significant change from the previous fiscal year is due to the income recorded in 2021 in correlation with the reduction of the liability for the 2020 obligation that the legislature retroactively applied, as described in Note 2 "Other operating revenues".

"Maintenance and other materials", net of changes in stocks, mainly include consumables used in the management of the Group's operating activities and, marginally, products purchased to be resold to end customers. The significant increase in the period was due to both the effect of higher material sourcing costs and the greater volume of concession business carried out by the Group, particularly with regard to the urban sanitation concessions in the Bologna and Modena areas, as well as the development of the photovoltaic business.

In relation to "Charges and revenues from derivatives", please see note 29 "Derivative instruments" for an analysis of the nature and performance of these items.

4 Service costs

	2022	2021	Change
Work and maintenance expenses	872.2	646.3	225.9
Waste transportation, disposal and collection	467.6	398.9	68.7
Transport and storage	269.3	1,008.7	(739.4)
Technical services	119.6	65.9	53.7
IT and data processing services	65.5	67.8	(2.3)
Fees paid to local authorities	61.7	64.9	(3.2)
Professional services	43.5	40.8	2.7
Other service costs	206.4	171.3	35.1
Total	**2,105.8**	**2,464.6**	**(358.8)**

"Work and maintenance expenses" refer to the costs for the construction or improvement of infrastructures under concession pursuant to the application of the accounting model for intangible assets for public services held under concession, the costs of implementing energy efficiency measures, and the costs for maintaining the plants managed by the Group. The change from the previous period is due mainly to the significant development of the business related to energy efficiency improvement work on apartment buildings.

"Waste transportation, disposal and collection" mainly include the operating costs of urban hygiene and waste disposal activities. The change from the previous year is the result of both the higher per-unit cost of services due to the increase in energy commodity prices in general and fuel prices, in particular, and higher volumes handled, due in part to the acquisition transactions carried out in the second half of the 2021 financial year and in the 2022 financial year.

"Transport and storage" include the costs of transporting and storing gas as well as the costs of distributing gas and electricity distribution, including system charges. The latter, in particular, represent cost components charged to end customers and therefore not substantially affecting the Group's results. The change from last year is mainly attributable to the negative value of system charges. The substantial reduction in this item compared to the previous year is due to:

- regulatory provisions that, to cope with high utility bills driven by sudden rises in energy commodity prices, starting back in October 2021 and amplified in the following quarters of 2022, introduced a cancellation of general system charges in the electricity sector applied to specific utilities and significantly reduced the gas distribution components;
- the increase in gas and electricity social bonuses credited to certain categories of end customers in the 2022 financial year. the regulatory provision, in particular, brought about the expansion of the base of users eligible for rebates, the increase (especially in the last quarter of 2022) of the unit value

of applicable social bonuses, and the introduction of an additional negative rate for the UG2c component, starting in April 2022, as established by ARERA Resolution 148/2022/R/gas.

These effects are only partially offset by the increase in gas transportation costs due to the increased capacity used by the Group in the 2022 financial year.

"Technical services" mainly include the costs incurred in carrying out energy efficiency improvement work on apartment buildings, an area that has grown significantly compared to the previous period.

"IT and data processing services" include costs for maintaining and managing the Group's IT and telecommunications infrastructure, as well as corporate applications and cybersecurity systems.

The item "Fees paid to local authorities" includes the charges incurred for the use of public owned networks, fees paid to companies that own these assets for the rent of gas, water and electricity cycle assets. It also includes, marginally, the fees paid for the use of telecommunications and district heating networks.

"Professional services" include charges for commercial, legal, notary, administrative and tax services. This item includes fees paid for the audit of financial statements and the issuance of certifications.

"Other service costs" include all other costs for services not specified in the above categories. This item also includes commissions to agents totalling 21.4 million euro (15.5 million euro at of 31 December 2021) and bank commissions in the amount of 15.2 million euro (8.7 million euro at 31 December 2021). It should also be noted that the item "Other service costs" also includes the instalments relating to short-term leases and low-value leases, the amount of which is not significant for the 2022 financial period.

5 Personnel costs

	2022	2021	Change
Salaries and wages	423.0	415.7	7.3
Social security costs	136.7	133.0	3.7
Other costs	41.4	44.1	(2.7)
Total	**601.1**	**592.8**	**8.3**

The increase as compared to the previous year is mainly connected to:

- the increase in the number of employees, particularly as a result of new acquisitions during 2022 and in the second half of the previous year;
- salary increases provided for in national collective labour agreements.

These effects are partially offset by lower average staff attendance in the 2022 financial year and lower expenses incurred for termination than in the previous year.

The average and specific number of employees for the period in question, analysed by category, is as follows:

	Average			Specific		
	2022	2021	Change	2022	2021	Change
Managers	154	154	-	153	154	(1)
Middle managers	580	572	9	593	583	10
Clerks	5,276	5,236	40	5,251	5,197	54
Blue-collar workers	3,441	3,427	14	3,418	3,401	17
Total	**9,451**	**9,389**	**62**	**9,415**	**9,335**	**80**

The average cost of labour per capita for 2022 as compared to the 2021 financial period is as follows:

thousand euro	2022	2021	Change
Average cost of labour pro person	64.0	63.0	1.0

6 Other operating costs

	2022	2021	Change
Taxation other than income taxes	23.3	21.7	1.6
Fees paid to Institutional Authorities	13.3	13.1	0.2
Losses on the sale and disposal of assets	9.2	9.2	-
Minor charges	29.1	22.5	6.6
Total	**74.9**	**66.5**	**8.4**

"Taxation other than income taxes" mainly relate to taxes on buildings, stamp duties and registration fees, public area occupation fee, fees related to the landfills managed and excise duties.

"Fees paid to Institutional authorities" paid to the regions, land reclamation consortia, sector agencies and mountain-area communities, mainly regarding the withdrawal and use of water, as well as maintenance and management costs for hydraulic works. The item also includes fees for the safeguarding of hydrogeological protection areas in mountain municipalities (as provided for by Regional government decree 933/2012) and fees paid for the operation of Atersir.

"Losses on the sale and disposal of assets" are mainly composed of divestments that occurred in the operation of waste treatment plants, gas distribution network meters and facilities serving the integrated water cycle.

"Minor charges" comprise other residual items including membership fees, indemnities, sanctions and fines.

7 Capitalised costs

	2022	2021	Change
Increase of self-constructed assets	82.5	60.8	21.7

This item includes mainly the labour costs and other charges (such as storage materials and costs for use of equipment) directly attributable to the Group's self-constructed assets.

8 Depreciation amortisation and provisions

	2022	2021	Change
Depreciation and amortisation	478.6	469.9	8.7
Net provisions	188.5	142.2	46.3
Total	**667.1**	**612.1**	**55.0**

The details of the item Depreciation and amortisation are as follows:

	Notes	2022	2021	Change
Depreciation	21, 22, 23	477.1	463.3	13.8
Write-downs	21, 22, 23	1.5	6.6	(5.1)
Total		**478.6**	**469.9**	**8.7**

Depreciation includes the depreciation of tangible assets, rights of use and intangible assets.

Write-downs refer mainly to waste treatment business assets.

The details of the item Net provisions are as follows:

	Notes	2022	2021	Change
Provisions to the bad debts fund	33	133.9	94.4	39.5
Provisions to risks and charge funds	31	66.6	52.0	14.6
De-provisioning	31, 33	(12.0)	(4.2)	(7.8)
Total		**188.5**	**142.2**	**46.3**

Provisions include value adjustments to the bad debts fund and provisions for risks and charges.

De-provisioning includes the re-verification of funds in view of the fact that the underlying risks no longer exist.

9 Share of profits (losses) pertaining to joint ventures and associated companies

	2022	2021	Change
Joint venture share of net profits	3.1	3.1	-
Associated companies share of net profits	6.9	10.1	(3.2)
Total	**10.0**	**13.2**	**(3.2)**

The share of profits and losses of joint ventures and associated companies includes the effects generated by the valuation of the companies included in the scope of consolidation carried out using the equity method. For details please refer to note 26 "Shareholdings".

10 Financial income

	2022	2021	Change
Customers	24.2	28.1	(3.9)
Income from derivatives	18.3	29.3	(11.0)
Income from the disposal of tax credits	16.0	1.5	14.5
Income from valuation at fair value of financial liabilities	11.2	9.5	1.7
Other financial income	12.5	13.9	(1.4)
Total income	**82.2**	**82.3**	**(0.1)**

"Customers" mainly include interest on payments in arrears attributable to the gas and electricity sales business.

"Income from derivatives" includes the effects of both valuation and realization of interest and foreign exchange derivatives, as detailed in Note 29 "Derivative Instruments."

"Income from the disposal of tax credits" represents the financial income realized following the transfers to banking institutions of tax credits resulting from the application of the discount on invoices for energy efficiency work carried out on behalf of customers who have taken advantage of the 110% super-bonus rebate. In 2022, in order to ensure efficient cash management and raise resources for operations, the Group made widespread use of the sale of the 110% super-bonus rebate, a solution only partially utilised in the 2021 financial period.

"Income from valuation at fair value of financial assets and liabilities", this item includes the following:

	Notes	2022	2021	Change
Minority shareholders' put option	19	12.6	0.7	11.9
Bonds	29	-	7.5	(7.5)
Energy efficiency credits		(1.4)	1.3	(2.7)
Total		**11.2**	**9.5**	**1.7**

- Put options and contingent consideration represent the positive effects of updating the estimates of liabilities recognized in previous years in connection with one-time acquisition transactions. The value at 31 December 2022 includes, in particular, the effects of the updated valuation of the debt for the put option held by Ascopiave Spa on the minority shareholding in EstEnergy Spa, taking into account the partial exercise of an 8% share;
- Energy efficiency credits, relating to the market value valuation of receivables related to the application of the so-called upfront discount to end customers for work covered by the 110% super-bonus rebate, held by the Group and designated to be sold to financial institutions. For the accounting treatment of this case, please see the details outlined in note 11 "Financial expenses" in relation to the expenses from valuation at fair value of financial assets and liabilities.

The item "Other financial income" includes the following:

	Notes	2022	2021	Change
Discounting of non-current financial receivables	18	4.7	5.3	(0.6)
Dividends		4.1	3.5	0.6
Loans	18	2.0	2.1	(0.1)
Write-back of value	25, 27	-	2.2	(2.2)
Other		1.7	0.8	0.9
Total		12.5	13.9	(1.4)

- Discounting of non-current financial receivables mainly represent the effect of valuation at the amortised cost the receivables for construction and improvement of assets recorded as part of applying the financial activity model for public services under concession;
- Dividends represent the portions of profit distributed by minor unconsolidated holdings, especially referring to the shareholding in Ascopiave Spa;
- The item Loans, in line with the previous year, represents interest income on loans granted to companies valued at net equity and minor investees.

11 Financial expenses

	2022	2021	Change
Expenses from bonds and loans	82.2	73.1	9.1
Factoring charges and transfer of tax credits	47.3	13.3	34.0
Valuation at depreciated cost of financial liabilities	30.0	29.7	0.3
Expenses from derivatives	21.4	34.1	(12.7)
Discounting of options and consideration on equity investments	20.7	20.0	0.7
Discounting of provisions	12.5	18.6	(6.1)
Expenses from trading	-	82.6	(82.6)
Expenses from valuation at fair value of financial assets and liabilities	(6.3)	25.8	(32.1)
Other financial expenses	9.4	3.1	6.3
Total	**217.2**	**300.3**	**(83.1)**

"Expenses from bonds and loans" include interest for the period relating to bond instruments issued by the parent company Hera Spa and interest relating to loans provided by the banking system and other financing institutions. The increase compared to the previous year is related to the higher level of debt due to the bond issued in May 2022 and the new loans undertaken during the period. These operations resulted in an increase in expenses that more than offset the savings from the debt optimization operation carried out through the renegotiation of five bonds made in the financial period 2021.

"Factoring charges and transfers of tax credits" includes the following:

	notes	2022	2021	Change
Disposals of tax credits	35	33.3	9.9	23.4
Disposals of trade receivables and other operating receivables		14.0	3.4	10.6
Total		**47.3**	**13.3**	**34.0**

Disposals of tax credits represent the expenses realized in the context of transactions involving the disposal of receivables recorded as a result of the application of the upfront discount to customers for energy efficiency measures. The increase compared to the previous year is due to both an increase in the volume of business in this area, which consequently generated more tax credits in the portfolio, and a reduction in transfer prices.
The increase in charges related to the assignment of trade and other operating receivables stems mainly from the increase in the volume of receivables disposed of during the year.

"Valuation at depreciated cost of financial liabilities" include imputed charges necessary to bring the face cost of debt in line with that calculated using the effective interest rate method. The item also includes figurative charges of 1.6 million euro, in line with the previous year, relating to the put option held by Ascopiave Spa on the minority shareholding in Hera Comm Spa, accounted for as a loan (with a nominal value of 54 million euro), as reported in Note 19 "Financial liabilities.".

"Expenses from derivatives" includes the effects of both valuation and realization of interest and foreign exchange derivatives, as detailed in Note 29 "Derivative Instruments."

"Discounting of options and consideration on equity investments" mainly includes notional discounting charges related to the fair value valuation of put options granted to minority shareholders, as reported in Note 19 "Financial liabilities".

"Discounting of provisions" is broken down as follows:

	Notes	2022	2021	Change
Post-closure landfills	31	8.0	13.2	(5.2)
Restoration of third-party assets	31	4.1	5.4	(1.3)
Post-employment and other employee benefits	30	0.3	(0.1)	0.4
Plant dismantling	31	0.1	0.1	-
Total		**12.5**	**18.6**	**(6.1)**

Please see the notes to the respective balance sheet items for an analysis of the change in charges for discounting funds in relation to the comparison year, where significant.

"Expenses from trading" at 31 December 2021 include the net effect of partial repurchase transactions in relation to five bond issues. These operations had led to the repayment of the debt for the nominal share repurchased in the amount of 405.5 million euro and the recording of net charges totalling 82.6 million euro.

"Expenses from valuation at fair value of financial assets and liabilities", this item includes the following:

	Notes	2022	2021	Change
Minority shareholders' put option	19	5.7	0.8	4.9
Bonds	29	0.6	6.4	(5.8)
Energy efficiency credits	35	(12.6)	18.6	(31.2)
Total		**(6.3)**	**25.8**	**(32.1)**

- Put options and contingent consideration represent the negative effects of updating the estimates of liabilities recognized in previous years in connection with one-time commercial acquisition transactions.
- Bonds represent valuation adjustments, in application of fair value hedging;
- Energy efficiency credits are related to the measurement at current market value of receivables related to the application of the upfront discount to end customers for energy efficiency measures, designated to be sold to financial institutions once the formal process of recognizing the relevant tax credit is completed. In fact, the accounting policy adopted by the Group stipulates that, at the time of the actual sale, the final charge associated with the transaction be recorded in the item "Factoring charges and sales of tax receivables," proceeding at the same time to terminate the valuation position opened in the previous year, thereby generating a substantially offsetting effect. The positive value is only partially offset by valuation charges recognized on loans issued in the 2022 financial year.

The item "Other financial expenses", residual in nature, includes the following:

	Notes	2022	2021	Change
Leases	22	2.6	3.1	(0.5)
Write-downs	27	-	2.4	(2.4)
Other expenses		6.8	(2.4)	9.2
Total		**9.4**	**3.1**	**6.3**

Other expenses mainly include interest for financial intermediation and interest related to payment deferrals.

2.02.03 Taxation

	2022	2021	Change
Earnings before taxes	**408.8**	**406.9**	**1.9**
Taxes	(103.5)	(34.2)	(69.3)
Net profit for the period	**305.3**	**372.7**	**(67.4)**
Tax rate	25.3%	8.4%	

The change in the tax amount and consequent increase in the tax rate are due to the exemption transaction carried out in the last fiscal year. In fact, during 2021, there had been a tax realignment of higher values related to eligible goodwill which, specifically, had resulted in the recognition of deferred tax assets in the amount of 79.8 million euro, the write-off of deferred tax liabilities in the amount of 7.2 million euro, against the payment of substitute taxes in the amount of 3% of the value of the realigned goodwill, amounting to 9.2 million euro.

In relation to the tax rate for the 2022 financial year, extraordinary tax rebates, in the form of tax credits, introduced for the purchase of electricity and gas had a major impact on the calculation of the tax rate, representing positive untaxed income components amounting to approximately 38 million euro, as well as benefits from the exemption of some higher values generated by company acquisitions.

12 Taxes

This item is made up as follows:

	2022				2021				Change
	Current	Pre-paid	Deferred	Total	Current	Pre-paid	Deferred	Total	
IRES	81.0	(13.0)	0.7	**68.7**	99.4	(82.7)	(12.5)	**4.2**	64.5
IRAP	26.7	(0.7)	1.1	**27.1**	31.4	(11.9)	(2.6)	**16.9**	10.2
Substitute tax	5.4	-	-	**5.4**	13.1	-	-	**13.1**	(7.7)
Nonrecurring subsidies	2.3	-	-	**2.3**	-	-	-	**-**	2.3
Total	**115.4**	**(13.7)**	**1.8**	**103.5**	**143.9**	**(94.6)**	**(15.1)**	**34.2**	69.3

The 2022 financial year had a lower current tax burden than the previous year; it should be noted how, against an in-line pre-tax result, in the previous one, the taxable income - and consequently tax burden - of the Group was reduced due to important non-tax-relevant components. Of particular note are the nonrecurring effects arising from the one-time concessions granted to some Group companies, in the form of tax credits, for the purchase of electricity and natural gas, pursuant to Legislative Decree n4/2022, Legislative Decree 17/2022, Legislative Decree 21/2022, known as the "Ukrainian Decree," Legislative Decree 50/2022, Legislative Decree 115/2022, referred to as "aiuti-bis," Legislative Decree 144/2022, known as "aiuti-ter," and Legislative Decree 176/2022, referred to as "aiuti-quater".

Deferred tax assets mainly include the net benefit on taxes resulting from the exemption carried out pursuant to Legislative Decree no. 185/2008 (converted into L. 2/2009) of the higher values generated by the acquisition of Vallortigara Spa and Eco Gas Srl; in particular, the exemption of the equity investment in Vallortigara Spa generated tax assets of 6 million euro, against the payment of a substitute tax of 3.3 million euro, while the exemption of the equity investment in Eco Gas Srl yielded tax assets of 3.5 million euro, against the payment of a substitute tax of 2 million euro. It should be noted that, last year, this item included, in addition to the exemption of the higher values arising from the acquisition of Recycla Spa (which recognized tax assets of 6.8 million euro, against the payment of a substitute tax of 3.8 million euro), the tax benefit from the realignment of goodwill, net of the previously mentioned substitute tax paid, amounting to 77.8 million euro.

It should also be noted that Legislative Decree 21/2022, in order to curb the effects of the increase in prices and tariffs in the energy sector on businesses and consumers, established for the financial year 2022 an extraordinary solidarity-oriented levy contribution, which the Group has determined to be applicable to its activities in the amount of 2.3 million euro.
With reference to the one-time contribution and its possible application to one additional company with respect to what has been recognized as a tax charge, while the Group deems that there is no objective probability of its having to pay the aforementioned contribution (a conclusion supported by the opinion of its tax advisors), albeit in a context of uncertainty surrounding the interpretation of this rule, in order to avoid the application of penalties it considered it appropriate to proceed with the payment of an additional 9.6 million euro, subsequently proceeding to submit a request for reimbursement. Finally, the subsequent Law 197/2022, referred to as Budget Law 2023, changed the subjective scope of this extraordinary contribution, making what Hera Spa had already paid in the amount of 13 million euro no longer due.

The same Budget Law 2023 also established a one-time solidarity contribution, in the form of a temporary levy, to be paid during 2023. The levy, unlike ordinary taxes, does not apply on the result produced in the year 2022, but on the profit surplus that emerges from the comparison with previous periods. According to the criteria for determining the tax base under the aforementioned law, it was found that none of the companies in the Group owe this levy.

For a more consistent analysis of the tax rate trend, reference should be made to the IRES tax rate reconciliation in the following sections, that is, to paragraph 1.04.01 "Income statement and investments" of the Directors' Report, in which both the pre-tax earnings and the tax charge have been adjusted for special items (including the effect from the exemption shown above), in order to determine an adjusted tax rate fully comparable with that of the previous year. STR

IRES tax rate reconciliation

The statutory tax rate determined on the basis of the configuration of taxable income for the purposes of IRES is equal to 24%. The reconciliation with the effective rate is shown below.

	2022		2021	
	Nominal effect	Percentage effect	Nominal effect	Percentage effect
Earnings before taxes	408.8		406.9	
IRES				
Standard rate	(98.1)	(24.0)%	(97.7)	(24.0)%
IRAP deduction	0.9	0.2%	0.9	0.2%
Ace and super Ace	4.9	1.2%	5.7	1.4%
Maxi and hyper depreciation	8.0	1.9%	8.5	2.1%
IRES previous years	0.8	0.2%	2.0	0.5%
Other changes (increases and/or decreases)	4.6	1.1%	(3.0)	(0.7)%
IRAP and other current taxes				
IRAP	(27.1)	(6.6)%	(16.9)	(4.2)%
Exemption	2.6	0.6%	66.3	16.3%
Taxes	**(103.5)**	**(25.3)%**	**(34.2)**	**(8.4)%**

This reconciliation is performed only in connection with the IRES, given that, as a result of the rules governing the IRAP, reconciliation between the statutory tax rate derived from financial statement information and the effective tax rate is not very meaningful.

"Exemption" mainly includes the net benefit on IRES taxes resulting from the exemption of the above-mentioned higher valules recognized with the acquisition of Vallortigara Spa and Eco Gas Srl, amounting to 1.6 million and 1 million euro, respectively.

The decrease in the item "Ace and super Ace" compared to the previous year mainly reflects the end of the window of opportunity to take advantage of the possibilities introduced by Legislative Decree 73/202 regarding the super Ace, that had allowed taxpayers to obtain a significant benefit on the tax rate. This

benefit no longer appears to be recognized for the 2022 tax period for which the ordinary Ace rules become applicable again, with reference to all taxable increases.
The item "Other changes (increases and/or decreases)" increased compared to last year mainly due to the effect of extraordinary subsidies recognized in the form of tax credits by some of the Group companies against the purchase of electricity and natural gas. These contributions, introduced by the above-mentioned legislative measures enacted several times during the fiscal year, not contributing to the formation of the tax base for the period, positively affected the 2022 tax rate.

In determining tax rates for the period, the Group took into due consideration the effects of the IAS tax reform introduced by Law 244 of 24 December 2007, and associated implementational decrees, the Ministerial Decree of 1 April 2009, the Ministerial Decree of 8 June 2011, and the Ministerial Decree of 10 January 2018, to coordinate international accounting standards with the rules to determine the taxable base for IRES and IRAP purposes, as per Article 4, paragraph 7-quarter,of Legislative Decree 38/2005. In particular, the reinforced derivation principle of article 83 of the Consolidated Tax Act (TUIR) was applied, which calls for entities that use IFRSs to use, including in a departure from the provisions of the TUIR, the criteria for the determination, recognition and classification in the financial statements provided for by said accounting standards.

13 Current tax assets and liabilities

	31 Dec 22	31 Dec 21	Change
Income tax receivables	44.8	20.3	24.5
IRES refund receivables	1.2	0.9	0.3
Total current tax assets	**46.0**	**21.2**	**24.8**
Income tax payables	17.1	24.2	(7.1)
Substitute tax payables	-	3.7	(3.7)
Total current tax liabilities	**17.1**	**27.9**	**(10.8)**

"Income tax receivables" refer to the excess advance IRES and IRAP payments over the tax amount payable. The significant increase over the comparison period reflects, for some relevant companies, a reduction in pre-tax profit compared with previous years.

"Income tax payables" includes provisions for IRES and IRAP made in relation to profit for the period.

"Substitute tax payables" includes payables for possible exemption transactions which have already been approved by management; the deviation from last year is due to the payment made during the 2022 financial year of the tax related to the transaction for the acquisition of the controlling interest in Recycla Spa.

14 Deferred tax assets and liabilities

	31 Dec 22	31 Dec 21	Change
Pre-paid tax assets	429.8	458.3	(28.5)
Offsetting of deferred tax liabilities	(189.6)	(229.2)	39.6
Substitute tax credit	0.2	0.3	(0.1)
Total net deferred tax assets	**240.4**	**229.4**	**11.0**
Deferred tax liabilities	405.3	361.3	44.0
Offsetting of deferred tax liabilities	(189.6)	(229.2)	39.6
Total net deferred tax liabilities	**215.7**	**132.1**	**83.6**

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets with the corresponding current tax liabilities.

The prepaid and deferred taxes relating to the year 2022 refer to the following temporary difference between the value attributed to assets and liabilities according to accounting criteria and the corresponding values for tax purposes.

Deferred tax assets	2022			2021		
	Temporary changes	Tax effect (IRES+IRAP)	Equity changes	Temporary changes	Tax effect (IRES+IRAP)	Equity changes
Pre-paid taxes with effect on the income statement and the statement of comprehensive income						
Depreciation	686.0	178.5		701.7	183.1	
Provision for bad debts	241.9	57.6		191.8	46.0	
Provisions for risks and charges	209.4	56.6		189.2	51.4	
Cash flow hedge	202.3	58.3		348.4	100.2	
Shareholdings	182.3	51.5		170.1	47.8	
Other	117.6	27.4		119.3	29.8	
Total tax effect	**1,639.5**	**429.8**	**0.7**	**1,720.5**	**458.3**	**0.3**
Credited (or debited) amount to the statement of comprehensive income		(42.9)			99.4	
Credited (or debited) amount to the income statement		13.7			94.6	

Deferred tax liabilities	2022			2021		
	Temporary changes	Tax effect (IRES+IRAP)	Equity changes	Temporary changes	Tax effect (IRES+IRAP)	Equity changes
Deferred taxes with effect on the income statement and statement of comprehensive income						
Depreciation	696.6	147.0		779.5	158.1	
Cash flow hedge	563.6	161.9		463.4	133.1	
Discounted liabilities	105.4	18.8		118.9	23.3	
Provisions for risks and charges	34.3	9.9		37.6	10.9	
Other	263.1	67.6		149.4	35.9	
Total tax effect	**1,663.0**	**405.3**	**13.3**	**1,548.8**	**361.3**	**19.5**
Credited (or debited) amount to the statement of comprehensive income		(28.9)			(128.6)	
Credited (or debited) amount to the income statement		(1.8)			15.1	

"Equity changes" have no effect on the income statement and the statement of comprehensive income for the year, as they include the balances of deferred tax assets and liabilities arising from:

- business combination operations carried out during 2022, in relation to which see the section "Business Combinations (supplementary information)" of section 2.02.10 "Other information".
- marginal reclassifications arising between deferred tax assets and liabilities.

"Deferred tax assets" arise from temporary differences between the value attributed to assets and liabilities according to accounting criteria and the corresponding values for tax purposes. The decrease for the period is due to the following effects:

- change for the period of the fair value of commodity derivatives classified as cash flow hedge, resulting in an asset decrease with a balancing entry in the statement of comprehensive income in the amount of 41.9 million euro.
- higher net allocations to the provision for bad debts of major sales companies, resulting in an increase in tax assets amounting to 11.6 million euro.

It should also be noted that last year there was a realignment of the book and tax values of goodwill recognised in the financial statements at 31 December 2019, as provided for by Article 1, paragraph 83 of the 2021 Budget Law. Deferred tax assets were recorded in the financial statements in view of the high likelihood of generating taxable income in future years which allows for the use of the deductible temporary difference. In particular, in relation to the assets recorded against the realignment of goodwill, for which tax regulations provide for annual use on a straight-line basis for a period of 50 years from the date of recording, management confirms that they are fully recoverable in view of the extension of the predictability timeframes of the regulated distribution businesses (on the basis of parameters such as the residual useful life of the assets, the extension of the concessions and their renewal likelihood), the particularly limited impact of the taxable income required to recover these deferred tax assets on the overall taxable income generated by the distribution assets with a residual useful life of several decades, as well as the tax consolidation regime under which the Group operates, which makes it possible to offset any tax losses across all businesses.

"Deferred tax liabilities" arise from timing differences between reported profit and taxable profit. The item also includes the significant tax effects of recognising or adjusting assets and liabilities in the consolidated financial statements.
The increase compared to 31 December 2021 is due to the following effects:

- change for the period in the fair value of commodity derivatives classified as cash flow hedge, resulting in a liabilities increase of 28.9 million euro with a balancing entry in the statement of comprehensive income;
- off-balance sheet deduction of the tax amortisation of customer list and goodwill resulting from the exemption of the higher book values implicit in the controlling shareholdings in Ascopiave Energie Spa, Ascotrade Spa, Blue Meta Spa, Etra Srl and Amgas Blu Srl; in particular, 2022 represents the first year in which the benefit resulting from the realignment, amounting to 17.2 million euro, will be enjoyed.

Reporting on tax litigations

IRES, IRAP and VAT

Company Tax	Description of litigation	Status of litigation	Disputed amount*	Amounts paid (including provisionally)**	Provisions booked in the financial statement
Ascotrade Spa IRES, IRAP and VAT	Notice of assessment for the years between 2013 and 2017 concerning the deductibility of a number of components of the purchase cost of raw material and the irregular VAT deduction. Notice of assessment for the year 2018 concerning VAT alone.	For the years 2013 and 2014, following appeals filed by the Inland Revenue Office against first instance rulings favourable to the company, proceedings are pending before the Second-instance Tax Court. For the year 2015, the judgments annulled the assessment acts in their entirety and ordered the Internal Revenue Office to reimburse the costs of the case. For the years 2016 to 2018, the company filed an appeal in February 2022.	10.1	0.7	-
Hera Trading Srl IRES and "Robin Tax" surtax	Notices of assessment for the years between 2011 and 2013 (only the latter for the Robin tax) concerning the deduction of valuation charges, net of related income, from commodity derivatives and environmental certificates.	Proceedings related to the 2011 and 2013 tax years, having seen adverse rulings in the first instance, are still pending in the second instance before the applicable Tax Courts. For the 2011 tax year, an accounting expert opinion was requested from the second-degree Tax Court of Emilia Romagna; for the 2012 tax year, an unfavourable judgment was rendered to the Taxpayer by the second-degree Tax Court of Friuli Venezia Giulia. The Company has filed appeals with the Court of Cassation.	6.6	2.9	-
Herambiente Spa IRAP	Notices of assessment for the years from 2009 to 2013, focused on eligibility for the IRAP "tax wedge" relief in favour of the company.	In relation to the tax years for which notices were received, proceedings are pending before the Court of Cassation following the appeals lodged in each case by the losing party (the rulings are both favourable and unfavourable to the company).	4.1	4.1	-
Herambiente Spa	Assessment notices for the non-application of withholding tax on dividends distributed to Ambiente	Appeals have been lodged with the appropriate Tax Court in relation to the proceedings for both years.	5.1		

Witholdings on dividends	Arancione U.A. and European Waste Holding Ltd in the years 2016 and 2017				
Marche Region Multiservizi Spa IRES and IRAP	Notices of assessment for the years 2009 and 2016 with objection to the deduction of the provision to the landfill post management allowance.	Proceedings for the years 2009 to 2014, following appeals filed by the losing party against unfavourable rulings (there are rulings both favourable and unfavourable to the company), are pending before the second-instance Tax Court of Ancona. The proceeding for the year 2015 witnessed a ruling favourable to the Company, but the Inland Revenue has lodged an appeal and the Company appeared before the second-degree Tax Court of the Marche Region. Regarding the year 2016, the company has appealed the assessment.	2.5	1.3	0.1
Inrete Distribuzione Spa IRES and IRAP	IRES and IRAP notices of assessment for the year 2016 concerning the undue deduction of discounting charges, the erroneous determination of the maxi-amortisation allowance regarding charges ancillary to the installation of smart meters, that is, the undue deduction of employee-related costs for the purposes of calculating IRAP.	With regard to the IRAP claim, the Company settled the dispute with the Inland Revenue Office and paid the tax due (of a modest amount). With regard to the two IRES notices against which an appeal was filed, in June 2022 the Tax Court ruled in the first instance in favour of the company, and condemned the Inland Revenue Office to pay expenses. The proceedings are currently pending in the second instance. Amounts paid on an interim basis were refunded following the favourable first instance ruling.	0.3	-	-
Hera Luce Srl IRES and IRAP	Notice of assessment for the year 2013 concerning the deductibility of routine maintenance costs.	The company appealed to the second-instance Tax Court of Emilia Romagna against the first instance ruling of the Provincial Tax Commission of Forlì, which annulled the penalties but confirmed the higher taxes claimed. The date for the appeal hearing has yet to be scheduled.	0.6	0.3	-

* "redetermined amount" means the original amount of the claim with no interests, unless it was redetermined as a result of judicial conciliation, assessment with adhesion, partial annulment in judicial proceedings or on self-defence.
** the amounts paid include interest, where due.

Other taxes

Company Tax	Description of litigation	Status of litigation	Disputed amount*	Amounts paid (including provisionally)**	Provisions booked in the financial statement
Herambiente Spa Eco-tax	Dispute documents related to the Sommacampagna landfill for the periods 2014-2017.	The proceedings are pending before the relevant first-instance Tax Courts for the tax periods of 2014, 2016 and 2017. With respect to the 2015 tax period, a favourable ruling for the company was issued with a recalculation of the penalties. Deadlines for filing an appeal with the applicable second-degree Tax Commission are pending.	7.0	-	-
Herambiente Spa ICI/IMU	Notices of assessment for the years 2008 to 2017 following the re-classification in the real estate registry of the Ferrara waste-to-energy plant.	The proceedings were concluded for the 2008-2013 notices with a ruling favourable to the Company, while they are still pending before the first-instance Tax Court for the remaining years.	2.8	-	2.6
Herambiente Spa ICI/IMU	Notices of assessment for the years between 2011 and 2020 concerning the classification in the real estate registry of land, facilities and buildable areas located in Ravenna.	For the years 2011-2015, the second instance judgment was partially favourable to the company; the deadlines for filing appeals to the Court of Cassation are pending. For the 2016-2020 periods, the first instance ruling was unfavourable to the company, and the case is pending at the second-instance Tax Court. During 2022, the company finished paying what it owed in relation to the 2018 settlement.	2.6	-	2.3
Herambiente Spa ICI/IMU	Notices of assessment for the years between 2013 and 2019 concerning the waste to energy plant and the recycling plant located in the municipality of Coriano.	For the years 2013-2015, the cases are pending partly in the first instance Tax Court of Rimini (2013) and partly in the second-instance Court of Emilia-Romagna (2014 and 2015). Assessments for the years 2016-2019 with the second-degree Tax Court are pending.	1.2	0.1	1.2
AcegasApsAmga Spa	Technical-administrative audit of the Padua and Trieste waste-to-energy plants carried out by the Customs Agency for the years 2012 to 2015 in	Proceedings on the Padua waste-to-energy plant are pending in the Court of Cassation following the company's appeal against the ruling against it on appeal. The Tax Court of Friuli Venezia Giulia upheld	2.1	1.0	-

Excise on self-consumption	relation to the installation of measuring instruments for detecting electricity produced and used for self-consumption and associated payment of the excise.	the company's argument in a ruling dated 21 April 2022 in relation to its entitlement to the subsidised excise tax with regard to the Trieste waste-to-energy plant.			
Hera Spa	Notices of assessment for the tax periods from 2013 to 2017, notified by the Municipality of Riccione for the permanent occupation of public land with waste bins.	The TOSAP proceedings for the years between 2013 and 2016 are pending before the second-instance Regional Tax Court of Emilia-Romagna, while the COSAP proceedings for the year 2017 are pending before the Appeals Court of Bologna. The first-instance ruling is partially in favour of the company.	1.2	1.2	
COSAP/TOSAP	COSAP notice of objection for the tax periods from 2018 and 2019, notified by the Municipality of Riccione for the permanent occupation of public land with waste bins.	The proceedings are pending before the Civil Court of Rimini.	2.1	-	2.2
	TOSAP notices of assessment for the tax years 2014-2018, notified by the Municipality of Coriano for the permanent occupation of public land with waste bins.	The proceedings for the year 2014 are currently pending before the second-degree Regional Tax Court of Emilia-Romagna, while the appeal for the year 2015 is pending before the first-degree Tax Court of Rimini. Regarding the notices for 2016, 2017, and 2018, first-instance hearings have been held and the filing of rulings is pending.	0.9	-	

* "redetermined amount" means the original amount of the claim with no interests, unless it was redetermined as a result of judicial conciliation, assessment with adhesion, partial annulment in judicial proceedings or on self-defence.
** the amounts paid include interest, where due.

With reference to the disputes in question, having consulted its lawyers, the Group has decided to make the provisions indicated. In cases in which no provision has been made, the alleged violations have been deemed groundless.

2.02.04 Equity and financial structure

	31 Dec 22	31 Dec 21	Change
Net equity	3,644.7	3,416.8	227.9
Net financial debt	4,249.8	3,261.3	988.5
Net financial debt / Net equity	**1.17**	**0.95**	

Compared to 31 December 2021, shareholders' net equity increased due mainly to the combination of the following effects:

- net income for the year amounting to 305.3 million euro, down from 372.7 million at 31 December 2021;
- positive change in the other comprehensive income components totalling 153.5 million euro, driven mainly by changes in cash flow hedge reserves related to gas and electricity commodity transaction hedges;
- distribution of dividends in the amount of 193.8 million euro.

Net financial debt is an alternative performance indicator, as monitored by the Group, the definition of which is reported in Section 1.04 "Overview of operating and financial trends and definition of alternative performance indicators." It increased significantly from the previous period; cash generation from operations for the year, as reported in the cash flow statement in Section 2.01.04, showed a significant decrease compared to the previous year, amounting to 1,009.7 million euro, due to the significant cash absorption resulting from the trend in net working capital. In addition, investment activities involved higher outlays in the financial year 2022 than in the previous financial year, which were necessary to develop the businesses managed by the company in line with its business plan. For these reasons, the Group has made use of increased financial debt, mainly by signing short- and medium-term contracts and issuing a 500 million euro bond. For more details, see Section 1.04.02 "Equity structure and reclassified financial debt" and Note 19 "Financial Liabilities".

Net equity

15 Group net equity

	31 Dec 22	31 Dec 21	Change
Share capital (nominal value)	1,489.5	1,489.5	-
Treasury share reserve	(38.5)	(29.2)	(9.3)
Share capital increase costs	(0.7)	(0.7)	-
Share capital	**1,450.3**	**1,459.6**	**(9.3)**
Legal reserve	120.3	109.1	11.2
Other reserves	1,409.1	1,269.9	139.2
Components of Comprehensive Income (OCI)	207.1	54.3	152.8
Reserve for treasury share transactions	(43.6)	(26.2)	(17.4)
Reserves	**1,692.9**	**1,407.1**	**285.8**
Profit (loss) for the period	**255.2**	**333.5**	**(78.3)**
Total	**3,398.4**	**3,200.2**	**198.2**

The share capital at 31 December 2022 amounted to 1,489,538,745 ordinary shares with a nominal value of 1 euro each and is fully paid-up. The number of treasury shares held by the Group at 31 December 2022 was 38,541,380 (29,217,962 at 31 December 2021).

The item reserves consists of:

- the legal reserve of the parent company Hera Spa, which increased as a result of the allocation of the previous year's earnings as resolved by the Shareholders' Meeting when approving the financial statements at 31 December 2021;
- other reserves reflecting the profits generated in previous years and reserves established on capital contributions or equity investments;
- components of other comprehensive income (OCI) mainly representing cash flow hedge reserves related to gas and electricity commodity transaction hedges;
- the reserve for treasury share transactions reflecting transactions on treasury shares at 31 December 2022. Changes over the course of the financial year generated an overall capital gain in the amount of approximately 0.1 million euro.

16 Non-controlling interests

	31 Dec 22	31 Dec 21	Change
Share capital and reserves	197.4	179.5	17.9
Components of Other Comprehensive Income (OCI)	(1.2)	(2.0)	0.8
Profit (loss) for the period	50.1	39.1	11.0
Total	**246.3**	**216.6**	**29.7**

This item mainly comprises the minority equity interests of the Herambiente Group and the Marche Multiservizi Group.

With reference to the acquisition of non-total controlling interests carried out in recent years through business combinations, the contractual agreements entered into by the Group provide for minority shareholders to be granted irrevocable put options, to be exercised within specific time windows. According to the provisions of IAS 32, the existence of such a right held by the minority shareholders has led to the need to classify options on shares/interests in acquired companies held by minority shareholders in the consolidated financial statements as a financial liability, thus considering the relative shareholdings to be fully owned. For additional details on the calculation of fair value of put option debt, please refer to note 19 "Financial liabilities".

Net income attributable to minority shareholders shows a significant increase over the previous period, mainly due to the improved results of the energy services and waste treatment businesses, partly as a result of the acquisitions made in the second half of 2021 and during the 2022 financial year.

Reconciliation statement

The following is a reconciliation between the Parent Company's separate financial statements and the consolidated financial statement.

	Net Profit	Net equity
Balances as per parent company's financial statements	271.0	2,530.3
Excess of shareholders' equity reported in the financial statements for the period over the carrying amounts of investments in consolidated companies	(6.1)	931.2
Consolidation adjustments:		
net equity valuation of companies recognised in the separate financial statements at cost	(1.3)	44.5
difference between purchase price and corresponding net book equity	(20.7)	(82.1)
elimination of intra-group transaction effects	12.3	(25.5)
Total	**255.2**	**3,398.4**
Allocation of third-party holdings	50.1	246.3
Balances as per consolidated financial statement	**305.3**	**3,644.7**

17 Earnings per share

	2022	2021
Profit or loss for the period attributable to holders of ordinary shares of the parent entity (A)	255.2	333.5
Weighted average number of shares outstanding for the purposes of calculation of earnings (loss) per share		
basic (B)	1,454,636,032	1,461,238,457
diluted (C)	1,454,636,032	1,461,238,457
Earnings (loss) per share (in euro)		
basic (A/B)	**0.175**	**0.228**
diluted (A/C)	**0.175**	**0.228**

Basic earnings per share are calculated on the operating result attributable to holders of ordinary shares of the parent company. Diluted earnings per share are equal to the basic as there are no classes of shares other than ordinary shares and there are no instruments that can be converted into shares.

At the writing of this consolidated financial statement, the share capital of the parent company Hera Spa consisted of 1,489,538,745 ordinary shares, unchanged from 31 December 2021, which were used in determining basic and diluted earnings per share.

Net financial debt

The following is the financial debt prepared in accordance with Guideline no. 39, issued on 4 March 2021 by ESMA, as implemented by Consob in its communication 5/2021 of 29 April 2021. The Group also monitors its financial performance through the Net Financial Debt indicator, which adds non-current financial receivables to the regulatory schedule.

		notes	31 Dec 22	31 Dec 21
A	Cash holdings	18	1,942.4	885.6
B	Cash equivalents	18	-	-
C	Other current financial assets	18	77.7	29.3
D	**Liquidity (A+B+C)**		**2,020.1**	**914.9**
E	Current financial debt	19	(563.0)	(443.6)
F	Current part of non-current financial debt	19, 22	(108.4)	(99.5)
G	**Current financial debt (E+F)**		**(671.4)**	**(543.1)**
H	**Current net financial debt (G+D)**		**1,348.7**	**371.8**
I	Non-current financial debt	19, 22, 29	(2,553.0)	(1,073.8)
J	Debt instruments	19	(3,197.3)	(2,702.0)
K	Commercial and other non-current payables		-	-
L	**Non-current financial debt (I+J+K)**		**(5,750.3)**	**(3,775.8)**
M	**Total financial debt (H+L) ESMA guidelines 32 – 382 - 1138**		**(4,401.6)**	**(3,404.0)**
	Non-current financial receivables	18	151.8	142.7
	Net financial debt		**(4,249.8)**	**(3,261.3)**

To better understand the financial dynamics taking place during the course of fiscal year 2022, see the financial statements and the comments shown in the Directors' report in paragraph 1.04.02 "Equity structure and reclassified net financial debt".

For the schedule of financial debt with related parties, see Section 2.03.04.

The following is an analysis of the balance sheet items included in the determination of net financial debt, with the exception of financial assets and liabilities related to interest rate derivative financial instruments which are detailed in Note 29 "Derivative Instruments" and lease liabilities which are shown in Note 22 "Rights of Use and Leasing Liabilities".

18 Financial assets, cash holdings and cash equivalents

	31 Dec 22	31 Dec 21	Change
Loan receivables	27.0	35.8	(8.8)
Receivables for construction services	80.4	59.2	21.2
Portfolio securities	2.0	1.9	0.1
Other financial receivables	42.4	45.8	(3.4)
Total non-current financial assets	**151.8**	**142.7**	**9.1**
Loan receivables	7.2	5.8	1.4
Other financial receivables	70.5	23.5	47.0
Total current financial assets	**77.7**	**29.3**	**48.4**

Total cash holdings	**1,942.4**	**885.6**	**1,056.8**
Total financial assets and cash holdings	**2,171.9**	**1,057.6**	**1,114.3**

"Loan receivables", comprises loans, regulated at market rate, made to the following companies:

	31 Dec 22			31 Dec 21		
	Non-current portion	Current portion	Total	Non-current portion	Current portion	Total
Aloe SpA	5.4	0.8	6.2	6.1	0.8	6.9
Calenia Energia Spa	3.3	-	3.3	7.1	0.3	7.4
Set Spa	12.2	3.2	15.4	15.4	3.1	18.5
Other minor companies	6.1	3.2	9.3	7.2	1.6	8.8
Total	**27.0**	**7.2**	**34.2**	**35.8**	**5.8**	**41.6**

Loans to companies that are vehicles through which the Group owns production quotas for electricity generation plants (Set Spa and Tamarete Energia Srl) were tested for impairment, the result of which did not lead to changes in the carrying values during the 2022 financial year, as explained in Note 27 "Impairment test equity investments."

"Receivables for construction services" from municipalities for the construction of public lighting systems identified in keeping with the financial asset model provided by the IFRIC 12 interpretation, as shown in greater detail in the section describing the evaluation criteria for the item "Loans and receivables" in section 2.02.01 "Introduction".

"Portfolio securities" mainly include bonds, funds and insurance policies guaranteeing the post-mortem management of the landfill held by the subsidiary Asa Scpa, amounting to 1.9 million euro, the book value of which is substantially in line with the fair value at the end of the year. These securities are measured at fair value through other comprehensive income components.

"Other financial receivables" include the following counterparties:

	31 Dec 22			31 Dec 21		
	Non-current portion	Current portion	Total	Non-current portion	Current portion	Total
Municipality of Padua	12.1	1.5	13.6	13.6	2.2	15.8
Collinare Consortium	13.0	-	13.0	12.1	-	12.1
Acosea Impianti Srl	12.7	-	12.7	12.6	-	12.6
Cato and Veneto Region	-	7.0	7.0	-	9.8	9.8
ex-CMV municipalities	3.9	-	3.9	3.9	-	3.9
Other financial receivables	0.7	62.0	62.7	3.6	11.5	15.1
Total	**42.4**	**70.5**	**112.9**	**45.8**	**23.5**	**69.3**

- The Municipality of Padua is mainly related to the construction of photovoltaic systems. The repayment of this credit, which is regulated at a market rate, is scheduled at the end of 2030;
- The item Collinare Consortium represents the compensation owed to the outgoing provider when the gas distribution services contract comes to an end;
- Acosea Impianti Srl refers to a security deposit left with the parent company Hera Spa;
- Cato and Veneto Region reflects government grants that will be collected after the balance sheet date;
- Ex-CMV municipalities concerns the compensation due to the outgoing operator at the end of the concession of the management of gas distribution service in the municipalities of Vigarano, Goro and Castello d'Argile;
- Other financial receivables include transactions for the assignment of energy efficiency tax credits concluded at the end of fiscal year 2022, formally validated and accepted by the bank counterparties,

the collection of which took place in January 2023, amounting to 46.3 million euro. This item also includes advances paid by the Group's distribution companies for participation in gas tenders to be held in the coming years, amounting to 4.3 million euro (4.7 million euro at 31 December 2021).

"Cash and cash equivalents" include almost exclusively bank and postal deposits (1,941.8 million at 31 December 2022). To better understand the change in the amount of cash and cash equivalents, please refer to the cash flow statement schedule.

19 Financial liabilities

	31 Dec 22	31 Dec 21	Change
Bonds and loans	5,171.5	3,105.9	2,065.6
Minority shareholder' put option	499.5	585.2	(85.7)
Payables to acquire controlling shareholdings and potential consideration	17.4	23.0	(5.6)
Other financial liabilities	1.5	1.9	(0.4)
Total non-current financial liabilities	**5,689.9**	**3,716.0**	**1,973.9**
Overdrafts and interest liabilities	316.6	64.8	251.8
Bonds and loans	87.1	56.1	31.0
Payables to acquire controlling shareholdings and potential consideration	13.3	2.2	11.1
Minority shareholders' put option	1.7	-	1.7
Other financial liabilities	231.4	376.6	(145.2)
Total current financial liabilities	**650.1**	**499.7**	**150.4**
Total financial liabilities	**6,340.0**	**4,215.7**	**2,124.3**

"Bonds and loans" for the non-current part, changed mainly due to the overall net effect of the following:

- issuance of the third green bond by the Group, which is part of the sustainability strategy aimed at financing or refinancing various projects, already carried out or planned in the business plan, selected on the basis of the provisions of the Green financing framework. the new bond, which is listed on the regulated markets of the Irish, Luxembourg and Italian stock exchanges, has a nominal value of 500 million euro, a duration of 7 years and an annual coupon of 2.5%. For further details regarding the new issuance, reference should be made to chapter 1.03 "Main significant events" in the Directors' report;
- use of a medium/long-term credit line, as a term loan bullet granted in pool by the main banks working with the Group, amounting to 450 million euro. This financing is backed by a guarantee issued by Sace Spa (based on Article 15 of Legislative Decree No. 50 of 17 May 2022, subsequently converted into law) and is regulated by a variable interest rate;
- subscription during the year of various loans with leading banks totalling 1,175 million euro, at both fixed and floating rates, with bullet repayment and an average term of approximately two years;
- classification in the current portion of a bond loan with a remaining face value of 22 million euro, maturing in May 2023.

The item also includes the value of the put option, in the amount of 54.8 million euro, related to Ascopiave Spa's 3% minority shareholding in Hera Comm Spa which, as a result of the contractual provisions, is classified as a loan and valued according to the depreciated cost method. This debt, with a nominal value of 54 million euro, increased due to the financial evaluation component and decreased due to dividends paid out:

	Opening value	Financial expenses	Flows paid out	Terminal value
2021 financial year	54.5	3.2	(2.7)	55.0
2022 financial year	55.0	3.2	(3.4)	54.8

The current portion of "Bonds and loans" includes the portions of medium- and long-term debts due within the next fiscal year, as well as the bond coming due in May.

Bonds

The main conditions of the bonds outstanding at 31 December 2022 are as follows:

Bonds	Duration (years)	Maturity	Nominal value (mn/€)	Coupon	Rate
Sustainability linked bond	12.5	25 Apr 2034	500 Eur	Annual	1.00%
Bond	10	22 May 2023	22 Eur	Annual	3.375%
Green bond	10	04 Jul 2024	288.3 Eur	Annual	2.375%
Bond*	15	05 Aug 2024	20,000 JPY	Six monthly	2.93%
Bond	12	22 May 2025	15 Eur	Annual	3.5%
Green bond	7	25-mag-2029	500 Eur	Annual	2.5%
Bond	10	14 Oct 2026	325.44 Eur	Annual	0.875%
Bond	10	03 Dec 2030	500 Eur	Annual	0.25%
Bond*	15/20	14 May 2027/2032	102.5 Eur	Annual	5.25%
Green bond	8	05 Jul 2027	357.2 Eur	Annual	0.875%
Bond	15	29 Jan 2028	599.02 Eur	Annual	5.20%

* Unlisted instrument

At 31 December 2022, the outstanding bonds, totalling a face value of 3,359.2 million euro (2,859.2 at 31 December 2021) and recorded at discounted cost of 3,221.4 million euro, have a fair value of 2,986.8 million euro (3,100.7 at 31 December 2021) determined by market quotations where available.
There are covenants on some loans that require compliance with the corporate rating limit, which must be rated, even only by a single rating agency, no lower than investment grade (BBB-). As of the balance sheet date this covenant has been complied with.

Put option

"Minority shareholders' put option" includes the fair value measurement of the sale options that are granted, with specific contractual arrangements, to minority shareholders on their own shares. The most significant value refers to the sale option on the non-controlling shares in EstEnergy Spa, equal to 40% of the share capital, held by Ascopiave Spa.
The policy of the Group provides not to represent the holdings of minority shareholders in the result component for the period, therefore in evaluating the value of the debt for the options (to be paid at the date of exercising the option according to the contractual mechanism agreed between the parties) increased of the dividends that are expected to be distributed by the subsidiary companies along the hypothetical life of the options themselves. The fair value recognised as a liability in the balance sheet is therefore not only the present value of the expected price of the put option at the date of it is exercised, but also contains the discounted estimate of future dividends distributed as part of the variable consideration due to the counterparty. Given the structure of the operation, during the period in which the option is exercised, the profit generated by the subsidiary companies will be distributed according to their respective nominal shareholdings. This mechanism means that the portion of the fair value of the put option that will be settled through the distribution of future dividends is actually self-liquidating, since the necessary financial resources (i.e. dividends of non-controlling shareholdings) will be directly generated by the subsidiary companies, without thus determining during that period a real additional financial need for the Group.

The following are the changes for the year, compared with the previous period:

	Opening value	Acquisitions	Financial Expenses	Hypothesis change	Flows paid out	Terminal value
31 Dec 21						
Put options (equity value)	403.4	21.8	14.5	3.2	-	442.9
Put options (future dividends)	153.0	3.7	5.4	(2.5)	(17.2)	142.3
Total	**556.4**	**25.5**	**19.8**	**0.7**	**(17.2)**	**585.2**
31 Dec 22						
Put options (equity value)	442.9	6.9	15.4	35.0	(79.0)	421.2
Put options (future dividends)	142.3	2.2	5.1	(47.6)	(21.9)	80.0
Total	**585.2**	**9.0**	**20.5**	**(12.6)**	**(100.9)**	**501.2**

Regarding the changes occurring during the year:

- acquisitions result from the extraordinary transactions concluded during the fiscal year that involve granting the counterparty an option on the non-controlling interest. During 2022, in particular, these values are attributable to the acquisition of Macero Maceratese Srl and the "Nonantola" branch;
- financial charges include the notional effects of discounting the debt recorded at the previous balance sheet date;
- the changes in assumptions represent the effects of updating the values underlying the determination of the fair value of the options themselves, the period value of which refers to the option on the non-controlling interests in EstEnergy Spa. Specifically, the fair value of the option is calculated with reference to the future scenario of exercising the option deemed to be the most likely by the management, taking into account options that were exercised in part, in line with the updated planning assumptions, adopting applied multiples to margin indicators in accordance with the conditions agreed between the parties and discounting the corresponding future cash flows, using as a discount rate the average cost of the Group's long-term debt at the date of the transaction. This revised estimate resulted in the recognition of income from the fair value measurement of financial liabilities in the amount of 12.6 million euro;
- the flows paid out include the amounts paid to minority shareholders both for exercising the options themselves (equity value) and for the payment of dividends belonging to them. During 2022, Ascopiave Spa partially exercised the put option it held, resulting in the sale to Hera Comm Spa of 8% of the shares in EstEnergy Spa for a countervalue of 79 million euro.

"Payables to acquire controlling shareholdings and potential consideration" include the amounts still to be paid to transferor shareholders as part of the business combination transactions concluded in the period or in previous periods, as well as the estimate of the potential payments (earn-out) foreseen by the agreements signed at the time of the acquisition.

The following is a breakdown of the item at 31 December 2022 by individual acquisition, compared with the previous period:

	31 Dec 22			31 Dec 21		
	Non-current portion	Current portion	Total	Non-current portion	Current portion	Total
Aliplast Spa	17.4	-	17.4	17.4	-	17.4
Macero Maceratese Srl	-	1.1	1.1	-	-	-
Eco Gas Srl	-	-	-	-	0.4	0.4
Payables to acquire controlling shareholdings	**17.4**	**1.1**	**18.5**	**17.4**	**0.4**	**17.8**
Pistoia Ambiente Srl	-	11.5	11.5	5.6	-	5.6
Aliplast Spa	-	0.5	0.5	-	0.5	0.5
Recycla Spa	-	0.2	0.2	-	1.2	1.2
Other minor companies	-	-	-	-	0.1	0.1
Contingent consideration	**-**	**12.2**	**12.2**	**5.6**	**1.8**	**7.4**
Total	**17.4**	**13.3**	**30.7**	**23.0**	**2.2**	**25.2**

During the year, the estimate of the contingent consideration for the acquisition of control over Pistoia Ambiente Srl (subsequently merged into Herambiente Spa) was updated in the amount of 5.7 million euro, recorded under expenses related to changes in the fair value of financial liabilities.

In "Overdrafts and interest liabilities", the significant change compared with the previous financial period is due to the underwriting of short-term monetary loans in the form of hot money in the last quarter of 2022, totalling 230 million euro (23.3 million at 31 December 2021), in light of the elevated volatility of energy markets. These loans were in the initial months of 2023 and, at the same time, the Group did not take out any further short-term loans given its satisfactory cash position.

"Other financial payables" mainly refer to:

	31 Dec 22			31 Dec 21		
	Non-current portion	Current portion	Total	Non-current portion	Current portion	Total
European Energy Exchange	-	145.1	145.1	-	266.6	266.6
Factoring	-	61.0	61.0	-	23.1	23.1
Fund for energy and waste management services	-	20.4	20.4	-	39.0	39.0
Municipal Pension Fund of the Municipality of Trieste	1.5	0.3	1.8	1.9	0.1	2.0
Other minor items	-	4.6	4.6	-	47.8	47.8
Total	**1.5**	**231.4**	**232.9**	**1.9**	**376.6**	**378.5**

- European Energy Exchange includes down payments related to power exchange contracts concluded on the EEX platform, which provides for daily adjustment of differentials. The change is due to the dynamic increase in energy commodity prices, which has oriented the Group to prioritize the settlement of expiring contract positions while reducing the underwriting of new positions, turning instead to other negotiated forms of exchange contracts;
- Factoring mainly includes collections yet to be transferred to financial institutions at the end of the year, in relation to receivables subject to non-recourse assignments for which the Group has maintained collection activities on behalf of factor companies;
- Fund for energy and waste management services includes revenues to be retroceded as they have already been advanced by CSEA in relation to the reports made by the Group for the activities carried out in the gas and electricity sales markets subject to tenders, as detailed in Note 36 "Other current liabilities" to which please refer for more details;
- Other minor items decreased significantly due to the payment of 39.4 million euro to the companies that own the assets, following the conclusion of the tender process at the end of 2021 and consequent

awarding of the management of the water service in the province of Rimini area, where the Group, although confirmed as provider, was formally obliged as the outgoing operator to pay compensation for the previous award period.

Debt analysis by maturity

The following table shows financial liabilities broken down by nature at 31 December 2022, showing bands of maturity:

Type	Residual amount 31 Dec 22	Portion due within the period	Portion due within 2nd year	Portion due within 5th year	Portion due beyond 5th year
Bonds	3,221.4	21.8	424.4	714.8	2,060.4
Loans	2,037.2	65.3	655.1	1,227.5	89.3
Minority shareholders' put option	501.2	1.7	16.6	476.7	6.2
Payables to acquire controlling shareholdings and potential consideration	30.7	13.3	-	17.4	-
Other financial liabilities	232.9	231.4	0.3	1.2	-
Overdrafts and interest liabilities	316.6	316.6	-	-	-
Total	**6,340.0**	**650.1**	**1,096.4**	**2,437.6**	**2,155.9**

Scenario analyses

The table below shows the worst-case scenario where assets (cash, financial and trade receivables) are not taken into account, while financial liabilities are shown in the capital and interest portion, trade payables and interest rate derivatives.

Financial lines were assumed to be revoked on demand, while loans were assumed to be repaid at the earliest date provided for in the contractual terms.

Worst case scenario	31 Dec 22			31 Dec 21		
(mn€)	from 1 to 3 months	more than 3 months to 1 year	from 1 to 2 years	from 1 to 3 months	more than 3 months to 1 year	from 1 to 2 years
Bonds	33.0	99.0	511.0	33.0	62.0	87.0
Financial payables and other liabilities	329.6	732.0	91.0	66.8	66.0	62.0
Payables to suppliers	3,093.1	-	-	2,356.6	-	-
Total	**3,455.8**	**831.0**	**602.0**	**2,456.4**	**128.0**	**149.0**

Current cash and lines of credit, in addition to the resources generated by the operating and financing activities, are deemed sufficient to meet future financial needs. The following is a summary of the credit lines available at 31 December 2022, compared with the previous year:

	31 Dec 22	31 Dec 21
Committed credit lines	1,230.0	450.0
Uncommitted credit lines	517.0	516.0
Total	**1,747.0**	**966.0**

The credit lines are distributed among the leading Italian and international banks and allow for adequate diversification of counterparty risk and competitive conditions.
The significant increase in committed lines relates to the signing in December 2022 of a commitment letter committing a pool of banks to provide the Hera Group with a 750 million euro loan backed by a SACE guarantee.

Sureties and guarantees

	31 Dec 22	31 Dec 21
Bank sureties and guarantees	2,780.0	1,870.2
Insurance sureties and guarantees	851.5	676.0
Total	**3,631.5**	**2,546.2**

For "Bank sureties and guarantees", the value at 31 December 2022, compared with the previous period, comprises the following:

	31 Dec 22	31 Dec 21
Bank sureties	1,244.4	913.6
Letters of patronage	1,535.6	956.6
Total	**2,780.0**	**1,870.2**

Specifically:
- bank sureties are related to sureties made to public institutions (the Ministry of the Environment and Energy Security, the regions, provinces and municipalities) and private entities to guarantee the suitable management of plants for treating and disposing of waste, for the suitable provision of waste disposal and intermediation services, for reclamation work and for the proper fulfilment of contractual commitments on wholesale energy commodity markets;
- Letters of patronage are issued mainly to guarantee the timely payment of raw material supplies.

The increase from the previous year is due to higher guarantees provided for operations in the wholesale gas and electricity commodity procurement markets, mainly due to the increase in prices of benchmark commodities.

"Insurance sureties and guarantees" at 31 December 2022 refers to sureties issued to public entities (provinces, municipalities and the Ministry of the Environment and Energy Security) and third parties to guarantee the suitable management of public utility and waste disposal services, the proper execution of the work to lay company pipelines across land owned by private individuals, reclamation work, managing waste treatment and disposal systems.

Finally, it should be noted that, at 31 December 2022, the Hera Group provided the guarantees for certain bank loans, in the amount of 11.8 million euro. In particular, these refer to mortgages on buildings belonging to the company Recycla Spa located in Maniago (PN), Resana (TV) and San Quirino (PN) and on buildings belonging to the company Marche Multiservizi Spa located in Pesaro and Urbino, lent to banking institutions that have provided loans to the Group, the residual nominal amount of which at 31 December 2022 totals 4.4 million euro.

20 Cash flows related to financing activities

Changes in financial liabilities

The following is a breakdown of information on changes in financial liabilities during the 2022 financial year, differentiating between cash flows and non-cash flows.

Type	31 Dec 22	31-Dec-21	Change (a)	Non-cash flows: Acquisitions divestitures (b)	Non-cash flows: Economic valuation components (c)	Non-cash flows: Changes in fair value (d)	Non-cash flows: Other changes (e)	Cash flows (f)=(a)-[(b)+(c)+(d)+(e)]
Non-current financial liabilities	5,689.9	3,716.0	1,973.9	10.6	50.4	(6.3)	(128.6)	2,047.8
Current financial liabilities	650.1	499.7	150.4	7.3	0.3		110.9	31.9
Cash flows related to financial liabilities	**6,340.0**	**4,215.7**	**2,124.3**	**17.9**	**50.7**	**(6.3)**	**(17.7)**	**2,079.7**
of which								
New issue of long-term bonds								2,127.0
Repayments of non-current financial liabilities								-
Repayments and other net changes in financial liabilities								(47.3)
Lease liabilities	**76.4**	**96.6**	**(20.2)**	**1.9**	**-**	**-**	**21.3**	**(43.4)**
Financial liabilities generated by financing activities	**6,416.4**	**4,312.3**	**2,104.1**	**19.8**	**50.7**	**(6.3)**	**3.6**	**2,036.3**

"Acquisitions and Divestitures" include the effects arising from the control acquisition transactions carried out in the 2022 financial year, as explained in the section "Business combination (supplementary information)" in Section 2.02.10 "Other information".

"Economic valuation components" include:

- charges from the amortised cost valuation of bonds and loans in the amount of 30 million euro, as reported in Note 11 "Financial expenses";
- discounting charges related to the put options of non-controlling shareholdings and earn-outs contracted as part of the acquisition of control over companies and business units, amounting to 20.7 million euros, as reported in Note 11 "Financial expenses",

"Changes in fair value" include mainly:

- the adjustment to fair value of the carrying amount of the put option recorded against the minority shareholder of EstEnergy Spa, which resulted in the recognition of income in the amount of 12.6 million euro, as reported in Note 19 "Financial liabilities";
- the adjustment to fair value of the carrying amount of the earn-out recorded at the time of the acquisition of Pistoia Ambiente Srl, which resulted in the recognition of charges amounting to 5.7 million euro, as reported in Note 19 "Financial liabilities";
- the adjustment made to the carrying value of a foreign currency bond due to the fair value hedge relationship that resulted in the recognition of charges amounting to 0.6 million euro, as reported in Note 29 "Derivative Instruments".

"Other changes" include effects mainly due to:

- payment of dividends to minority shareholders with whom the Group contracted put options at the time of acquiring control, amounting to 21.9 million euro. In the cash flow statement, the related cash flow is represented in dividends paid out, although it is accounted for as a change in the financial liability already recorded (this mechanism is explained in Note 19 "Financial liabilities");
- the recognition, in application of amortised cost, of the adjustment of the nominal value of the bond loan and loans taken out during the year totalling 10.2 million euro;

- the recognition of liabilities related to leases entered into during the year and the remeasurement of outstanding lease liabilities generated by an update of the underlying assumptions about renewal, purchase, or early termination options, as reported in Note 22, "Rights of Use and Lease Liabilities".

Acquisition of Interests in consolidated companies
The value refers mainly to the outlay related to the purchase of non-controlling shares in Hera Comm Marche Srl, as described in section 2.02.01 "Introduction".

Dividends paid out to Hera shareholders and non-controlling interests
The value refers to dividends paid out during the year 2022 to:
- Parent Company's shareholders in the amount of 176.7 million euro;
- minority shareholders in the amount of 42.8 million euro, of which 21.9 million euro were paid to minority shareholders to whom the Group had recognized payables for put options in previous years, as mentioned above.

Finally, it should be noted that non-monetary flows due to exchange rate differences were absent in 2022.

2.02.05 Investment activities

The Group's assets increased compared with the comparison year mainly due to new investments made in public services under concession, particularly in the integrated water cycle and natural gas distribution businesses.
Also note the recognition of customer lists amounting to 44.3 million euro and goodwill amounting to 5.2 million euro in connection with business combinations carried out during the year.
The following notes comment on the composition of and main changes within each asset category; note that additional information about investments made during the period can be found in section 1.07 "Analysis by Strategic Business Area" of the Directors' Report.
The value of all tangible and intangible assets, including goodwill, was subjected to impairment testing, the results of which can be found in Note 25 "Impairment tests on assets".

21 Tangible assets

	31 Dec 22	31 Dec 21	Change
Land and buildings	620.4	585.3	35.1
Plants and machinery	1,089.5	1,107.8	(18.3)
Other movable assets	89.5	123.7	(34.2)
Assets under construction	183.0	122.1	60.9
Total operating assets	**1,982.4**	**1,938.9**	**43.5**
Investment property	2.0	2.1	(0.1)
Total	**1,984.4**	**1,941.0**	**43.4**

Property, plant and equipment are disclosed net of accumulated depreciation. Their composition and changes in the period are as follows:

31 Dec 21	Net opening balance	Investments	Disinvest-ments	Depreciation and amortisation	Changes in the scope of consol-idation	Other changes	Net terminal value	of which gross terminal value	of which amortis-ation provision
Land and buildings	573.2	13.2	(0.1)	(21.5)	9.6	10.9	585.3	856.8	(271.5)
Plants and machinery	1,120.1	58.0	(4.2)	(120.6)	3.3	51.2	1,107.8	3,005.5	(1,897.7)
Other movable assets	126.5	14.4	(0.8)	(28.8)	2.3	10.1	123.7	511.1	(387.4)

Assets under construction	104.4	86.3	(0.1)	(2.0)	-	(66.5)	122.1	122.1	-
Total	**1,924.2**	**171.9**	**(5.2)**	**(172.9)**	**15.2**	**5.7**	**1,938.9**	**4,495.5**	**(2,556.6)**
31 Dec 22									
Land and buildings	585.3	24.0	(1.9)	(19.5)	3.7	28.8	620.4	908.7	(288.3)
Plants and machinery	1,107.8	61.8	(3.7)	(112.5)	9.0	27.1	1,089.5	3,060.2	(1,970.7)
Other movable assets	123.7	13.7	(0.3)	(21.0)	0.6	(27.2)	89.5	433.1	(343.6)
Assets under construction	122.1	126.1	(0.5)	-	-	(64.7)	183.0	183.0	-
Total	**1,938.9**	**225.6**	**(6.4)**	**(153.0)**	**13.3**	**(36.0)**	**1,982.4**	**4,585.0**	**(2,602.6)**

For a better understanding of the changes that took place in the period, it should be noted that the assets used to carry out the urban sanitation service in the territorial basins of Bologna and the "pianura e montagna modenese", totalling 53.1 million euro, have been reclassified under "Public services under concession" among intangible assets, following the awarding of the tender for the period 2022-2036 in favour of the Temporary Grouping of companies (RTI) led by the Hera Group. Specifically, land and buildings amounting to 2.9 million euro, plants and machinery amounting to 15 million euro, other movable assets amounting to 22.7 million euro, and motor vehicles amounting to 12.5 million euro were reclassified under intangible assets.

"Land and buildings" consists of 129.2 million euro in land and 491.2 million euro in buildings. These are mainly company-owned properties on which the majority of the sites and production plants stand.

"Plant and machinery" is made up mainly of distribution networks and plants relating to business not falling within the scope of the concession system such as district heating, electricity in the Modena area, waste disposal and waste treatment as well as plastic production plants. The main investments for the year were in waste treatment activities amounting to 31.2 million euro and electricity distribution amounting to 10.7 million euro. At the same time, disinvestments took place for demolition as well as divestments of obsolete plants, which contributed to the reduction in depreciation compared with the previous year.

"Other movable assets", mainly includes the equipment, waste disposal bins in the amount of 56.5 million euro, and vehicles totalling 33 million euro.

"Assets under construction" include mainly the investments being made in waste treatment plants amounting to 69.1 million euro and the electricity distribution network amounting to 12.5 million euro, as well as expansions and extraordinary maintenance of the Group's operating offices amounting to 17.1 million euro.

"Other changes" covers the in-progress reclassification of fixed assets to the specific categories for assets brought into operation during the financial year, as well as the reclassification from tangible assets to intangible assets, especially when goods used in activities under concession are involved.
During 2022 financial year, in addition to the above in relation to urban sanitation, there was also the redemption of assets previously held by the Group through leasing contracts and classified under Rights of Use, totalling 21.8 million euro, of which the largest part relates to the item "Land and buildings".

For the column "Change in the scope of consolidation," please refer to the section "Business combination (supplementary information)" contained in Section 2.02.10 "Other information."

For additional details on guarantees granted in favour of third parties and in relation to tangible assets held by the Group, please refer to note 19 "Financial liabilities".

22 Rights of use and lease liabilities

The following tables show the breakdown of rights of use (reported net of the associated amortisation provision) and lease liabilities at the transition date and the related movements. Contracts taken over as part of business combinations are separately reported in movements and classified as "Changes in the scope of consolidation".

	31 Dec 22	31 Dec 21	Change
Rights of use land and buildings	50.7	65.7	(15.0)
Rights of use plants and machinery	7.1	7.8	(0.7)
Rights of use other assets	26.4	28.1	(1.7)
Total	**84.2**	**101.6**	**(17.4)**

	Net opening balance	New contracts and contractual changes	Depreciation and amortisation	Changes in the scope of consolidation	Other changes	Net terminal value	of which gross terminal value	of which amortisation provision
31 Dec 21								
Rights of use land and buildings	68.7	5.1	(7.7)	0.8	(1.2)	65.7	110.4	(44.7)
Rights of use plants and machinery	7.9	0.2	(1.2)	0.9	-	7.8	12.0	(4.2)
Rights of use other assets	19.3	14.6	(8.1)	2.4	(0.1)	28.1	48.3	(20.2)
Total	**95.9**	**19.9**	**(17.0)**	**4.1**	**(1.3)**	**101.6**	**170.7**	**(69.1)**
31 Dec 22								
Rights of use land and buildings	65.7	12.5	(7.6)	0.4	(20.3)	50.7	94.1	(43.4)
Rights of use plants and machinery	7.8	0.6	(1.2)	0.8	(0.9)	7.1	12.4	(5.3)
Rights of use other assets	28.1	8.2	(10.1)	0.8	(0.6)	26.4	49.4	(23.0)
Total	**101.6**	**21.3**	**(18.9)**	**2.0**	**(21.8)**	**84.2**	**155.9**	**(71.7)**

"Rights of use land and buildings" consists of 44.9 million euro in rights of use related to buildings and 5.8 million euro in rights of use related to land. The rights of use for buildings refers mainly to contracts concerning the real estate structures used for headquarters, offices and customer service desk.

"Rights of use of plant and machinery" refers mainly to contracts regarding purification and composting plants.

"Rights of use of other movable assets" refers mainly to contracts underwritten for the use of IT infrastructures (especially data centres), operational vehicles and cars.

The column "New contracts and contractual amendments" shows the leases signed during the year, as well as the change in the assumptions regarding the duration, renewal or termination options of the existing contracts.

The column "Other changes" includes the residual value of leased assets redeemed during the period and reclassified under tangible assets due to their nature. Specifically, it should be noted that, as provided for in the contractual agreements between the parties, in the year 2022 the repossession of buildings where some of the Group's main production facilities are located took place, buildings which represented, at 31 December 2021, the contracts with the largest absolute value. The total amount reclassified for the above transaction was 19.4 million euro.

Financial liabilities show the following composition and change, compared with the previous year:

	Net opening balance	New contracts and contractual changes	Decreases	Financial expenses	Changes in the scope of consolidation	Net terminal value
31 Dec 21						
Lease liabilities	**93.6**	**19.9**	**(22.5)**	**3.2**	**2.5**	**96.6**
of which						
non-current liabilities	73.5					53.2
current liabilities	20.1					43.4
31 Dec 22						
Lease liabilities	**96.6**	**21.2**	**(46.0)**	**2.7**	**1.9**	**76.4**
of which						
non-current liabilities	53.2					55.1
current liabilities	43.4					21.3

Financial liabilities due to leases mainly include financial payables arising from the rental fees of the Group's operating and administrative offices.

The column "New contracts and contractual changes" includes the new contracts signed in the period and the re-assessment of the debt of some of the existing contracts, generated by the update of the assumptions underlying the contracts themselves concerning options of renewal, purchase or early termination.

"Decreases" are generated by the reimbursement of contractual fees scheduled during the course of the financial period and redemption options exercised. The value for the period includes, in particular, the previously described repossession of buildings where major production facilities of the Group are located, totalling 22.7 million euro.

In accordance with its procurement policies, the Group subscribed contracts in line with market standards for all types of underlying assets. In the case of offices, customer service desks, cars and IT infrastructure, the contracts do not contain any binding clauses or special fees in the event of annulment, as these assets are perfectly interchangeable and are offered by a large number of counterparties. The liability reported in the financial statements therefore represents the most likely total sum of disbursements that the Group will have to make in future periods. For the same reasons, moreover, the renewal clauses, when they exist, are not currently expected to be exercised, possibly assessing their cost-effectiveness in the future or the option of signing new contracts with different counterparties.

The table below shows the lease liabilities broken down by category according to their expiration date range:

Type	Total	Portion due within the period	Portion due within 2nd year	Portion due within 5th year	Portion due beyond 5th year
2021 financial year	96.6	43.4	15.0	26.1	12.1
2022 financial year	76.4	21.3	17.4	25.1	12.6

23 Intangible assets

	31 Dec 22	31 Dec 21	Change
IT applications	82.5	84.6	(2.1)
Concessions and other rights of use	110.8	113.8	(3.0)
Public services under concession	3,184.5	2,963.4	221.1
Customer lists	581.1	576.2	4.9
Other intangible assets	92.9	79.4	13.5
Intangible assets under construction, public services under concession	273.9	237.4	36.5
Intangible assets under construction	91.7	71.9	19.8
Total	**4,417.4**	**4,126.7**	**290.7**

Intangible assets are stated net of their accumulated amortisation and are broken down below with details of the changes during the year:

	Net opening balance	Invest-ments	Disinvest-ments	Depreciat-ion and amortis-ation	Changes in the scope of consolid-ation	Other changes	Net terminal value	of which gross terminal value	of which amortisat-ion provision
31 Dec 21									
IT applications	78.8	5.5	-	(39.7)	0.2	39.8	84.6	524.5	(439.9)
Concessions and other rights of use	130.2	0.3	-	(16.8)	-	0.1	113.8	471.6	(357.8)
Public services under concession	2,860.1	181.1	(4.5)	(160.9)	4.7	82.9	2,963.4	5,144.1	(2,180.7)
Customer lists	546.3	-	-	(34.8)	64.7	-	576.2	693.9	(117.7)
Other intangible assets	67.7	33.3	-	(26.9)	0.2	5.1	79.4	225.8	(146.4)
Intangible assets under construction, public services under concession	169.5	144.4	(0.8)	-	-	(75.7)	237.4	237.4	-
Intangible assets under construction	71.8	52.2	-	(0.9)	-	(51.2)	71.9	71.9	-
Total	**3,924.4**	**416.8**	**(5.3)**	**(280.0)**	**69.8**	**1.0**	**4,126.7**	**7,369.2**	**(3,242.5)**
31 Dec 22									
IT applications	84.6	4.5	-	(42.9)	0.1	36.2	82.5	565.7	(483.2)
Concessions and other rights of use	113.8	0.5	-	(15.8)	12.0	0.3	110.8	483.8	(373.0)
Public services under concession	2,963.4	208.3	(4.7)	(174.9)	-	192.4	3,184.5	5,595.3	(2,410.8)
Customer lists	576.2	-	-	(39.4)	44.3	-	581.1	741.8	(160.7)
Other intangible assets	79.4	43.4	0.0	(33.5)	0.1	3.5	92.9	269.7	(176.8)
Intangible assets under construction, public services under concession	237.4	166.8	(0.4)	-	-	(129.9)	273.9	273.9	-
Intangible assets under construction	71.9	60.4	-	(0.3)	-	(40.3)	91.7	91.7	-
Total	**4,126.7**	**483.9**	**(5.1)**	**(306.8)**	**56.5**	**62.2**	**4,417.4**	**8,021.9**	**(3,604.5)**

"IT applications" refers to costs incurred in purchasing licenses and implementing corporate information systems.

"Concessions and other rights of use" mainly includes:

- concessions, for 37.8 million euro, primarily involving the rights relating to the activities of gas distribution and integrated water cycle, classified as intangible assets even before the IFRIC 12 interpretation "Service concession arrangements" was first applied;

- the authorisation to operate the Serravalle Pistoiese landfill, for 53.4 million euro, an asset recorded as part of the a business combination operation carried out in previous periods and amortised on the basis of the number of tons consigned.

"Public services under concession" includes assets relating to gas distribution, electricity distribution (Imola area), the integrated water cycle and public lighting activities (except for the latter, as specified in note 18 "Current financial assets, cash and cash equivalents") provided through contracts awarded by the respective public bodies. These concession relationships and associated assets involved in carrying out the activities for which the Group holds the use rights, are accounted for by applying the intangible asset model as set forth by IFRIC 12 interpretation. Investments for the year related mainly to the water networks, in the amount of 118.7 million euro, and gas distribution networks, in the amount of 51.5 million euro. It should be noted that, during the year, the item was changed by the reclassification of the assets related to the urban sanitation service in the areas of Bologna and Modena, which were previously classified as tangible assets due to the different regulatory framework, following the awarding of the tender for the area, as reported in detail in Note 21 "Tangible assets". Depreciation and amortization for the period, up sharply from last year, is therefore also affected by the above reclassification.

"Intangible assets under construction and public services under concession" includes investments related to these concessions that are still to be completed at the end of the period and mainly refers to the water networks, in the amount of 89.8 million euro, and gas distribution networks, in the amount of 34.3 million euro.

"Intangible assets under construction" essentially comprises IT projects that have not yet been completed.

"Customer lists" are recorded as a result of business combination transactions and the consequent valuation of the assets acquired. The amortisation period of these customer lists is correlated to the churn rate identified for each individual transaction. Depreciation and amortisation for the period increased compared with the comparison period due to the recognition of customer lists as a result of the control acquisitions in the second half of the 2021 financial year and during the 2022 financial year.

The item "Other intangible assets" refers mainly to the rights of use for networks and infrastructures for the passage and laying down of telecommunication networks and the incremental costs incurred for obtaining new sale contracts. In particular, the commissions recognized as assets for the 2022 fiscal year amounted to 36 million euro (24.8 million euro for 2021), and the significant increase in amortisation for the period is due to them.

"Other changes" include reclassifications of fixed assets under construction to their specific categories in the case of assets that came into operation during the year and reclassifications from/to tangible assets, especially in the case of assets subject to concession activities, as mentioned under "Public services under concession".

"Change in scope of consolidation" reflects the control acquisitions made during the year, for details of which please refer to the section "Business combination (supplementary information)" contained in Section 2.02.10 "Other information".

24 Goodwill

	31 Dec 22	31 Dec 21	Change
Goodwill	848.1	842.9	5.2

The value of goodwill at 31 December 2022 mainly reflects the following operations:
- Acquisition of control of the "Ascopiave business activities," i.e. the companies EstEnergy Spa, Ascotrade Spa, Ascopiave Energie Spa, Blue Meta Spa, Etra Energia Srl and Amgas Blu Srl, which took place in 2019 for a total of 431.2 million euro;
- integration that in 2002 resulted in the creation of Hera Spa, totalling 81.3 million euro;

- acquisition of control through the merger of Agea Spa, taking place in January 2004, amounting to 41.7 million euro:
- acquisition of control over Gruppo Meta which took place during the 2005 financial year, as a result of the merger of Meta Spa into Hera Spa, totalling 117.7 million euro;
- acquisition of control over Sat Spa through the merger into Hera Spa, taking place during 2008, amounting to 54.9 million euro:
- acquisition of control over the Aliplast Group taking place in 2017, totalling 25 million euro;
- acquisition of control over the Marche Multiservizi Group, amounting to 20.8 million euro.

As reported in Section "Business Combinations (supplementary information)" of section 2.02.10 of "Other information", during the 2022 fiscal year business combinations took place resulting in an increase in goodwill.

Below is the value of goodwill broken down by operating segment:

	31 Dec 22	31 Dec 21	Change
Gas	493.5	494.8	(1.3)
Waste management	233.5	228.3	5.2
Electricity	73.5	72.2	1.3
Water cycle	42.7	42.7	-
Other services	4.9	4.9	-
Total	**848.1**	**842.9**	**5.2**

25 Impairment tests on assets

Cash-generating and goodwill units
Assets and goodwill have been subjected to impairment tests by determining the value in use, which is the current value of operating cash flows (duly discounted according to the dcf - discounted cash flow method) resulting from the 2022 - 2026 business plan approved by the Board of Directors of the parent company at its meeting 8 February 2023.

The impairment test was applied to the following CGUs (Cash generating units): gas, electricity, integrated water management, environmental and other services (Public lighting and telecommunications) that are consistent with the business areas used for internal periodic reporting and with the information contained in the annual financial report in paragraph 2.02.10 "Other Information".

In relation to this, it should be noted that the Group has implemented a structured process for preparing and reviewing the business plan, which involves formulating the Plan on an annual basis according to an external context scenario that takes into account the market trends and rules for regulated businesses, with the support of all the business units and following a bottom-up logic. Specifically, assumptions were implemented in developing the 2022-2026 Business Plan consistent with those used in previous plans and, on the basis of the final reported values, forecasts were developed that refer to the most authoritative and up external sources available wherever necessary.
Revenues for regulated business areas were developed on the basis of the evolution of the rates deriving from national regulations and/or agreements with the Area Authority. In particular, revenues from energy distribution were forecasted according to the principles of ARERA 737/22 (RTDG) and 568/19 (TIT) resolutions for gas and electricity respectively, and taking into account the respective WACC values set by ARERA. These rates were approved until the year 2023 in the integrated reference text (TIWACC 2022-2027, Resolution 614/21 as amended), while for subsequent years they were updated in accordance with the methodology of the same resolution and according to the forecasted financial and fiscal parameters integrated into the approved business plan.
Revenues from energy sales under protected conditions and with regard to services of last resort have instead been estimated on the basis of the respective regulatory reference texts, i.e. the TIV (resolutions 208/2022 and 491/2020/R/EEL) for electricity and TIVG (approved by resolution ARG/GAS/64/09, as amended) for gas.

For integrated water management, the hypothesis used to forecast revenues assumed no change in the volumes distributed and was based on the rates originating from the agreements in effect with ATERSIR and the application of the Water Rate method (MTI-3) set forth by ARERA resolution no. 639/21, also taking account the parameters underlying the hedging of financial and tax charges, among other factors. For urban sanitation, the hypothesis formalized involved achieving full rate coverage over all the areas served within the duration of the plan, consistent with the provisions of rules currently in effect.

Price trends for electric energy and gas bought and sold in the open market were worked out on the basis of business considerations consistent with the planned energy scenario, considering the forecasts provided by a panel of institutional observers.

The development of plants for the treatment and recycling of waste is consistent with the forecasts of the provincial plans for the provinces in which the Hera Group operates. The investment schedule and the subsequent start of new plants is the result of the best estimate of the managers in charge.

The inertial evolution of the Group's costs in the plan timeframe was developed by formulating hypotheses based on the information available. In relation to employees and labour costs, instead, the indications included in the various types of employment contracts were considered.
The first year of the plan represents the base reference for identifying economic, financial and management objectives that converge in the annual budget, the guiding operational element for achieving the Group's growth objectives.

The cash flows generated were therefore determined using the data for the 2023 - 2026 period as a base. In particular, the net profit margin was used, from which taxes were deducted, depreciation and provision were added and the maintenance investments planned for each year of the plan were deducted.

Following the last year of the plan, Free cash flows were considered equal to the value of the Net operating profit for the last year of the plan, in the event that the value of depreciation and provisions remains at the level of the investments. In the event that the plan does not take into account the prediction of future events that significantly influence estimated cash flows as a result of its medium-term timeframe, adjustments were applied in order to also incorporate the effects of such events. The cash flows are calculated by applying the growth rate (g) to the normalised Free Cash Flows with the medium/long-term timeframe for the relevant sector (2% on average) for the 2027-2042 period (20 years total). For regulated services, these flows are brought into line with the expected continuation of market share following the completion of the expected calls for tenders.

These flows are supplemented by the current value of perpetuity, calculated as follows:
- For market activities, the cash flow resulting from the application of the perpetuity criterion for the last year (2042) was considered, assuming an average factor growth of 2%;
- for services under contract, the terminal value was established by considering the cash flow resulting from the application of the perpetuity criterion weighted by the percentage of competitive bidding processes that the Group is expected to win at the end of the contract periods (100% for network services, 80% for urban sanitation services) and the redemption value of assets weighted by the proportion of competitive bidding processes which the Group expected not to win. This value was estimated as equal to the current value of the net book value of assets owned and leasehold improvements, less the recovery values, in order to properly represent the non-renewal of the contract and the subsequent sale of the assets to the new operator with a value equal to the remaining book value.

To discount unlevered cash flows, the rate used was the weighted average cost of capital (WACC), which represents the yield expected by the funders and shareholders of the company for the use of equity capital, adjusted for the risk of the specific country in which the asset being valued. The value of the specific country risk to be included in the discount rate is defined on the basis of information provided by external providers. Since the Group has a diversified business portfolio with a balance of regulated and free-market activities that make it less exposed to cyclical trends in the economy, it was decided to maintain the historical methodological approach which involves a 9 /12-month observation of the variables underlying the Wacc calculation. At the same time, in order to formulate a view of the effects of a possible medium- to long-term financial shock, a "Stressed" scenario was developed that would take into account current market conditions albeit in a particularly volatile environment.

Specifically, the rates used for the purposes of the actual and scenario assessments are as follows:

	2022 Base	2022 Stressed	2021 Base
Wacc Gas – Electricty – Water Cycle – Other Services	4.58%	5.80%	4.27%
Wacc waste management	5.36%	6.35%	5.15%

The outcomes of the test were positive for all Cgu, showing a use value higher than the book value.

In view of this, two sensitivity scenarios were hypothesised:

- an initial analysis focused on the marginality of the individual businesses, hypothesizing a 5% decrease that would result in a reduction in the cash flows developed in the years covered by the plan and subsequent years.
- the second analysis, hypothesising discounting all cash flows, used the "Stressed" Wacc.

In both of these scenarios, the values obtained are higher than those recorded in the balance sheets, therefore this analysis has further confirmed the carrying values.

Assessments concerning climate change scenarios and consequent sensitivity

Th electrification of energy consumption is one of the most significant risks/opportunities related to climate change. Achieving climate change mitigation, as defined through emission reduction targets at the European level and translated on a national basis with related implementation plans, requires initiatives to change both the technologies adopted to meet energy needs and measures to make them more efficient.

The Hera Group has therefore begun conducting specific analyses aimed at identifying the possible impacts of the scenario of transition on the evolution of end customers' energy consumption, with reference to the business areas it has selected within a timeframe that extends up to 2040.

The analyses took into account exogenous drivers, such as national and European policies on the topic and consumer preferences, drivers of change, and related enabling technologies. The results have allowed the company to gauge the impact that the transitional scenario could have on the evolution of gas and electricity consumption as a function of key determinants such as energy efficiency, technology mix, mobility, and self-consumption. These analyses confirmed, in particular, the widespread expectation that the future will witness a growth in electricity consumption and a simultaneous reduction in gas consumption.

With reference to the businesses operated by the Group, the assessments conducted necessarily took into account the differing nature of the regulated distribution business and the free-market sales business.

Regarding the gas distribution business, it should first be mentioned that ordinary and extraordinary maintenance activities, for which tariff remuneration is provided, are correlated to the physicality of the assets and not to the volumes of gas distributed. Indeed, renovation work is mainly carried out to resolve critical issues through event-driven interventions, resulting, for example, from a network or plant leakage or breakdown, or through scheduled operations to comply with the dictates of technical and regulatory standards.

The transitional risk related to climate change thus appears to depend on purely regulatory decisions and future systemic developments in the gas distribution network. One prospect considered likely by the Group is that the drivers generating gas network development needs might change from the need to meet consumption demands to the need to meet input requirements for biomethane and green gas in general that can enable the running of energy production systems using renewable sources.

In this respect, ARERA has also shown interest in exploring issues related to possible transition costs that may emerge when there is a decline in consumption and thus a decline in the use of this energy vector. The 2022-25 Strategic Framework reveals an awareness of the need to reflect on which market and regulatory tools might be the most suitable to facilitate the carrying out of investments that are of real benefit to the system, in compliance with efficiency and economic sustainability criteria.

At present, however, the Regulatory Authority has not issued any measures, deeming that it is proceeding in full accordance with the current regulatory criteria. Therefore, on the basis of these considerations, the Group does not judge that any elements can be identified in the current framework to assume that the system will be severely disrupted without mechanisms in place to protect the financial equilibrium of companies providing gas distribution services.

Electricity distribution, on the other hand, is set to have an ever increasing impact on the energy grid due to the electrification of consumption. This may in effect represent a development opportunity for the Group, especially when the current concessions are put up for tender.

Relative to sales activity, a model scenario extending beyond the horizon of the plan was formulated that, taking into account transitional risks, projects customer consumption by service and type of use through to 2040. In particular, by considering the various effects of energy efficiency and transition dynamics, average volumes by customer cluster were calculated and growth/decrease rates over time were applied to these calculated volumes. To provide an estimate of overall marginality, intermediate steps were taken, estimating the evolution of the customer base in terms of supply points, to which an average volume per segment was attributed, adjusted over time to consider the impact of energy transition. Assuming that the margins hypothesized in the business plan for each service/segment remain constant over time, a significant growth in electricity margins was estimated for the period 2027-2040, associated with a lesser reduction in gas margins.
In order to conduct a sensitivity analysis in relation to the impairment test, projections for natural gas sales were incorporated into the valuation models, both adjusting the annual cash flows up to 2040 (based on the assumptions made previously) by an average of 8 million euro and normalizing the cash flow used to calculate the terminal value by an analogous amount. In this hypothetical scenario as well, the results confirm the full recoverability of the asset values recorded in the balance sheet.

An additional physical risk that may impact the Group is increased temperatures. Therefore, an additional medium- to long-term Cgu gas stress scenario was developed that would take into account the effects of an increase in average winter temperatures. Specifically, the projected increase in the RCP8.5 scenario is 1.5°C up to 2030 2°C up to 2050, relative to the 1981-2010 average. In relation to the climate assumptions for estimating gas sales volumes for the purposes of the Business Plan, this results in an 0.7°C increase up to 2030 and an 1.2°C increase up to 2050, respectively. Based on this scenario, again with a planning horizon up to 2040, a sensitivity analysis was developed to take into account a consequent reduction in Cgu gas margins (please also refer to the section of the Directors' Report 1.02.03 "Environmental-Catastrophic Risk Management"). In this case, too, the results obtained confirm the full recoverability of the values of the assets recorded in the financial statements.

2.02.06 Shareholdings

During the fiscal year 2022, there were no significant transactions involving the purchase or sale of shareholdings. The only investment that resulted in a change in the portfolio was the acquisition of non-controlling shares in Aurora Srl, a company in the waste treatment sector that is currently not operational. The changes in value from the previous year are therefore attributable to the assessment processes of investee companies.

26 Shareholdings

	31 Dec 22	31 Dec 21	Change
Shareholdings valued using the equity method	151.4	150.6	0.8
Other shareholdings	38.9	47.9	(9.0)
Total	**190.3**	**198.5**	**(8.2)**

The changes in joint ventures and associated companies as compared to 31 December 2021 take into account the pro-quota losses and profits reported by the respective companies (including the other components of the comprehensive income statement) as well as the possible reduction of the value for any dividends that were distributed and for depreciations due to the impairment test.

Associated companies and joint ventures

Changes in consolidated shareholdings using the net equity method are as follows:

	Opening value	Investments and disinvestments	Profit for the fin. year	Dividends paid out	Changes in the scope of consolidation	Write-downs and other changes	Terminal value
31 Dec 21							
Enomondo Srl	15.6	-	3.1	(1.1)	-	-	17.6
Total joint ventures	**15.6**	**-**	**3.1**	**(1.1)**	**-**	**-**	**17.6**
Aimag Spa	50.6	-	3.7	(2.6)	-	-	51.7
Set Spa	27.9	-	0.6	-	-	-	28.5
Sgr Servizi Spa	24.4	-	3.0	(2.2)	-	-	25.2
ASM SET Srl	18.7	-	1.4	(1.2)	-	-	18.9
SEA - Servizi Ecologici Ambientali Srl	-	-	1.4	(2.4)	9.7	-	8.7
Total associated companies	**121.6**	**-**	**10.1**	**(8.4)**	**9.7**	**-**	**133.0**
Total	**137.2**	**-**	**13.2**	**(9.5)**	**9.7**	**-**	**150.6**
31 Dec 22							
Enomondo Srl	17.6	-	3.1	(2.2)	-	0.3	18.8
Total joint ventures	**17.6**	**-**	**3.1**	**(2.2)**	**-**	**0.3**	**18.8**
Aimag Spa	51.7	-	2.3	(2.8)	-	-	51.2
Set Spa	28.5	-	(0.6)	-	-	-	27.9
Sgr Servizi Spa	25.2	-	2.4	(2.0)	-	(0.1)	25.5
ASM SET Srl	18.9	-	1.5	(1.4)	-	(0.1)	18.9
SEA - Servizi Ecologici Ambientali Srl	8.7	-	1.3	(1.0)	-	0.1	9.1
Total associated companies	**133.0**	**-**	**6.9**	**(7.2)**	**-**	**(0.1)**	**132.6**
Total	**150.6**	**-**	**10.0**	**(9.4)**	**-**	**0.2**	**151.4**

The result for the year decreased from the previous year mainly due to the lower results reported by Aimag Spa, a multi-utility company operating in the province of Modena area, and Set Spa, an investment vehicle for a combined-cycle power plant located in Teverola (CE). On the other hand, the results of the company Enomondo Srl, operating in the production of thermal energy and electricity from biomass combustion plants, remained constant.

No impairments or reversals of impairments were reported for companies within the scope of consolidation. For more details on the assumptions and results of the impairment tests to which the carrying values of the investments in affiliates that represent vehicles through which the Group holds shares in the production of electric generation plants (Set Spa and Tamarete Energia Srl) were subjected, please see the information in Note 27 "Impairment tests on shareholdings" below.

Other share-holdings

Investments in companies not included in the scope of consolidation underwent the following changes:

	Fair value hierarchy	Opening value	Investments and disinvestments	Fair value valuations	Other changes	Terminal value
31 Dec 21						
Ascopiave Spa	1	42.0	-	(2.1)	-	39.9
Veneta Sanitaria Finanza di Progetto Spa	3	3.6	-	-	-	3.6
Other minor companies	3	5.1	1.3	(2.0)	-	4.4
Total		**50.7**	**1.3**	**(4.1)**	**-**	**47.9**
31 Dec 22						
Ascopiave Spa	1	39.9	-	(12.3)	-	27.6
Veneta Sanitaria Finanza di Progetto Spa	3	3.6	-	-	-	3.6
Other minor companies	3	4.4	3.2	-	0.1	7.7
Total		**47.9**	**3.2**	**(12.3)**	**0.1**	**38.9**

In the case of shareholdings with a fair value hierarchy of 1, the value adjustment, recorded in the components of the comprehensive income statement, makes it possible to align the book value of the shares with the market prices at the end of the year. In the case of hierarchy 3 shareholdings, partly in view of the insignificant value of the investments in the portfolio, the change in fair value was not significant.

Investments for the period are mainly attributable to the purchase of minority shares in Aurora Srl, as specified above.

Investee data

Below are presented the main aggregate values of the joint venture Enomondo Srl as well as companies with significant influence (Aimag Spa, ASM SET Srl, SEA Srl, Set Spa, Sgr Servizi Spa and Tamarete Energia Srl):

Assets	Company Joint ventures	Company Associated companies	Total
Non-current assets			
Tangible assets	34.3	410.6	444.9
Rights of use		0.6	0.6
Intangible assets		53.4	53.4
Goodwill		105.0	105.0
Shareholdings		7.0	7.0
Financial assets	0.5	12.9	13.4
Deferred tax assets	0.7	4.5	5.2
Total non-current assets	**35.5**	**594.0**	**629.5**
Current assets			
Inventories	0.5	23.3	23.8
Trade receivables	7.3	337.6	344.9
Contract work in progress		3.0	3.0
Financial assets		9.1	9.1
Current tax assets		3.5	3.5
Other current assets	6.5	99.8	106.3
Derivative instruments	0.6		0.6
Cash and cash equivalents	8.0	29.3	37.3
Total current assets	**22.9**	**505.6**	**528.5**
Total assets	**58.4**	**1,099.6**	**1,158.0**

Net equity and liabilities	Company Joint ventures	Company Associated companies	Total
Share capital and reserves			
Share capital	14.0	88.0	102.0
Reserves	17.4	281.8	299.2
Profit (loss) for the period	6.1	26.6	32.7
Group net equity	**37.5**	**396.4**	**433.9**
Non-controlling interests		14.3	14.3
Total net equity	**37.5**	**410.7**	**448.2**
Non-current liabilities			
Non-current financial liabilities	7.2	213.5	220.7
Non-current lease liabilities		0.4	0.4
Post-employment and other benefits		5.6	5.6
Provisions for risks and charges	1.0	37.8	38.8
Deferred tax liabilities	0.1	0.7	0.8
Derivative financial instruments		0.1	0.1
Total non-current liabilities	**8.3**	**258.1**	**266.4**
Current liabilities			
Current financial liabilities	3.0	145.8	148.8
Current lease liabilities		0.1	0.1
Trade payables	8.6	255.2	263.8
Current tax liabilities		0.3	0.3
Other current liabilities	1.0	29.4	30.4
Total current liabilities	**12.6**	**430.8**	**443.4**
Total liabilities	**20.9**	**688.9**	**709.8**
Total net equity and total liabilities	**58.4**	**1,099.6**	**1,158.0**

Income statement	Company Joint ventures	Company Associated companies	Total
Revenues	28.8	1,265.9	1,294.7
Other operating revenues	3.5	2.5	6.0
Raw materials and materials	(2.5)	(1,015.1)	(1,017.6)
Service costs	(15.8)	(100.0)	(115.8)
Personnel costs	(0.4)	(29.3)	(29.7)
Amortisation, provisions and depreciation	(5.4)	(55.9)	(61.3)
Other operating costs	(0.1)	(22.2)	(22.3)
Operating revenues	**8.1**	**45.9**	**54.0**
Financial income		5.0	5.0
Financial expenses	(0.2)	(9.5)	(9.7)
Total financial management	**(0.2)**	**(4.5)**	**(4.7)**
Other non-operating revenues (expenses)		(1.3)	(1.3)
Earnings before taxes	**7.9**	**40.1**	**48.0**
Taxes for the period	(1.8)	(12.3)	(14.1)
Net revenues for the period	**6.1**	**27.8**	**33.9**

27 Impairment tests on shareholdings

With reference to the market for electric generation, in the presence of impairment indicators and in keeping with previous financial periods, an in-depth analysis was performed to determine the recoverable amount of the Group's investments, and related financial assets, operating in the sector. In particular, the analysis was conducted by discounting the value of the cash flows expected to be generated over the remaining useful lives of the plants of Set Spa and Tamarete Energia Srl
In the 2022 financial year, as a result of the significant increase in gas prices, there was a significant effect on prices in Mgp and the presence of a negative baseload Clean spark spread (Css). Emerging trend signals show short-term opportunities offered by moderately positive baseload Css values, while in the medium to long term the outlook is leaning toward a consolidation towards slightly negative values, against, however, positive modulated Css. The factors that have determined the performance of the electricity generation market during this decade are due to the combination of multiple factors on both demand and supply sides. The main factors affecting current price dynamics are to be found in:

- introduction of significant production capacity in renewable energy in the past few years;
- moderate GDP growth and consumption efficiency (driven by European and national environmental policy objectives) reflected in the low growth in demand for energy;
- European and national policies in relation to CO2 emission reduction targets and targets for renewable energy affecting supply.

On the basis of new scenarios developed, it is believed that the market will evolve towards levels of baseload Clean spark spread aligned in the short term to the recent historical level, while they will be slightly negative in the medium to long term, in particular due to a combination of multiple effects, including:

- new high-efficiency incoming capacity (CCGT) beginning in 2022, which will replace coal-powered plants with a view to phasing out coal by 2025;
- beginning of the end-of-life cycle of the old CCGT plants, which, from the second half of the decade, creates favourable market conditions for highly efficient and flexible retrofits of the old CCGT plants, whose remuneration and return on investment are ensured by the participation in MGP and MSD, additionally ensuring a higher level of suitability of the system in the medium-long term and therefore less room for marginality growth in the absence of such investments;
- resulting unincreased marginality in the MGP market;
- growing role of renewable sources, also supported by the need to reduce dependency not only on fossil fuels in general but also on specific geopolitical areas.

That said, future cash flows determined on the basis of the medium/long-term energy scenario the Group considered to be the most likely, formulated on the basis of independent expert assumptions consistent with growth expectations for energy demand, installed power, the demand for combined cycle and the system's expected reserve margin. This scenario alters the one used in the previous exercise, affecting future Clean spark spread values. The estimated cash flows were discounted using a 5.21% WACC, calculated in the same way as shown for the cash flow generating units, as indicated in note 25 "Impairment tests on assets".

Specifically, the rates used for the purposes of the actual and scenario assessments are as follows:

	2022 Base	2022 Stressed	2021 Base
Electricity generation WACC	5.21%	6.18%	5.04%

The outcome of the test confirmed the full recoverability of the values relating to Set Spa, while it confirmed a highly critical scenario for Tamarete Energia Srl, as it found there are not the prerequisites for recovering the sums invested.

In addition, two sensitivity scenarios were hypothesised:

- an initial analysis was developed by decreasing the Css by 1 euro/MWh, resulting in reduced cash flows developed over the life years of the plants;
- a second analysis, hypothesising the discounting of all cash flows used the "Stressed" WACC.

Under both scenarios, this would result in the full recoverability of Set Spa's book values.

At the end of the valuation process, the carrying amount of financial assets, shareholdings and receivables attributable to Set Spa was 43.3 million euro, while the financial assets attributable to Tamarete Energia Srl were written down in full. The Group has estimated the possible financial undertaking necessary to guarantee the business continuity of Tamarete Energia Srl should the future negative scenario be confirmed as amounting to approximately 2.9 million euro, recording a liability of the same amount as an implicit obligation.

28 Cash flows related to investment activities

Investments in subsidiary companies and business units net of cash holdings

For more details on the acquisition transactions carried out during the 2022 financial year, please refer to Section 1.03 "Significant Events" of the Directors' Report under section "Business Combinations (supplementary information)" and Section 2.02.10 "Other Information" of the Notes to the Financial Statements.

Other equity investments

During the 2022 fiscal year, the Group acquired non-controlling shares of Aurora Srl, which operates in the waste treatment sector. This company, not equipped with significant assets, is not yet operational and has thus been excluded from the scope of consolidation and recorded under investments in other shareholdings.

The table below details the main cash disbursements and cash holdings acquired, when present, associated with shareholdings in companies and business units.

31 Dec 22	Alibardi Fiorenzo Srl	Con Energia Spa	Macero Maceratese Srl	"Bfeng" business unit	Other minor companies	Total investments
Cash outlays leading to the acquisition of control	1.4	30.0	10.0	12.0		53.4
Considerations to pay out			1.1			1.1
Cash holdings acquired		(4.2)	(0.2)			(4.4)
Investments in subsidiary companies and business units net of cash holdings	**1.4**	**25.8**	**10.9**	**12.0**		**50.1**
Cash outlays in non-consolidated companies					3.2	3.2
Investments in subsidiary companies, business units and other shareholdings	**1.4**	**25.8**	**10.9**	**12.0**	**3.2**	**53.3**

Increase/decrease in other investment activities

The following is a breakdown of information on changes in the other investment activities during the 2022 financial year, differentiating between cash flows and non-cash flows.

Type	31 Dec 22	31 Dec 21	Change	Non-cash flows				
			(a)	Acquisitions divestitures (b)	Economic valuation components (c)	Changes in fair value (d)	Other changes (e)	Cash flows (f)=[(b)+(c)+(d)+(e)]-(a)
Current and non-current financial assets	229.5	172.0	57.5	2.3	6.8		49.5	1.1

"Acquisitions and Divestitures" include the effects arising from the control acquisition transactions carried out in the 2022 financial year, as explained in the section "Business Combinations (supplementary information)" of section 2.02.10 "Other information".

"Economic valuation components" mainly include income from discounting non-current financial receivables (amounting to 4.7 million at 31 December 2022), as reported in Note 10 "Financial income".

"Other changes" mainly includes the amount of tax credit assignments realized at the end of the 2022 fiscal year with leading financial institutions, the collection of which took place in January 2023 in the amount of 46.3 million. For further details, please see note 18 "Financial assets, cash holdings and cash equivalents".

2.02.07 Derivatives and related instruments

The derivative instruments used by the Group are divided into two types based on the underlying assets hedged: interest and exchange rates with reference to financing transactions, and commodities with reference to the commercial purchase and sale of gas and electricity. All commodity derivatives are classified as current assets and liabilities by virtue of the high level of liquidity and the operational time span that characterise these instruments.

29 Derivative instruments

At 31 December 2022, the net exposure of interest and foreign exchange derivatives was negative, albeit slightly up from the previous year.
In contrast, the net exposure of commodity derivatives, which is significantly higher than last year, reflects the increase in energy commodity prices.

	31 Dec 22			31 Dec 21			Change
	Fair value assets	Fair value liabilities	Net effect	Fair value assets	Fair value liabilities	Net effect	Net effect
Interest/exchange rate derivatives							
Loans	0.5	-	0.5	-	0.1	(0.1)	0.6
Foreign currency loans	0.5	6.3	(5.8)	6.9	13.4	(6.5)	0.6
Total interest/exchange rate derivatives	**1.0**	**6.3**	**(5.4)**	**6.9**	**13.5**	**(6.6)**	**1.3**
Commodity derivatives			-			-	-
Commercial portfolio	1,531.0	1,244.3	286.8	1,716.1	1,616.6	99.5	187.4
Trading portfolio	91.2	103.4	(12.2)	81.3	86.6	(5.3)	(6.8)
Total commodity derivatives	**1,622.2**	**1,347.6**	**274.6**	**1,797.4**	**1,703.3**	**94.1**	**180.5**
Total derivatives	**1,623.2**	**1,353.9**	**269.2**	**1,804.3**	**1,716.8**	**87.5**	**181.7**
of which non current	1.0	6.3		6.9	13.5		
of which current	1,622.2	1,347.6		1,797.4	1,703.3		

The financial management policy envisages the use of hedging instruments to effectively offset changes in the fair value, cash flows of the hedged instrument or, more specifically, changes in interest and exchange rate fluctuations that affect the sources of funds used. At 31 December 2022, the net exposure in terms of fair value with regard to current and non-current interest and foreign exchange derivatives in the form of interest rate swaps (IRSs) and cross currency swaps (CCSs) is negative compared to the previous year and is due to the increase in interest rate curves, the strengthening of the euro over the yen, and the realisation of cash flows.

The operational management of commodities, on the other hand, is carried out through a process that identifies objectives, strategies and responsibilities for each existing operation. Contracts, both financial and physical in nature, are classified into the commercial or trading portfolios according to the purpose of the contracts. The Group's internal organisational model make it possible to identify the nature of the operation (commercial or trading) and produce the information required for a formal identification of the purpose of derivatives. The centralised management of hedging transactions allows for all possible synergies for hedging the electricity consumption needs of the Central Market Department, and is integrated with exchange rate transactions towards the market and is carried out through the exclusive use of swap contracts or other authorised derivatives.

All other derivatives or similar instruments that are not intended to hedge the Group's requirements are classified in the trading portfolio.
In the 2022 fiscal year, commodity derivatives showed a significantly higher net positive exposure than in the previous year, largely related to the significant increase in energy commodity prices, which were also reflected in higher commodity costs (gas and electricity).

Interest rate derivatives

Interest rate and foreign exchange derivative instruments held as of 31 December 2022, subscribed in order to hedge loans, can be classed into the following categories:

		31 Dec 22			31 Dec 21		
Type	Fair value hierarchy	Notional	Fair value assets	Fair value liabilities	Notional	Fair value assets	Fair value liabilities
Cash flow hedges	2	8.3 mn	0.5	-	9 mn	-	0.1
Fair value hedges	2	149.8 mn	0.5	6.3	149.8 mn	6.9	13.4
Non-hedge accounting	2	-	-	-	-	-	-
Total fair value			**1.0**	**6.3**		**6.9**	**13.5**

		31 Dec 22			31 Dec 21		
Type	Fair value hierarchy	Income	Financial Expenses	Net effect .	Income	Financial Expenses	Net effect .
Cash flow hedges	2	0.1	-	0.1	0.0	-	0.0
Fair value hedges	2	18.2	(21.4)	(3.3)	11.0	(15.8)	(4.8)
Non-hedge accounting	2	-	-	-	18.3	(18.3)	(0.0)
Total income (expenses)		**18.3**	**(21.4)**	**(3.2)**	**29.3**	**(34.1)**	**(4.8)**

Cash flow hedges

The positive change in the fair value of derivatives classified as cash flow hedges is mainly due to the realisation of cash flows during the period, that is, the reduction in the notional amount of the derivative. No significant ineffective portions connected to the residual financial instruments were found in the financial period. The overall effect of these instruments on the statement of comprehensive income was equal to 0.5 million euro in 2022.

Fair value hedges

Derivatives designated as hedges of interest rate and exchange rate risks and of the fair value of foreign currency financial liabilities (fair value hedges), in the form of interest rate swaps (IRS) and cross currency swaps (CCS), are related to a bond denominated in Japanese yen with a remaining notional amount of 20 billion yen equal to 149.8 million euro (converted at the original exchange rate being hedged). The change in fair value is attributable to the exchange rate effect, the Japanese yen having depreciated against the euro in 2022, as well as the rise in interest rate curves.

The table below provides a breakdown of financial income and expense associated with derivatives designated as fair value hedges and related underlying liabilities, as adjusted for the income and losses attributable to the hedged risk:

Fair value hedges	31 Dec 22			31 Dec 21		
	Income	Financial Expenses	Net effect .	Income	Financial Expenses	Net effect .
Assessment of derivatives	13.2	(12.6)	0.6	6.4	(7.6)	(1.2)
Accrued interest	0.5	(0.6)	(0.1)	-	(0.1)	(0.1)
Realised cash flows	4.4	(8.1)	(3.6)	4.6	(8.2)	(3.5)
Economic effect of derivatives Fair value hedges	18.2	(21.4)	(3.1)	11.0	(15.8)	(4.8)

Underlying amounts hedged	31 Dec 22			31 Dec 21		
	Income	Financial Expenses	Net effect.	Income	Financial Expenses	Net effect.
Assessment of financial liabilities	-	(0.6)	(0.6)	7.5	(6.4)	1.2

Non-hedge accounting

Last year, interest rate derivatives, identified as non-hedge accounting, matured. The category originated in full from restructuring operations and, despite not including instruments that qualify as hedges pursuant to IFRS 9, have as their main objective to hedge against interest rate fluctuations and have no impact on the income statement (mirroring).

Sensitivity Analysis - Financial operations

Assuming an instant change of 10% in the euro/yen exchange rate, given the same interest rates, the potential decrease in fair value of the derivative financial instruments in place at 31 December 2022 would amount to approximately 13.6 million euro. Likewise, assuming an instant reduction of the same amount, the potential fair value increase would be approximately 16.9 million euro. Given that exchange rate derivatives related to borrowing transactions are treated as fair value hedges, any change in these fair values would not have any effect on the income statement, other than for the credit adjustment part, as any such change would be offset by a movement in the opposite direction of the hedged liability.
The assumptions on interest rate changes would have no significant effect on the fair value of outstanding derivative financial instruments on interest and exchange rates. Furthermore, these changes in fair value of financial instruments accounted for as cash flow hedges would have no effect on the income statement if it were not for their potential ineffective portion, which moreover is not significant. In the event of an increase or decrease in fair value, there would be a non-significant increase or decrease in net equity. As to derivatives designated as fair value hedges, any change in fair value would not have any effect on the income statement, other than for the credit adjustment part, as any such change would be essentially offset by a movement in the opposite direction of the hedged liability.

Commodity derivatives

Commercial portfolio

The commercial portfolio includes commodity derivative instruments, both financial and physical, entered into to hedge mismatches between purchase and sale formulas, which are classed into the following categories:

Operations management

Type	Fair value hierarchy	31 Dec 22			31 Dec 21		
		Notional	Fair value assets	Fair value liabilities	Notional	Fair value assets	Fair value liabilities
Gas formulas	3	2,863,802 MWh	974.7		27,991,358 MWh	1,309.2	
Electricity formulas	2	5,293,822 MWh	556.3		4,829,772 MWh	406.8	
Exchange	2	-	-		10,408,061 USD	0.1	
Gas formulas	3	4,084,098 MWh		901.6	28,987,729 MWh		1,440.8
Electricity formulas	2	3,165,429 MWh		341.1	2,905,219 MWh		175.6
Exchange	2	62,353,000 USD		1.5	30,477,506 USD		0.2
Total fair value			**1,531.0**	**1,244.3**		**1,716.1**	**1,616.6**

Type	31 Dec 22			31 Dec 21		
	Income	Expenses	Net effect	Income	Expenses	Net effect
Assessment of derivatives	24.3	(23.0)	1.3	1.6	(1.9)	(0.2)
Realised cash flows	4,564.8	(4,579.5)	(14.7)	1,242.7	(1,279.8)	(37.1)
Economic effect of derivatives	**4,589.2**	**(4,602.5)**	**(13.4)**	**1,244.4**	**(1,281.7)**	**(37.4)**

The main objectives of these contracts are to replicate the cash flows of the formulas on sale in the market and to cover the spread between the Ttf price, the benchmark market for continental Europe, and the Psv price, the virtual trading point and Italian gas hub. In order to assess the impact that fluctuations in the market price of the underlying asset have on the financial derivatives attributable to the commercial portfolio, the PaR (Profit at Risk) tool is used, that is the change in the value of the portfolio of derivative financial instruments within pre-established probability hypotheses as a result of a shift in market indexes.

The increase in the net fair value of commodity derivatives related to the commercial portfolio is mainly due to the increase in the gas price during the year and to the same dynamics recorded during the year for the national price, which is closely related to gas price trends.

Effects on statement of comprehensiv e income

Overall effect of these instruments on the statement of comprehensive income is broken down as follows:

Commodity derivatives commercial portfolio	31 Dec 22			31 Dec 21		
	Positive components	Negative components	Net effect .	Positive components	Negative components	Net effect .
Changes to expected cash flows	214.7	-	214.7	87.6	-	87.6
Reserve transferred to the income statement	4,579.5	(4,564.8)	14.6	1,279.8	(1,242.7)	37.1
Derivatives effect on statement of comprehensive income cash flow hedge	**4,794.2**	**(4,564.8)**	**229.3**	**1,367.4**	**(1,242.7)**	**124.7**

The net effect of the year's expected cash flows also includes the change in the fair value of derivative instruments previously measured using hedge accounting, for which the outstanding hedge relationship has been terminated in relation to hedged items that have not yet matured. The components recognised in the statement of comprehensive income will be transferred to profit and loss on the maturity dates of the corresponding hedged positions, which are expected to occur within the next twelve months.

Effects on income statement

The effect of these instruments on the income statement is broken down as follows:

Physical contracts treated as derivatives		Financial derivative contracts		Overall effect
Sales revenues	4,067.2	Income	497.7	4,564.8
Purchasing costs	(4,367.5)	Expenses	(212.0)	(4,579.5)
Effect of realising derivative cash flow hedges	**(300.3)**		**285.6**	**(14.7)**

Sensitivity analysis - Commercial portfolio

In assuming an instant increase of 60 euro/MWh of the TTF, with no change in the national standard price curve, the potential decrease in the fair value of derivative financial instruments held as at 31 December 2022 would amount to approximately 219.8 million euro. On the contrary, an instant fall in the same amount would bring about a potential increase in the fair value of the instruments of approximately 219.8 million euro.

In assuming an instant +60 euro/MWh change in the national standard price curve, with no change in the TTF price, the potential increase in the fair value of derivative financial instruments of the commercial portfolio held at 31 December 2022 would amount to approximately 39.7 million euro. On the contrary, an instant change of -60 euro/MWh would bring about a potential decrease in the fair value of the instruments of approximately 39.7 million euro.

In the organizational model described above, these changes in fair value would mainly affect derivative instruments accounted for as hedges thus the opposite variation of net equity would be recorded in the income statement.

Trading portfolio

The trading portfolio includes derivatives or similar instruments that are not intended to hedge the Group's requirements and are entered into for speculative purposes. these instruments may be divided into the following categories

Operations management

Type		31 Dec 22			31 Dec 21		
	Fair value hierarchy	Notional	Fair value assets	Fair value liabilities	Notional	Fair value assets	Fair value liabilities
Gas formulas	3	204,228 MWh	8.5		546,478 MWh	20.6	
Electricity formulas	2	663,755 MWh	82.7		1,323,041 MWh	60.4	
Raw oil	2				4,253 Bbl	0.1	
Other commodities	2				3,578 Ton	0.3	
Gas formulas	3	67,292 MWh		5.7	682,525 MWh		35.1
Electricity formulas	2	1,274,824 MWh		96.9	2,183,368 MWh		49.9
Raw oil	2	3,839 Bbl		0.1	18,514 Bbl		0.2
Other commodities	2	3,404 Ton		0.6	16,163 Ton		1.3
Total fair value			**91.2**	**103.4**		**81.3**	**86.6**

Type	31 Dec 22			31 Dec 21		
	Income	Expenses	Net effect	Income	Expenses	Net effect
Assessment of derivatives	163.7	(170.5)	(6.8)	144.2	(132.7)	11.5
Realised cash flows	146.4	(51.3)	95.1	89.4	(61.3)	28.1
Economic effect of derivatives	**310.1**	**(221.8)**	**88.3**	**233.6**	**(194.0)**	**39.6**

In order to assess the impact that fluctuations in market prices of the underlying asset have on the derivatives attributable to the trading portfolio, the VaR (Value at Risk) instrument is used, that is the negative change in the value of the portfolio of derivative instruments within pre-established probability hypotheses as a result of an unfavourable shift in market indexes.

The effect of these instruments on the income statement is broken down as follows:

Contracts treated as derivatives		Financial derivative contracts		Overall effect
Sales revenues	37.2	Income	109.2	146.4
Purchasing costs	(33.4)	Expenses	(17.9)	(51.3)
Effect of realising derivatives	**3.8**		**91.3**	**95.1**

The following disclosure provides an analysis of the results of operations for the year ended 31 December 2022 for trading activity, including the effects of energy commodity contracts.

	Fair value 31 Dec 2022	Fair value 31 Dec 2021	Delta fair value	Realised 2022	Amounts entered in the Income Statement 31 Dec 22
Trading portfolio					
Gas, crude oil and other commodity formulas	2.0	(15.8)	17.8	24.9	42.6
Electricity formulas	(14.2)	10.5	(24.6)	70.3	45.6
Total trading portfolio	**(12.2)**	**(5.3)**	**(6.8)**	**95.1**	**88.3**

Sensitivity analysis - Trading portfolio
In assuming an instant increase of 60 euro/MWh of the TTF, with no change in the national standard price curve, the potential decrease in the fair value of derivative instruments held at 31 December 2022 would amount to approximately 1.2 million euro. On the contrary, an instant fall in the same amount would bring about a potential increase in the fair value of the instruments of approximately 1.2 million euro.
In assuming an instant +60 euro/MWh change in the national standard price curve, with equal TTF price, the potential increase in the fair value of derivative financial instruments of the trading portfolio held at 31 December 2022 would amount to approximately 13.7 million euro. On the contrary, an instant change of -60 euro/MWh would bring about a potential decrease in the fair value of the instruments of approximately 13.7 million euro.

2.02.08 Provisions and Contingent Liabilities

30 Post-employment and other benefits

This includes provisions for employee leaving indemnities and other contractual benefits, net of advances paid out and payments made to the social security institutions pursuant to current regulations. The calculation is made using actuarial techniques and discounting future liabilities to the balance sheet date. These liabilities comprise the employee's matured receivables at the presumed date of leaving the company.

	Opening balance	Service cost	Financial expenses	Actuarial profit (losses)	Uses	Other movements	Changes in the scope of consolidation	Closing balance
31 Dec 21								
Post-employment	102.2	1.1	(0.1)	0.1	(11.5)	0.2	1.7	93.7
Other benefits	14.5	-	-	(1.7)	(1.1)	-	-	11.7
Total	**116.7**	**1.1**	**(0.1)**	**(1.6)**	**(12.6)**	**0.2**	**1.7**	**105.4**
31 Dec 22								
Post-employment	93.7	1.4	0.2	(5.1)	(11.3)	-	0.5	79.4
Other benefits	11.7	-	0.1	2.0	(1.2)	-	-	12.6
Total	**105.4**	**1.4**	**0.3**	**(3.1)**	**(12.5)**	**-**	**0.5**	**92.0**

"Other benefits" mainly comprises the following:

- The item Gas discount represents annual indemnities provided to Federgasacqua employees, hired prior to January 1980, which may be transferred to their heirs;
- Premungas is a supplementary pension fund for employee members of Federgasacqua hired prior to January 1980. This fund, closed with effect from January 1997, undergoes changes on a quarterly basis solely to settle payments made to eligible retirees.

- The item Tariff reduction was set up to cover the charges deriving from the acknowledgement to retired staff of the electricity business unit of tariff concessions for electricity consumption.

The item "Service Cost" regards companies with a small number of employees for whom the employee severance indemnity fund continues to represent a defined benefit plan.

"Financial charges" are calculated by applying a specific discount rate for each company, determined on the basis of the average financial life of the bond.

"Actuarial profit (losses)" reflects the re-measurement of the liabilities for employee benefits arising from changes in actuarial assumptions. These effects are recorded directly in the other items of the comprehensive income statement.

"Changes in scope of consolidation" includes the post-employement provision acquired following the business combinations carried out during the period.

The table below outlines the main assumptions used in the actuarial estimate of employee benefits, subdivided by geographical area:

	Central area	North-east area
Technical actuarial yearly rate	3.55%	3.60%
Overall increase of salary yearly rate	2.00%	2.00%
Yearly frequency of exit from work for reasons other than death	1.70%	1.70%
Yarly average frequency of use of severance pay provision	2.20%	2.60%

In interpreting said assumptions, account is taken of the following:

- with regard to the inflation rate, the inflation assumption was inferred by adopting the Extended National Consumer Price index of 2.60% for the year 2023 and 1.7% for the following years;
- for probabilities of death, ISTAT 2021 tables were consulted;
- in the actuarial valuations, account was taken of the new effective dates for pensions under Law Decree of 6 December 2011, no. 201 concerning urgent measures for growth, equity, and the consolidation of public finances, as amended by Law 214 of 22 December 2011, as well as the regulation for adjusting requirements for accessing the pension system in view of increased life expectancies in accordance with Article 12 of Legislative Decree no. 78 of 31 May 2010 as amended by Law 122 of 30 July 2010;
- For the probability of leaving employment for reasons other than death, an average yearly exit rate of 1.7% was hypothesized, since the analysis differentiated by professional level and sex did not result in statistically significant results;
- to take into account the phenomenon of early leaving, the incidence and amount of average anticipated severance pay were hypothesized. The frequency of advance payments as well as the average percentage of severance pay requested as an advance were drawn from corporate data. The rate of severance pay requested as an advance was hypothesized at 70% of severance pay or the maximum amount set by current regulations;

Actuarial projections were made on the basis of the Euro Composite AA yield curve at 31 December 2022.

Sensitivity Analysis - Obligations of defined-benefit plans
Assuming a 50 bps increase in the internal rate of return compared to the discount rate actually applied to value the liabilities at 31 December 2022, all other actuarial assumptions being equal, the potential decrease of the present value of the obligations of the existing defined-benefit plans (DBO) would amount to about 1.8 million euro. Likewise assuming a reduction of this rate of 50 bps, there would be an increase in the present value of the liabilities of about 1.9 million euro.
Assuming a 50 bps increase in the in the rate of inflation compared to that actually applied to value the liabilities at 31 December 2022, all other actuarial assumptions being equal, the potential increase of the present value of the obligations of the existing defined-benefit plans (DBO) would amount to about 1.2

million euro. Likewise assuming a reduction of this rate of 50 bps, there would be a decrease in the present value of the liabilities of about 1.1 million euro.
Changes in the remaining actuarial assumptions would not produce significant effects on the present value of the liabilities of the defined-benefit plans reported in the financial statement.

31 Provisions for risks and charges

	Opening balance	Provisions	Financial expenses	Uses	Other movements	Changes in the scope of consolidation	Closing balance
31 Dec 21							
Provision third-party asset restoration	232.2	9.2	5.4	-	(39.3)	-	207.5
Provision for closure and post-closure landfill expenses	179.0	5.6	13.2	(17.5)	2.3	-	182.6
Provision for personnel legal cases and disputes	14.5	3.1	-	(5.8)	(1.1)	-	10.7
Provisions for waste disposal	6.7	7.2	-	(6.4)	-	0.6	8.1
Provision for plants dismantling	5.9	-	0.1	-	-	-	6.0
Other provisions for risks and charges	99.9	28.0	-	(1.5)	(14.9)	1.6	113.1
Total	**538.2**	**53.1**	**18.7**	**(31.2)**	**(53.0)**	**2.2**	**528.0**
31 Dec 22							
Provision third-party asset restoration	207.5	6.3	4.1	-	-	-	217.9
Provision for closure and post-closure landfill expenses	182.6	6.0	8.0	(13.5)	3.2	-	186.3
Provision for personnel legal cases and disputes	10.7	2.4	-	(1.3)	(1.0)	0.1	10.9
Provisions for waste disposal	8.1	9.3	-	(7.6)	(0.1)	-	9.7
Provision for plants dismantling	6.0	-	0.1	-	-	-	6.1
Other provisions for risks and charges	113.1	44.0	-	(5.6)	(16.8)	-	134.7
Total	**528.0**	**68.0**	**12.2**	**(28.0)**	**(14.7)**	**0.1**	**565.6**

The "Provision for third-party asset restoration" includes provisions made in relation to law and contractual requirements for the Group companies as lessees of the distribution networks of the entity that owns the assets. The allocations are made on the basis of depreciation rates held to be representative of the remaining useful life of the assets in question in order to compensate the owner companies for the wear and tear of the assets used for business activities. The provision reflects the present value of these outlays which will be determined in future periods (usually on expiry of the agreements entered into with the area agencies, as far as the water service is concerned, and on expiry of the transitory period anticipated by current legislation as far as gas distribution is concerned). The increases in the provision comprise the sum total of the provisions for the year, including those discounted to present value, and the financial charges for the period associated with the cash flows discounted to present value.
The decrease in provisions compared to the previous year is mainly affected by the end of the extended management of the water service in the province of Rimini at 31 December 2021. The tender, which was also awarded to the Hera Group, stipulates that the assets are to remain under the management of the owner companies and are therefore not to be entrusted to the operator. The decrease in financial expenses compared to the previous period is determined by the annual update of the parameters used to reflect current market conditions (Wacc).

The "Provision for landfill closure and post-closure expenses" represents the amount set aside to cover the costs which will have to be incurred for the management of the closure and post-closure period pertaining to the landfills currently managed. The future outlays, calculated for each landfill by means of a specific appraisal, have been discounted to present value. The increases in the provision comprise the financial component derived from the discounting process and provisions due to changes in the assumptions about future outlays, following the change in expert estimates on closed landfills.

Financial expenses decreased compared to the previous year due to the different effects arising from the yearly update of the parameters used to reflect current market conditions (Wacc), as well as the revision of the assumptions on the timing of future disbursements. Uses represent actual disbursements that occurred during the year, while are "Other movements" mainly includes estimated closure and post-closure costs in relation to newly constructed landfills and the changes in the estimated closure and post-closure costs of active landfills, which entailed the recording of an adjustment of the same amount as the value of tangible assets (landfill asset), totalling 1.9 million euro for the year 2022.

The "Provision for legal cases and disputes brought by personnel" reflects the outcomes of lawsuits and disputes brought by employees.

"Provision for plants dismantling" includes the amounts allocated for the future dismantling of the plants for cases in which it is mandatory.

"Provision for waste disposal" reports the estimated costs of disposal of the waste already stored at the Group's plants. The provisions reflect the estimated costs of contributions for the year 2022 not yet processed at the end of the financial period, while the uses represent the costs incurred over the period for the processing of waste that was residual as at 31 December 2021.

"Other provisions for risks and charges" comprises provisions made against sundry risks. Below, there is a description of the main items:

Liabilities	Type	Amount (mn €)
The higher cost of the electricity used in the water service provision was not recognised, due to the volatility of the energy market, which resulted in price values for the period that were higher than the allowed maximum limit provided for by the tariff system.	Likely	18.5
The amount of the WTE and cogeneration plants' green certificates, calculated according to the difference between auxiliary services resulting from total self-consumption and services estimated on the basis of the benchmark percentage, was not recognised;	Likely	14.0
Outstanding bonds (guarantee on financial exposure given by AcegasApsAmga Spa) in case of abandonment of the operations run by the foreign subsidiary AresGas (Bulgaria).	Contingent	11.3
Risks arising from the activity of energy efficiency upgrading of buildings carried out on behalf of end customers, particularly apartment blocks	Likely	11.3
Reimbursement of a portion of the sewerage and purification tariffs for the water service	Likely	6.1
Potentially higher expenses that may be incurred in connection with extraordinary maintenance on the Ponte San Nicolò (Padua) landfill	Contingent	5.2
Potential litigations arising from the risk of disputes in relation to the gas distribution unit of the Veneto and Friuli Venezia-Giulia regions, which was sold at the end of 2019	Likely	3.5

The liabilities classified as contingent were recognised as part of the business combination in the year in which it occurred.

Provisions in this category, which amounted to 44 million euro, showed an increase compared to the previous year, mainly due to legislative and regulatory risks. The reduction of 16.8 million euro, classified as "Other movements" is mainly attributable to the following:

release of provisions recorded in previous years, valued in excess of the actual liability, in the amount of 10.9 million euro. These refer, in the amount of 6.5 million euro, to the approval of applications submitted in relation to the full recognition of electricity costs incurred in the water service sector for the year 2021, the full remuneration of which will be guaranteed by means of the tariff in subsequent years;

partial offsetting of the provision for risks set aside in previous years for the non-recognition of green certificates, in the amount of 4.7 million euro, with a similar amount of receivables recorded under current assets for certificates.

The "Change in the scope of consolidation" include the provisions of the companies acquired during 2022.

For detailed information on risk provisions for tax litigations, see note 12 "Taxes".

2.02.09 Operating working capital

	notes	31 Dec 22	31 Dec 21	Change
Inventories	32	995.1	368.0	627.1
Commercial receivables	33	3,875.0	2,918.0	957.0
Commercial payables	34	(3,093.1)	(2,356.6)	(736.5)
Current tax assets	13	46.0	21.2	24.8
Current tax liabilities	13	(17.1)	(27.9)	10.8
Other current assets	35	642.5	422.3	220.2
Other current liabilities	36	(1,720.0)	(1,435.6)	(284.4)
Operating working capital		**728.4**	**(90.6)**	**819.0**

Operating working capital consists of the same components as net working capital, as defined by the alternative performance indicators in Section 1.04 "Overview of operating and financial trends and definition of alternative performance measures," with the exception of current portions of assets and liabilities for commodity derivatives.
The change in the year 2022 with respect to the comparative period is mainly due to the increase in methane gas inventories, as detailed in Note 32 "Inventories".

32 Inventories

	31 Dec 22	31 Dec 21	Change
Gas stocks	468.6	58.9	409.7
Raw materials and stocks	57.6	50.5	7.1
Materials earmarked for sale and final products	19.5	6.7	12.8
Contract work in progress	449.4	251.9	197.5
Total	**995.1**	**368.0**	**627.1**

"Gas stocks" includes methane gas stocks held by the Group at the end of the period, which during the 2023 financial period will be used to supply gas to its customers. Change from the previous year was due to:

- the significant increase in wholesale raw material prices as compared to 2021, was most noticeable at the time of placing in storage.
- higher volumes in stock at the end of the period, which increased by 85% compared to 31 December 2021.

The book value of gas stocks is recoverable on the basis of gas sales made after the end of the financial period and forward sales contracts already signed by the Group at the date of the financial statements.

"Raw materials and stocks", already presented net of an associated obsolescence provision, mainly includes:

	31 Dec 22	31 Dec 21	Change
Spare materials and equipment	49.8	44.0	5.8
Plastic materials	7.4	6.5	0.9
Other fuels	0.4	-	0.4
Total	57.6	50.5	7.1

"Materials earmarked for sale and finished products", already shown net of the relevant provision for depreciation, mainly consists of:

	31 Dec 22	31 Dec 21	Change
Plastic products	12.2	5.8	6.4
Material for photovoltaic systems	6.7	0.6	6.1
Telecommunications equipment	0.6	0.3	0.3
Total	19.5	6.7	12.8

The change for the period is due to both the significant increase in the prices of virgin polymer for the manufacture of plastic products and the increased volume of operations of the photovoltaic business.

The item "Contract work in progress" includes long-term contracts for plant construction work, mainly in relation to the following businesses:

	31 Dec 22	31 Dec 21	Change
Energy services	384.9	199.1	185.8
Water services	27.3	21.3	6.0
Public lighting	23.7	23.4	0.3
Other minor items	13.5	8.1	5.4
Total	**449.4**	**251.9**	**197.5**

The change in the period is mainly related to the energy requalification of apartment buildings, especially apartment buildings, a business that has strongly increased in 2022 partly thanks to the Group's strategic choices aimed at combating climate change.

33 Commercial receivables

	31 Dec 22	31 Dec 21	Change
Receivables from customers	2,051.1	1,842.9	208.2
Provision for bad debts	(552.0)	(444.6)	(107.4)
Receivables from customers for bills and invoices not yet issued	2,375.9	1,519.7	856.2
Total	**3,875.0**	**2,918.0**	**957.0**

Trade receivables comprise estimated consumption, for the portion pertaining to the period, relating to bills and invoices which will be issued after 31 December 2022, as well as receivables for revenues coming due during the period, referring to the water sector which will be billed in the following period, in accordance with the billing methods for final customers established by the relevant Authority.
The increase from the previous year in the stock of receivables managed compared to the previous year was mainly due to:

- the increase in the market prices of gas and electricity commodities, which led to a corresponding increase in the value of both sales to end customers and brokerage transactions in wholesale markets carried out at the end of the financial year and which will financially settle in early 2023;
- the greater number of energy end-users served in the country following the allocation of the relevant supply tenders (as mentioned in sections 1.07.01 "Gas" and 1.07.02 "Electricity" of the Directors' Report).

The value of trade receivables reported in the financial statements at 31 December 2022 represents the Group's maximum exposure to credit risk. Changes in the provision for bad debts is as follows:

	Opening balance	Provisions	Changes in the scope of consolidation	Uses and other movements	Closing balance
2021 financial year	394.4	94.4	1.8	(46.0)	444.6
2022 financial year	444.6	133.9	1.8	(28.3)	552.0

The recording of the provision is made on the basis of analytical valuations in relation to specific receivables, supplemented by measurements made based on future-oriented analyses of the receivables regarding the general body of customers (in relation to the age of the receivables, the type of recovery action undertaken and the status of the debtor), as described in the section "Risk management" in paragraph 2.02.01 "Introduction". The change in the provision with respect to the previous year is mainly due to the markets of last resort, which experienced a significant increase in the number of customers and consequently in the volumes managed, in a scenario also characterised by high prices, which further increased the nominal value of the receivables managed. For traditional energy markets, the provision for the year 2022 was in line with the previous year, as the increase in exposure due to higher prices was more than offset by improved collection performance. In fact, the 24-month unpaid ratio of the Group's sales companies, calculated net of the markets of last resort for gas, decreased to 0.71%, compared to 0.85% in the previous year. Confirming the continuous trend of improvement over the last few years, the use of the provision fell sharply compared to the previous year.

Analysis of overdue receivables

The following table displays receivables for invoices issued relative to all customer clusters, organized by degree of past-due:

	31 Dec 22	Inc.%	31 Dec 21	Inc.%	Change
Not yet due	824.2	40%	772.3	42%	51.9
Due 0-30 days	179.5	9%	214.5	12%	(35.0)
Due 31-180 days	287.3	14%	145.0	8%	142.3
Due 181-360 days	151.2	7%	98.8	5%	52.4
Due beyond 360 days	608.9	30%	612.3	33%	(3.4)
Total	**2,051.1**		**1,842.9**		**208.2**

34 Commercial payables

	31 Dec 22	31 Dec 21	Change
Payables to suppliers	890.3	741.2	149.1
Payables to suppliers for invoices not yet received	2,202.8	1,615.4	587.4
Total	**3,093.1**	**2,356.6**	**736.5**

The change of commercial payables compared to the previous year is mainly due to:

- the increase of gas and electricity wholesale prices, which led to an increase in the purchase costs of raw materials with a resulting higher liability towards suppliers;
- the increase in the volume of energy efficiency upgrading of buildings carried out on behalf of end customers, particularly apartment buildings, which led to a subsequent increase in payables to suppliers and professionals carrying out the works.

35 Other current assets

	31 Dec 22	31 Dec 21	Change
Fund for energy and waste management services for equalisation and continuity income	119.6	49.9	69.7
VAT, excise and additional taxes	86.6	47.6	39.0
Tax credits and benefits	79.8	20.2	59.6
Receivables from electricity and gas sector companies	76.1	-	76.1
Advances to suppliers	76.1	42.7	33.4
Security deposits	59.8	121.0	(61.2)
Energy efficiency bonds and emissions trading	40.9	46.9	(6.0)
Pre-paid costs	29.5	26.5	3.0
Incentives from renewable sources	10.6	23.4	(12.8)
Other receivables	63.5	44.1	19.4
Total	**642.5**	**422.3**	**220.2**

"Fund for energy and waste management services for equalisation and continuity income" comprises 36.3 million euro of equalisation credit (27.7 million euro at 31 December 2021) and 83.3 million euro of continuity income (22.2 million euro at 31 December 2021).
Continuity income increased by 61.1 million euro compared to the previous year mainly due to two effects:

- on the one hand, the measures introduced by the government in autumn 2021, aimed at containing energy tariffs, provided for both the cancellation of most system charges and the extension of social gas and electricity bonuses. The application of these tariff reduction measures (as indicated in the regulatory context in paragraph 1.01.01 of the Directors' Report), which were not imposed on market operators, resulted in a significant receivable from the Fund for energy and waste management services. This credit exposure, which increased sharply compared to the previous year, was subject to operations to optimise collection times, but still generated a net increase of 28.5 million euro;
- on the other hand, the recognition on the basis of Resolution 44/2022 issued by ARERA for the costs incurred for default gas and last resort supply services for the year 2022 resulted in a change of 27 million euro compared to the previous year, bringing the value of the receivable to be collected for the recognition of costs incurred for operating on these markets to a total of 34.5 million euro at 31 December 2022.

Equalisation credit increased by 8.6 million euro compared to the previous year, with a diversified dynamic in the various regulated sectors, particularly as a result of the trend in volumes distributed in the gas business.

"VAT, excise and additional taxes" includes payables for VAT in the amount of 18 million euro (6.1 million euros at 31 December 2021), and excise and additional taxes in the amount of 68.6 million euro (41.5 million euro at 31 December 2021). With regard to excise duties and additional taxes, the procedures governing the financial relations with the tax authorities should be taken into account: as a matter of fact, advance payments made during the year are calculated on the basis of the quantities of gas and electricity billed in the previous year, while the actual debt is generated on the basis of the volumes sold in the period. These methods can generate credit or debit positions with differences that may be significant even between one period and another.
The change as compared to 31 December 2021 is attributable to a decrease of 11.9 million euro in receivables for value added tax and an increase of 27.1 million euro in receivables for excise and additional taxes. For a better understanding of the Group's net exposure to value added tax, please refer to the commentary in Note 36 "Other current liabilities". The increase in receivables for excise duties and additional taxes, on the other hand, is mainly due to the lower volumes of gas sold in the 2022 financial year compared to the previous period to customers on the free and safeguarded market in the north-eastern area, due to the milder climate and energy-saving behaviour adopted by users to cope with the high cost of energy.

"Tax credits and benefits" mainly include:

- tax credits arising from the application of the invoice discount to end customers, stated at their market value, in relation to subsidised energy efficiency measures, amounting to 44.1 million euro. These measures are mainly related to building renovation activities on apartment buildings;
- credits arising from the Government's regulatory measures in relation to electricity and gas costs for electricity and gas-consuming companies, which will be used as offsets in the 2023 financial year, as provided for by current tax regulations, amounting to approximately 23 million euro;
- credits for investments in capital goods, including those related to Industry 4.0, totalling 5.8 million euro, which will be used to offset taxes and contributions in subsequent years on the basis of the annual limits provided for.

"Receivables from electricity and gas sector companies" mainly include receivables from the distribution companies As a result of the same dynamics set forth above in the commentary on continuity income, these positions were generated especially at 31 December 2022 as a result of the crediting to end customers, carried out by the distribution companies through the sales companies, of the social bonuses envisaged by the measures introduced by the Government as from autumn 2021 (subsequently enhanced both in terms of value and beneficiary population) and of the Ug2c component, which is negative, introduced since 1 April 2022. For these reasons, the value of the credited items exceeded the debiting of the distribution fees, resulting in a reversal of the typical commercial balance.

In the item "Advances to suppliers", the increase compared to the previous year is mainly due to the increase in the volume of energy efficiency work in buildings on behalf of customers, mainly apartment blocks, and the subsequent requests from the Group's partner suppliers in carrying out the work.

"Security deposits" mainly includes deposits provided as security for participation in foreign platforms that deal in commodity contracts, auctions on the electricity market, and to secure transactions on wholesale markets for electricity and natural gas, totalling 49.3 million euro; The decrease compared to the previous year is due to lower operations carried out in the period, especially on the Eex platform, as a result of the Group's decision to shift to other forms of exchange contracts, also due to the volatility of commodity prices.

"Energy efficiency bonds and emissions trading", includes the following:

	31 Dec 22	31 Dec 21	Change
Grey certificate.	20.8	14.4	6.4
White certificates	15.0	22.7	(7.7)
Green certificates	5.1	9.8	(4.7)
Total	**40.9**	**46.9**	**(6.0)**

The portfolio of grey certificates reflects the valuation of both securities held by the Group for 10.1 million euro (7.4 million euro at 31 December 2021) and the exposure for forward contracts to buy and sell greenhouse gas emission allowances for 10.7 million euro (7 million euro at 31 December 2021). The increase as compared to 2021 is mainly due to a volume effect, the market price being substantially in line with the previous period.

- The portfolio of white certificates includes the valuation of both securities calculated on the basis of the energy efficiency targets set by the GSE for gas and electricity distribution companies, net of disposals that occurred in the period, for 13.1 million euro (20.8 million euro at 31 December 2021), and securities originating from energy efficiency measures implemented by the Group for 1.9 million euro (in line with the previous year). The decrease, with substantially the same valuation of the contribution compared to the previous year and with higher allocated targets for the obligation year 2022 compared to the obligation year 2021, is mainly due to both different ways of fulfilling obligations highlighted in the 2022 financial year and to the higher quantity of disposals.
- At 31 December 2022, the green certificate portfolio included securities recognised on an accrual basis prior to 2016 in relation to the electricity production of the waste-to-energy plant in Ferrara. These securities are the subject of a complaint by the GSE concerning the methodology for calculating the self-consumption of auxiliary services. In the course of 2022, positions amounting to 4.7 million euro concerning other plants affected by a similar calculation method were closed, as they

were deemed to be definitively non-collectable. For the partial closure of the portfolio, the relevant risk provision, which had already been set aside in previous years, was compensated by an equal amount, as explained in Note 31 "Provisions for risks and charges".

"Prepaid costs" mainly comprise future accruals in respect of:

	31 Dec 22	31 Dec 21	Change
Outsourced services and processing	14.6	13.7	0.9
Insurance, bank sureties and commissions	5.0	4.3	0.7
Rents payables and concession fees for network services	2.7	2.3	0.4
Other minor items	7.2	6.2	1.0
Total	**29.5**	**26.5**	**3.0**

"Incentives from renewable sources" consists of receivables from the GSE for the new incentive mechanism to promote the production of electricity from renewable sources. Incentives for the period decreased sharply compared to the 2021 financial year, as the price of incentives (Grin) was reduced, which is inversely proportional to the previous year's national electricity price (Pun).

The item "Other receivables" includes:

	31 Dec 22	31 Dec 21	Change
Extraordinary contributions	22.6	-	22.6
Water leakage provision receivables	6.2	10.6	(4.4)
Receivables from asset companies	6.0	5.7	0.3
Other minor items	28.7	27.8	0.9
Total	**63.5**	**44.1**	**19.4**

- Extraordinary subsidies include the amount certain Group companies paid, yet deemed not due, during the year 2022 in respect of the "Extraordinary extra-profits subsidy", established for the year 2022 by Article 37 of Legislative Decree no. 21/2022. These amounts were paid to the State Treasury on the due dates, despite significant doubts as to their application, in order to avoid penalties and interest. The subsequent 2023 Budget Law, which in paragraphs 120 and 121 of Article 1 changed the subjective scope and the taxable base of the contribution for the year 2022, made it possible to exclude one Group company from the scope of application, however failed to clear the application doubts in respect of a second impacted company. In both cases, the Group filed for reimbursement, thus recording the amount paid under other current assets;
- receivables for water leakage provisions includes amounts charged and not yet collected from users for insurance in case of leaks;
- Receivables from asset companies include receivables from companies that own the networks and from related assets used by the Group to provide utility services.

36 Other current liabilities

	31 Dec 22	31 Dec 21	Change
Payables for advances to the fund for energy and waste management services	441.8	336.9	104.9
Security deposits from customers	383.3	129.8	253.5
Plant investment grants	239.5	228.7	10.8
Advances for works	106.7	50.4	56.3
Fund for energy and waste management service components and equalisation	99.5	85.8	13.7
VAT, excise and additional taxes	83.0	155.0	(72.0)
Personnel and employee withholding	82.8	81.7	1.1
Payables to social security institutions	69.4	63.6	5.8
Energy efficiency bonds and emissions trading liabilities	51.6	49.2	2.4
Receivables from electricity and gas sector companies	34.7	-	34.7
Prepaid revenues and other expenses	32.4	167.6	(135.2)
Other payables	95.3	86.9	8.4
Total	**1,720.0**	**1,435.6**	**284.4**

“Payables for advances to the Fund for energy and waste management services” comprises non-interest-bearing advances granted by the Fund for energy and waste management services, as follows:

- 243.3 million euro (233.4 million euro at 31 December 2021) for advances in compliance with the integration mechanism set forth by resolution 370/2012/R/Eel and 456/2013/R/Eel by ARERA, for overdue and unpaid receivables from customers managed under a safeguard regime. The latest reports concern the years 2009-2020;
- 182.2 million euro (90 million euro at 31 December 2021) in compliance with the integration mechanism set forth in Law 239 of 23 August 2004 and by ARERA’s Tivg , for the charges for delinquency of services of last resort in the natural gas sector (Fui, Ftf and Fdd) until the 2019-2021 thermic years;
- 12.9 million (11.8 million euro at 31 December 2021) in compliance with Resolution 32/2021/R/Eel (former Resolution 445/2020/R/Eel), relating to the procedures for accessing the reimbursement mechanism for general system charges not collected from end customers and already paid to distribution companies for 2016-2020. The scope is restricted to the sale of electricity on the free market, the Safeguard market (disconnectable) and the gradual protection service (disconnectable).

“Security deposits from customers” reflect the amounts requested from customers for gas, water and electricity provision contracts. The significant increase for the period is mainly due to:

- the award of six lots of the gas last resort service and a further nine lots of the gas distribution default service for the period 1 October 2021 - 30 September 2023;
- the award of four lots of the Consip EE19 tender for the supply of electricity to public administrations in 2022;
- the increase in commodity prices that occurred during the period, which was reflected in a higher value of security deposits charged to customers.

"Plant investment grants" decreases in proportion to the amount of depreciation calculated on the fixed assets in question and increases as a result of new investments subject to grants. The item includes specifically, the following grants received by the Group:

	31 Dec 22	31 Dec 21	Change
New water system investment fund;	87.1	73.0	14.1
Purification plant in Servola (Trieste)	33.0	36.0	(3.0)
Purification and sewarage systems	32.0	33.2	(1.2)
Construction of rolling basins e underwater pipes in the area of Rimini.	20.6	21.5	(0.9)
Other minor items	66.8	65.0	1.8
Total	**239.5**	**228.7**	**10.8**

"Advances for works" includes advances received from municipalities and apartment buildings for works in progress relating to public lighting and energy efficiency upgrades of private buildings, respectively, which will be completed in the following years. The significant increase is in line with the increase in energy efficiency work carried out by the Group, as reported in Note 1 "Revenues".

"Fund for energy and waste management service components and equalisation", reflects the liabilities for the Fund for energy and waste management services mainly due to some system components of the gas, water and electricity service for 84.1 million euro (84.8 million euro at 31 December 2021) and equalization of the electricity service for 15.4 million euro (1 million euro at 31 December 2021).

"VAT, excise and additional taxes" includes payables for VAT in the amount of 0.9 million euro (78.9 million euro at 31 December 2021), and excise and additional taxes in the amount of 82.1 million euro (76.1 million euro at 31 December 2021). As outlined in Note 35, "Other current assets", this increase must be understood taking into account the factors that regulate financial relations with the Inland Revenue Office, which can generate credit/debit positions with differences that can be significant even between one financial period and another.
With regard to value-added tax, the decrease in the year was mainly related to the payment of the advance concerning the Group VAT for 90.3 million euro at the end of the financial period, which resulted in a credit balance as at 31 December, whereas last year, in application of the historical method, the advance had not been paid. The payment of the advance depended on the dynamics of the turnover issued, in particular relating to the greater volumes on the markets for last resort gas services and the trend in energy commodity prices, which increased the taxable base, even in the presence of a reduction in the rate to 5% for the supply of methane gas for residential and industrial use, which only partially mitigated the volumetric effect.
With regard to excise and additional taxes, the advance payment in 2022 was made, as required by the regulations in force, on the basis of the volumes invoiced in the previous year. However, the accrued liability was generated on the basis of the volumes invoiced in the year 2022 which were higher than in the year 2021.

"Personnel and employee withholding" includes for the most part the vacation time accrued and not used, as well as the productivity bonuses accounted for by department, plus withholding taxes to be paid to the State treasury as tax substitute for employees.

"Payables to social security institutions" relates to contributions owed to these institutions for the December salaries, performance bonuses and additional monthly payments under national collective agreements.

"Energy efficiency bonds and emissions trading", includes:

	31 Dec 22	31 Dec 21	Change
Grey certificate.	22.5	17.2	5.3
White certificates	17.9	26.7	(8.8)
Guarantee of origin certificates	11.2	5.3	5.9
Total	**51.6**	**49.2**	**2.4**

Grey certificates reflect the valuation of both the forward sale and purchase contracts of greenhouse gas emission allowances in the amount of 11.8 million euro (6.6 euro million at 31 December 2021) and the obligation to redeliver certificates calculated on the basis of current regulations in the amount of 10.7 million euro(10.6 million euro at 31 December 2021). The change compared to the previous year is due to higher volumes of forward contracts, while market prices were largely unchanged.
White certificates include, beginning in the 2021 financial year, the valuation of exposure with respect to obligations to return energy efficiency certificates not yet in the portfolio to the relevant authorities. The change as compared to 31 December 2021 is mainly due to the decrease in certificates not yet cancelled in respect of the years for which the Group has not yet fully complied with the allocated accrual obligation.
Guarantee of origin (GO) certificates concern certification obligations for electricity produced from renewable energy sources for sales made to customers with this type of supply. The increase in the liability is due to the increase in the market price over the course of 2022.

"Receivables from electricity and gas sector companies" mainly include receivables entered by the Group's distribution companies against third-party sales companies These positions were generated at 31 December 2022 as a result of the measures against high energy prices, as illustrated in Note 35 "Other current assets" in the item "Receivables from electricity and gas companies".

The item "Anticipated revenues and other expenses" comprises portions of revenues already invoiced falling due in the following financial period. The item specifically comprises for 9 million euro (146.8 million euro at 31 December 2021) invoices issued at the end of 2021 for energy efficiency operations benefiting from tax incentives for which the work will be completed in the 2023 financial year.
The item "other payables" mainly comprises the following:

	31 Dec 22	31 Dec 21	Change
Tariff concessions to users	11.5	12.8	(1.3)
Environmental damage contributions	11.3	11.4	(0.1)
Insurance deductibles	9.8	12.2	(2.4)
Delinquency payments for electricity gas and other sectors	9.5	5.9	3.6
Other minor items	53.2	44.6	8.6
Total	**95.3**	**86.9**	**8.4**

Specifically:

- environmental damage contributions represent the payments to be made to municipalities, on the basis of specific agreements, as compensation for activities that impact on the environment for waste delivered to plants in their municipal territories. The amount of these contributions is related to the amount of waste disposed of annually;
- insurance deductibles include amounts that the Group must repay directly to damaged third parties or insurance companies;
- delinquency payables in the electricity, gas and other sectors mainly represent the amounts, charged to end users, to be retroceded as compensation to previous suppliers who were in arrears for the last three monthly payments, prior to their transition to the Hera Group. This indemnity is applied only to certain specific categories of users, identified by ARERA Resolution no. 593/2017/R and its subsequent amendments and additions.
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37 Cash flows of operating activities

Changes in net working capital

The following is a breakdown of information on changes in financial liabilities during the 2022 financial year, differentiating between cash flows and non-cash flows.

Type	31 Dec 22	31 Dec 21	Change (a)	Non-cash flows				Cash flows (f)=[(b)+(c)+(d)+(e)]-(a)
				Acquisitions divestitures (b)	Economic valuation components (c)	Changes in fair value (d)	Other changes (e)	
Inventories	995.1	368.0	627.1	0.1	0.2		(0.6)	(627.4)
Commercial receivables	3,875.0	2,918.0	957.0	13.6	(133.5)	11.0	(214.8)	(1,280.7)
Commercial payables	(3,093.1)	(2,356.6)	(736.5)	(8.8)			0.1	727.8
Other current assets/liabilities	(1,077.5)	(1,013.3)	(64.2)	(2.0)	13.7	(4.8)	181.6	252.7
Changes in working capital	**699.5**	**(83.9)**	**783.4**	**2.9**	**(119.6)**	**6.2**	**(33.7)**	**(927.6)**

"Acquisitions and divestitures" includes the effects of the acquisitions of control carried out during 2022, as illustrated in detail in the section "Business Combinations (supplementary information)" of paragraph 2.02.10 "Other information".

"Economic valuation components" mainly includes:

- the provision for bad debts for a negative 133.9 million euro, as illustrated in Note 33 "Commercial receivables";
- the portions pertaining to the period of plan related grants, the total amount of which was collected in previous years, totalling a positive amount of 12.8 million euro, as stated in Note 2 "Other operating revenues".

"Changes in fair value" includes:

- the valuation at current market value of receivables resulting from the application of the invoice discount in connection with energy efficiency measures for end customers, held for to be transferred to financial institutions, for a positive 11 million euro; For further details on the Group's accounting policy, please see Note 11 "Financial expenses"
- the valuation of environmental certificates and greenhouse gas emission obligations assigned to the Group, as well as the valuation of forward contracts for the purchase and sale of greenhouse gas emission allowances, for a total negative 4.8 million euro, as illustrated in Note 35 "Other current assets" and 36 "Other current liabilities".

"Other changes" mainly comprises offsets within net working capital of transactions involving the gross recognition of assets and liabilities. It should also be noted, as already indicated in Note 20 "Cash Flows from financing activities", the reclassification of non-monetary flows related to the transfer of tax credits arising from the application of the invoice discount for energy efficiency measures, in the amount of 46.3 million euro.

Dividends collected

In 2022, dividends for 9.4 million euro were received from companies consolidated according to the equity method and 4 million euro from shareholdings held in other companies. For further details, please see note 10 "Financial income" and 26 "Shareholdings".

Net interest paid

The following is a reconciliation of the balance sheet values of financial income and expenses and the related net cash flows for the year.

Type	2022 (a)	Non-cash components		Other changes (d)	Cash components (e)=(a)-[(b)+(c)+(d)]
		Economic valuation components (b)	Changes in fair value (c)		
Financial income	82.2	4.7	25.0	10.7	41.8
Financial expenses	(217.2)	(63.0)	(6.9)	(19.3)	(128.0)
Total	**(135.0)**	**(58.3)**	**18.1**	**(8.6)**	**(86.2)**

"Economic valuation components" includes income and expenses arising from both the measurement at amortised cost and the discounting of receivables and liabilities characterised by monetary outlays to be carries out in the medium- to long-term period, as illustrated in Note 10 "Financial income" and Note 11 "Financial expenses".

"Changes in fair value" includes measurements at current market value of financial assets and liabilities, mainly relating to:

- receivables arising from the application of the invoice discount in relation to energy efficiency measures for end customers for a positive 11.2 million euro. For further details on the Group's accounting policy, please see Note 11 "Financial expenses";
- fair value valuation of put options and contingent consideration for a total net effect of a positive 7 million euro.

"Other change" mainly includes:

- interest cash flows recognised on an accrual basis and not yet paid at 31 December 2022;
- the components of income collected and expenses paid during the year, with the associated cash flows reported in specific items of the cash flow statement, mainly related to dividends dividends paid by other minor holdings.

Taxes paid

The breakdown of flows by tax type is as follows:

	31 Dec 22	31 Dec 21
Income taxes	131.9	148.2
Extraordinary contributions	24.9	-
Substitute tax	9.1	9.2
IRES refund	-	(1.1)
Taxes paid	**165.9**	**156.3**

Income taxes include the amount paid by the Group during the year 2022 in relation to the 2021 IRES and IRAP balances and the advance payments due for the year 2022.

Extraordinary contributions represent the amount paid during the 2022 financial year in relation to the "Extraordinary extra-profit contribution". For further details see Notes 12 "Taxes" and 35 "Other current assets".

The substitute tax includes, at 31 December 2022, the amount paid in relation to the exemption of controlling interests in connection with the acquisitions of Eco Gas Srl and Vallortigara Servizi Ambientali Spa. At 31 December 2021, the item included the amount paid in relation to the tax realignment regulation for goodwill, as outlined in note 12 "Taxes".

02.02.10 Other information

Business combinations (supplementary information)

Business combinations have been accounted for on the basis of assessments conducted by management in respect of analyses of the fair value of assets and liabilities and contingent liabilities, in line with information concerning facts and events available at the date of acquisition. The evaluation process of all operations ended on 31 December 2022.

The table below shows the assets and liabilities acquired as part of business combinations carried out during the year, recognised at their fair value.

	Alibardi Fiorenzo Srl	Con Energia Spa	Macero Maceratese Srl	"Bfeng" branch	"Nonantola" branch	Total business combinations
Non-current assets						
Tangible assets	0.1		5.7		7.5	13.3
Rights of use		0.3	1.7			2.0
Intangible assets		34.4	10.1	12.0		56.5
Shareholdings			0.1			0.1
Financial assets			0.1			0.1
Deferred tax assets		0.4	0.2			0.6
Current assets						
Inventory and work in progress			0.1			0.1
Commercial receivables	0.3	7.3	6.0			13.6
Financial assets		2.2				2.2
Current tax assets		0.1				0.1
Other current assets	0.2	0.4	1.6			2.2
Cash holdings		4.2	0.2			4.4
Non-current liabilities						
Financial liabilities			(1.5)		(4.4)	(5.9)
Lease liabilities		(0.3)	(1.1)			(1.4)
Post-employment		(0.1)	(0.4)			(0.5)
Provisions for risks and charges			(0.1)			(0.1)
Deferred tax liabilities		(9.9)	(3.4)			(13,.3)
Current liabilities						
Financial liabilities			(1.9)			(1.9)
Lease liabilities			(0.5)			(0.5)
Commercial payables	(0.1)	(5.9)	(2.8)			(8.8)
Current tax liabilities		(0.1)	(0.2)			(0.3)
Other current liabilities	(0.1)	(3.0)	(1.0)		(0.1)	(4.2)
Total net assets acquired	**0.4**	**30.0**	**12.9**	**12.0**	**3.0**	**58.3**
Equivalent fair value	1.4	30.0	11.1	12.0		54.5
Minority shareholders' put option			6.0		3.0	9.0
Total value of the combination	**1.4**	**30.0**	**17.1**	**12.0**	**3.0**	**63.5**

(Goodwill) / Profit	**(1.0)**	**-**	**(4.2)**	**-**	**-**	**(5.2)**

The evaluation process resulted in the following adjustments to the carrying amounts recorded in the financial statement of the acquired entity, as well as the following considerations in relation to the amount transferred:

	Alibardi Fiorenzo Srl	Con Energia Spa	Macero Maceratese Srl	"Bfeng" branch	"Nonantola" branch	Total business combinations
Book value of net assets acquired	**0.4**	**6.7**	**5.7**	**12.0**	**3.0**	**27.8**
Adjustments for fair value valuation						
Tangible assets			0.6			0.6
Intangible assets		34.3	10.0			44.3
Commercial receivables		(1.5)				(1.5)
Deferred tax assets (liabilities)		(9.5)	(3.4)			(12.9)
Fair value of net assets acquired	**0.4**	**30.0**	**12.9**	**12.0**	**3.0**	**58.3**
Cash outlay	1.4	30.0	10.0	12.0		53.4
Deferred/contingent consideration			1.1			1.1
Equivalent fair value	**1.4**	**30.0**	**11.1**	**12.0**	**-**	**54.5**

Adjustments for fair value valuation

The managements' evaluation of the fair value of the identifiable assets acquired and liabilities incurred, which also considered the recoverable value of the assets, led to the following amendments being identified:

- Con Energia Srl – a customer list of 34.3 million euro was recorded, with an estimated useful life of 15 years calculated on the basis of the estimated churn rate of the acquired customers. In addition, the allowance for bad debts was adjusted by 1.5 million euro to adjust the commercial receivables acquired to their recoverable value based on the valuation methods used by the Hera Group.
- Macero Maceratese Srl – customer list of 10 million euro was recorded, established on the basis of both the characteristics of the reference context and using the incremental cash flow method (Meem). The depreciation period, equal to 18 years, was determined on the basis of the churn rate established by analysing the historical series of the turnover of the major clients. Additionally, an increase in the value of the building owned by the company for 0.6 million euro was recorded;

The effects reported above resulted, where applicable, in the recognition of deferred tax liabilities determined on the basis of the applicable nominal tax rate.

With reference to the acquisition of Macero Maceratese Srl, it should be noted that a cross option to buy and sell the outstanding shareholding was negotiated with the counterparty, while in the acquisition of the "Nonantola" branch a put option that benefits the counterparty was negotiated. The existence of such rights held by the minority shareholders led to the need to classify the options in the consolidated financial statements under financial liabilities, as illustrated in Note 19 "Financial liabilities". In accordance with its own accounting policies, the Group did not include the minority shares in the consolidated financial statements, considering the shareholding to be fully owned. The valuation of the options identified at the time of acquisition, therefore, totalled 9 million euro.

In relation to the acquisition of the Bfeng business unit – a right of use, in force until 2043, was recognised in the financial statements of the purchaser Hera Spa concerning the operation, ordinary and extraordinary maintenance of an electro-thermofrigorific power plant located in the municipality of Bologna, amounting to 12 million euro.

Please see note 28 "Cashflows from investing activities" for an analysis of the cash flows associated with the combination operations described above.

Changes to the accounting standards

Accounting standards, amendments and interpretations applicable from 1 January 2022

Beginning 1 January 2022, the following accounting standards and associated amendments as issued by the IASB and endorsed by the European Union apply:

Amendments to IFRS 3 – Reference to the Conceptual Framework. Document issued by IASB on 14 May 2020, applicable from 1 January 2022 with early application allowed. The amendments require entities to refer to the Conceptual Framework published in March 2018 and not the one in force when IFRS3 was introduced. It also introduces an exception to the use of the Conceptual Framework for certain types of liabilities, requiring to refer to IAS 37 when applying IFRS 3. Without this exception, an entity might recognise liabilities in gaining control of a business that it would not otherwise recognise, and immediately after the acquisition it would have to derecognise those liabilities by recording income that has no economic substance.

Amendments to IAS 16 – Selling items produced while bringing an asset into the location and condition for its intended use. Document issued by IASB on 14 May 2020, applicable from 1 January 2022 with early application allowed. This amendment prohibits deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced before that asset is in the location and condition necessary for it to be capable of operating in the manner intended by management. The entity must recognise the proceeds from selling such items, and the cost of producing those items, in profit or loss for the period.

Amendments to IAS 37 – Onerous Contracts: cost of fulfilling a contract. Document issued by IASB on 14 May 2020, applicable from 1 January 2022 with early application allowed. The changes specify that the cost of fulfilling a contract must comprise all the costs that relate directly to the contract. Accordingly, the valuation includes not only incremental costs (such as the cost of material used in the processing), but also all costs that the company cannot avoid because it entered into the contract (such as the share of personnel costs and depreciation of machinery used to fulfil the contract).

On 14 May 2020 the IASB published the document "Improvements to the International Financial Reporting Standard: 2018-2020 Cycle". These improvements include amendments to existing international accounting standards, including:

- **IFRS 1** - First adoption of International Financial Reporting Standards. The improvement allows a subsidiary to measure cumulative exchange differences for all foreign currency transactions using the amounts that were recognised in the consolidated financial statements, based on the parent company's date of first adoption;
- **IFRS 9** - Financial Instruments. It specifies that the only fees to be taken into account for the purposes of the 10% test for derecognising a financial liability are those exchanged between the entity and the lender;
- **IFRS 16** - Leases**.** The improvement revises the illustrative example number 13, excluding the reimbursement of costs incurred to improve third-party assets, in order not to cause confusion on how to apply incentives on contracts.

With reference to the application of these amendments, there were no observable effects on the Group's financial statements.

Accounting standards, amendments and interpretations endorsed by the European Union which are not yet applicable and have not been adopted early by the Group.

With reference to the areas that are significant for the Group, the following accounting standard amendments will be mandatory from the following financial year onwards, having also already been endorsed by the EU:

Amendments to IAS 1 - Disclosure of financial statements and accounting policies. Document issued by IASB on 12 February 2021, applicable from 1 January 2023 with early application allowed. The amendments require entities to disclose their material accounting policies rather than their significant accounting policies and provide guidance to explain the application of the materiality process.

Amendments to IAS 8 - Accounting Policies, Changes in Accounting Estimates and Errors. Document issued by IASB on 12 February 2021, applicable from 1 January 2023 with early application allowed. The amendments additionally clarify that companies should distinguish between changes to accounting policies and changes to accounting estimates.

Amendments to IAS 12 - Deferred taxes related to assets and liabilities arising from a single transaction. Document issued by IASB on 7 May 2021, applicable from 1 January 2023 with early application allowed. The amendments clarify how companies should account for deferred tax on transactions such as leases and contracts with decommissioning obligations that may generate assets and liabilities of equal amounts, for which the exemption for reporting deferred taxation does not apply when assets and liabilities are recognised for the first time. The amendments aim at reducing the differences in deferred tax reporting between different types of contracts.

These amendments clarify, correct or remove redundant statements or formulations in the text of the relevant standards.

The directors are currently assessing possible effects deriving from the introduction of these amendments into the Group's consolidated financial statement.

Accounting standards, amendments and interpretations that have not yet been endorsed by the European Union

The following standards, amendments and updates of IFRSs (already approved by IASB) and interpretations (already approved by IFRS IC) that are relevant for the Group are currently being endorsed by the relevant bodies of the European Union:

Amendments to IAS 1 - Presentation of financial statements: reporting liabilities as current or non-current. Document issued by IASB on 23 January 2020 and updated on 15 July 2020, applicable from 1 January 2024 with early application allowed. The amendments clarify the requirements to be considered in determining whether payables and other liabilities with uncertain settlement date should be classified as current or non-current in the statement of financial position (including payables that can be settled by conversion into equity instruments).

Amendments to IFRS 16 - Lease Liabilities in a Sale and Leaseback Transaction. Document issued by IASB on 2 September 2022, applicable from 1 January 2024 with early application allowed. The amendments provide that in the valuation of lease liabilities in a sale and leaseback transaction, the seller-lessee shall determine the lease payments in such a way as not to recognise any amount of gain or loss related to the right of use retained by the lessee.

Amendments to IAS 1 - Presentation of financial statements: non-current liabilities subject to covenant. Document issued by IASB on 31 October 2022, applicable from 1 January 2024 with early application allowed. The amendments aim to improve the information disclosed by an entity when the right to defer settlement of a liability is subject to compliance with covenants within 12 months after the reporting period.

With reference to the new amendments described above, the directors are currently evaluating what possible effects introducing them might have on the Group's consolidated financial statements.

Classification of financial assets and liabilities pursuant to IFRS 7

The table below illustrates the composition of the Group's assets, using the current and non-current distinction. The fair value of other investments and derivative financial instruments is discussed in Notes 26 and 29, respectively.

31 Dec 22	Hierarchy fair Value	Fair value to income statement	Fair value to statement of comprehensive income	Depreciated cost	Total
Non-current financial assets	2		2.0	149.8	151.8
Non-current assets		**-**	**2.0**	**149.8**	**151.8**
Commercial receivables	3		168.6	3,706.4	3,875.0
Current financial assets				77.7	77.7
Other assets	2	22.6	8.3	657.6	688.5
Current assets		**22.6**	**176.9**	**4,441.70**	**4,641.2**

31 Dec 21	Hierarchy fair Value	Fair value to income statement	Fair value to statement of comprehensive income	Depreciated cost	Total
Non-current financial assets	2		1.9	140.8	142.7
Non-current assets		**-**	**1.9**	**140.8**	**142.7**
Commercial receivables	3		198.0	2,720.0	2,918.0
Current financial assets	2			29.3	29.3
Other assets	2	26.1		417.4	443.5
Current assets		**26.1**	**198.0**	**3,166.7**	**3,390.8**

With respect to "Non-current financial assets" reference should be made to Note 18.
With respect to "Current assets" reference should be made to Notes 13, 18, 33 and 35.

The table below illustrates the composition of the Group's liabilities, using the current and non-current distinction. Details of the fair value of derivatives are provided instead in Note 29.

31 Dec 22	Hierarchy fair Value	Fair value to income statement	Hedged elements (fair value hedge)	Cost Depreciated	Total
Non-current financial liabilities	2/3	499.5	144.4	5,046.0	5,689.9
Non-current lease liabilities				55.1	55.1
Non-current liabilities		**499.5**	**144.4**	**5,101.1**	**5,745.0**
Commercial payables				3,093.1	3,093.1
Current financial liabilities	3	13.9		636.2	650.1
Current lease liabilities				21.3	21.3
Other liabilities	2	33.7		1,703.4	1,737.1
Current liabilities		**47.6**	**-**	**5,454.0**	**5,501.6**

31 Dec 21	Hierarchy fair Value	Fair value to income statement	Hedged elements (fair value hedge)	Cost Depreciated	Total
Non-current financial liabilities	2/3	590.8	143.7	2,981.5	3,716.0
Non-current lease liabilities				53.2	53.2
Non-current liabilities		**590.8**	**143.7**	**3,034.7**	**3,769.2**
Commercial payables				2,356.6	2,356.6
Current financial liabilities	3	1.6		498.1	499.7
Current lease liabilities				43.4	43.4
Other liabilities	2	22.5		1,441.0	1,463.5
Current liabilities		**24.1**	**-**	**4,339.1**	**4,363.2**

With regard to "Non-current financial liabilities", the fair value hierarchy for hedged items is Level 2, while for items measured at fair value through profit or loss it is Level 3.
With respect to "Non-current liabilities" reference is made to Notes 19 and 22.
With respect to "Non-current liabilities" reference is made to Notes 13, 19, 22, 34 and 36.

Reporting by operational sector

Reporting by operational sectors is based on the approach management uses to monitor the performance of the Group by homogeneous business areas. The net costs and assests for business support functions, in keeping with the internal control model, are entirely associated to operational businesses.

At 31 December 2022, the Hera Group was organized into the following business lines:

- **Gas:** includes the costs of distributing and selling methane gas as well as district heating and energy services;
- **Electricity:** includes the costs of producing, distributing and selling electricity;
- **Water Cycle:** includes aqueduct, purification and sewage services;
- **Waste management:** includes waste collection, treatment, recycling and disposal services;
- **Other services:** includes public lighting, telecommunications and other minor services.

The following are assets and liabilities by business line for the 2021 and 2022 financial years:

31 Dec 22	Gas	Electricity	Water cycle	Waste management	Other services	Total
Current year						
Assets (tangible and intangible)	2,038.8	655.4	2,320.2	1,348.5	123.1	6,486.0
Goodwill	493.5	73.5	42.7	233.5	4.9	848.1
Shareholdings	99.6	29.8	18.7	42.2	-	190.3
Not attributed fixed assets						24.7
Net fixed assets	**2,631.9**	**758.7**	**2,381.6**	**1,624.2**	**128.0**	**7,549.1**
Attributed net working capital	804.8	80.3	(247.8)	59.3	2.9	699.5
Non attributed net working capital						303.5
Net working capital	**804.8**	**80.3**	**(247.8)**	**59.3**	**2.9**	**1,003.0**
Other provisions	(191.4)	(35.8)	(148.1)	(278.5)	(3.8)	(657.6)
Net invested capital	**3,245.3**	**803.2**	**1,985.7**	**1,405.0**	**127.1**	**7,894.5**

31 Dec 21	Gas	Electricity	Water cycle	Waste management	Other services	Total
Previous year						
Assets (tangible and intangible)	1,943.3	647.6	2,134.2	1,315.4	128.8	6,169.3
Goodwill	494.8	72.2	42.7	228.3	4.9	842.9
Shareholdings	111.7	30.4	18.9	37.5	-	198.5
Not attributed fixed assets						97.3
Net fixed assets	**2,549.8**	**750.2**	**2,195.8**	**1,581.2**	**133.7**	**7,308.0**
Attributed net working capital	(95.5)	108.1	(155.4)	66.8	(7.9)	(83.9)
Non attributed net working capital						87.4
Net working capital	**(95.5)**	**108.1**	**(155.4)**	**66.8**	**(7.9)**	**3.5**
Other provisions	(181.1)	(33.4)	(129.4)	(285.2)	(4.3)	(633.4)
Net invested capital	**2,273.2**	**824.9**	**1,911.0**	**1,362.8**	**121.5**	**6,678.1**

The following are the main result measures by business line for the 2021 and 2022 financial years:

2022	Gas	Electricity	Water cycle	Waste management	Other services	Structure	Total
Current financial period							
Direct revenues	13,282.8	4,720.7	996.5	1,272.1	145.4	51.5	20,630.2
Infra-cycle revenues	181.9	316.3	4.5	34.9	50.1	63.0	723.7
Total direct revenues	**13,464.7**	**5,037.1**	**915.8**	**1,00.9**	**195.5**	**114.5**	**21,354.0**
Indirect revenues	18.9	5.7	48.9	51.7	0.7	(114.5)	-
Total revenues	**13,483.6**	**5,047.2**	**964.7**	**1,052.6**	**196.2**	**-**	**21,354.0**
EBITDA	**491.1**	**71.6**	**262.4**	**261.9**	**38.4**	**-**	**1,200.9**
Direct amortisations and provisions	205.5	87.7	121.2	125.6	22.2	76.9	667.1
Indirect amortisations and provisions	8.8	3.1	35.4	34.5	0.5	(76.9)	-
Total amortisations and provisions	**214.3**	**90.8**	**156.5**	**160.1**	**22.6**	**-**	**667.1**
Operating revenues	**276.8**	**(19.2)**	**105.9**	**101.8**	**15.7**	**-**	**533.8**

2021	Gas	Electricity	Water cycle	Waste management	Other services	Structure	Total
Previous financial period							
Direct revenues	5,833.6	2,784.2	911.1	1,272.1	125.9	28.5	10,955.4
Infra-cycle revenues	109.0	233.1	4.7	34.9	44.2	76.1	502.1
Total direct revenues	**5,942.7**	**3,017.2**	**915.8**	**1,307.0**	**170.2**	**104.7**	**11,457.5**
Indirect revenues	26.3	7.4	48.9	21.4	0.6	(104.7)	-
Total revenues	**5,969.0**	**3,024.6**	**964.7**	**1,328.4**	**170.8**	**-**	**11,457.5**
EBITDA	**487.6**	**144.7**	**262.4**	**291.7**	**37.4**	**-**	**1,223.9**
Direct amortisations and provisions	173.8	69.7	121.2	152.0	20.4	75.0	612.1
Indirect amortisations and provisions	8.0	3.0	35.4	28.1	0.5	(75.0)	-
Total amortisations and provisions	**181.9**	**72.7**	**156.5**	**180.2**	**20.9**	**-**	**612.1**
Operating revenues	**305.8**	**72.0**	**105.9**	**111.6**	**16.4**	**-**	**611.7**

As extensively described in the Directors' Report, the EBITDA of the gas operating segment was adjusted for management purposes to comment on its performance for the period. The value containing the adjustment on gas inventory valuation is shown in chapter 1.07, "Analysis by Business Area;" please refer to this section for its understanding of business dynamics.

2.03 FINANCIAL STATEMENT FORMATS AS PER CONSOB RESOLUTION 15519/2006

In accordance with the relevant Group policies, the economic, equity and financial reports in effect at 31 December 2022 and the associated period of comparison with related parties are as follows.

Procedure for the operations with related parties is available on the website of the Hera Group at the following link:
https://www.gruppohera.it/gruppo/governance/sistema-di-governance/politiche-e-procedure

It should be noted that during the year 2022, there were no operations with related parties for which it was necessary to include in the financial statements the information required by the regulation adopted on this matter through CONSOB Resolution no. 17221 of 12 March 2010 and following amendments and integrations.

2.03.01 Income statement as per Consob resolution 15519/ 2006

	notes	2022	of which related parties A	B	C	D	Total	%	2021	of which related parties A	B	C	D	Total	%
Revenues	1	20,082.0	-	129.1	315.6	23.6	468.3	2.3%	10,555.3	-	58.0	319.4	13.1	390.5	3.7%
Other operating revenues	2	548.2	-	0.3	3.2	-	3.5	0.6%	400.1	-	0.3	7.1	0.5	7.9	2.0%
Raw materials and materials	3	(16,730.0)	-	(100.2)	-	(45.0)	(145.2)	0.9%	(6,668.5)	-	(104.7)	-	(46.1)	(150.8)	2.3%
Service costs	4	(2,105.8)	-	(11.9)	(23.3)	(33.2)	(68.4)	3.2%	(2,464.6)	-	(8.6)	(19.8)	(33.9)	(62.3)	2.5%
Personnel costs	5	(601.1)	-	-	-	-	-		(592.8)	-	-	-	-	-	
Other operating costs	6	(74.9)	-	-	(2.3)	(0.9)	(3.2)	4.3%	(66.5)	-	-	(1.8)	(0.6)	(2.4)	3.6%
Capitalised costs	7	82.5	-	-	-	-	-		60.8	-	-	-	-	-	
Amortisation, provisions and depreciation	8	(667.1)	-	-	-	-	-		(612.1)	-	(4.0)	-	-	(4.0)	0.7%
Operating revenues		**533.8**	**-**	**17.3**	**293.2**	**(55.5)**	**255.0**		**611.7**	**-**	**(59.0)**	**304.9**	**(67.0)**	**178.9**	
Share of profits (losses) pertaining to joint ventures and associated companies	9	10.0	-	10.0	-	-	10.0	100.0%	13.2	-	13.2	-	-	13.2	100.0%
Financial income	10	82.2	-	1.6	0.6	0.4	2.6	3.2%	82.3	-	4.8	0.7	0.4	5.9	7.2%
Financial expenses	11	(217.2)	-	-	(0.3)	-	(0.3)	0.1%	(300.3)	-	(2.4)	(0.3)	-	(2.7)	0.9%
Financial operations		**(125.0)**	**-**	**11.6**	**0.3**	**0.4**	**12.3**		**(204.8)**	**-**	**15.6**	**0.4**	**0.4**	**16.4**	
Earnings before taxes		**408.8**	**-**	**28.9**	**293.5**	**(55.1)**	**267.3**		**406.9**	**-**	**(43.4)**	**305.3**	**(66.6)**	**195.3**	
Taxes	12	(103.5)	-	-	-	-	-		(34.2)	-	-	-	-	-	
Net profit for the year		**305.3**	**-**	**28.9**	**293.5**	**(55.1)**	**267.3**		**372.7**	**-**	**(43.4)**	**305.3**	**(66.6)**	**195.3**	
Attributable to:															
Parent company shareholders		255.2							333.5						
Minority shareholders		50.1							39.2						
Earnings per share															
basic	17	0.175							0.228						
diluted	17	0.175							0.228						

Column headings related parties: A non-consolidated subsidiaries, B Associated and jointly controlled companies, C Related companies with significant influence (shareholder municipalities), D Other related parties

2.03.02 Statement of financial position as per Consob resolution 15519/ 2006

	notes	31 Dec 22	of which related parties						31 Dec 21	of which related parties					
			A	B	C	D	Total	%		A	B	C	D	Total	%
ASSETS															
Non-current assets															
Tangible assets	21.25	1,984.4	-	-	-	-	-		1,941.0	-	-	-	-	-	
Rights of use	22.25	84.2	-	-	-	-	-		101.6	-	-	-	-	-	
Intangible assets	23.25	4,417.4	-	-	-	-	-		4,126.7	-	-	-	-	-	
Goodwill	24.25	848.1	-	-	-	-	-		842.9	-	-	-	-	-	
Shareholdings	26.27	190.3	-	156.3	-	2.0	158.3	83.2%	198.5	-	152.4	-	2.0	154.4	77.8%
Non-current financial assets	18	151.8	-	14.3	12.1	25.3	51.7	34.1%	142.7	-	18.6	13.6	29.8	62.0	43.4%
Deferred tax assets	14	240.4	-	-	-	-	-		229.4	-	-	-	-	-	
Derivative financial instruments	29	1.0	-	-	-	-	-		6.9	-	-	-	-	-	
Total non-current assets		**7,917.6**	**-**	**170.6**	**12.1**	**27.3**	**210.0**		**7,589.7**	**-**	**171.0**	**13.6**	**31.8**	**216.4**	
Current assets															
Inventories	32	995.1	-	-	-	-	-		368.0	-	-	-	-	-	
Commercial receivables	33	3,875.0	-	24.9	85.3	24.8	135.0	3.5%	2,918.0	-	10.3	65.6	15.0	90.9	3.1%
Current financial assets	18	77.7	-	9.2	3.7	1.4	14.3	18.4%	29.3	-	4.8	4.4	3.2	12.4	42.3%
Current tax assets	13	46.0	-	-	-	-	-		21.2	-	-	-	-	-	
Other current assets	35	642.5	-	2.9	(2.3)	3.9	4.5	0.7%	422.3	-	2.4	(1.2)	3.9	5.1	1.2%
Derivative financial instruments	29	1,622.2	-	-	-	-	-		1,797.4	-	-	-	-	-	
Cash and cash equivalents	18	1,942.4	-	-	-	-	-		885.6	-	-	-	-	-	
Total current assets		**9,200.9**	**-**	**37.0**	**86.7**	**30.1**	**153.8**		**6,441.8**	**-**	**17.5**	**68.8**	**22.1**	**108.4**	
TOTAL ASSETS		**17,118.5**	**-**	**207.6**	**98.8**	**57.4**	**363.8**		**14,031.5**	**-**	**188.5**	**82.4**	**53.9**	**324.8**	

Column headings related parties: A non-consolidated subsidiaries, B Associated and jointly controlled companies, C Related companies with significant influence (shareholder municipalities), D Other related parties

	notes	31 Dec 22	of which related parties A	B	C	D	Total	%	31 Dec 21	of which related parties A	B	C	D	Total	%
NET EQUITY AND LIABILITIES															
Share capital and reserves															
Share capital	15	1,450.3	-	-	-	-	-		1,459.6	-	-	-	-	-	
Reserves	15	1,692.9	-	-	-	-	-		1,407.1	-	-	-	-	-	
Profit (loss) for the period	15	255.2	-	-	-	-	-		333.5	-	-	-	-	-	
Group net equity		**3,398.4**	**-**	**-**	**-**	**-**	**-**		**3,200.2**	**-**	**-**	**-**	**-**	**-**	
Non-controlling interests	16	246.3	-	-	-	-	-		216.6	-	-	-	-	-	
Total net equity		**3,644.7**	**-**	**-**	**-**	**-**	**-**		**3,416.8**	**-**	**-**	**-**	**-**	**-**	
Non-current liabilities															
Non-current financial liabilities	19	5,689.9	-	-	1.5	-	1.5	0.0%	3,716.0	-	-	1.8	-	1.8	0.0%
Non-current lease liabilities	22	55.1	-	-	3.7	0.3	4.0	7.3%	53.2	-	0.1	4.6	0.2	4.9	9.2%
Post-employment and other benefits	30	92.0	-	-	-	-	-		105.4	-	-	-	-	-	
Provisions for risks and charges	31	565.6	-	3.8	-	-	3.8	0.7%	528.0	-	1.5	-	-	1.5	0.3%
Deferred tax liabilities	14	215.7	-	-	-	-	-		132.1	-	-	-	-	-	
Derivative financial instruments	29	6.3	-	-	-	-	-		13.5	-	-	-	-	-	
Total non-current liabilities		**6,624.6**	**-**	**3.8**	**5.2**	**0.3**	**9.3**		**4,548.2**	**-**	**1.6**	**6.4**	**0.2**	**8.2**	
Current liabilities															
Current financial liabilities	19	650.1	-	5.2	0.5	-	5.7	0.9%	499.7	-	-	0.7	39.4	40.1	8.0%
Current lease liabilities	22	21.3	-	-	1.4	0.1	1.5	7.2%	43.4	-	-	1.2	0.1	1.3	3.1%
Commercial payables	34	3,093.1	-	33.8	22.8	33.3	89.9	2.9%	2,356.6	-	31.8	16.7	24.6	73.1	3.1%
Current tax liabilities	13	17.1	-	-	-	-	-		27.9	-	-	-	-	-	
Other current liabilities	36	1,720.0	-	1.5	6.5	0.1	8.1	0.5%	1,435.6	-	4.8	4.8	0.4	10.0	0.7%
Derivative financial instruments	29	1,347.6	-	-	-	-	-		1,703.3	-	-	-	-	-	
Total current liabilities		6,849.2	-	40.5	31.2	33.5	105.2		6,066.5	-	36.6	23.4	64.5	124.5	
TOTAL LIABILITIES		**13,473.8**	**-**	**44.3**	**36.4**	**33.8**	**114.5**		**10,614.7**	**-**	**38.2**	**29.8**	**64.7**	**132.7**	
TOTAL NET EQUITY AND LIABILITIES		**17,118.5**	**-**	**44.3**	**36.4**	**33.8**	**114.5**		**14,031.5**	**-**	**38.2**	**29.8**	**64.7**	**132.7**	

Column headings related parties: A non-consolidated subsidiaries, B Associated and jointly controlled companies, C Related companies with significant influence (shareholder municipalities), D Other related parties

2.03.03 Cash flow statement as per Consob resolution 15519/2006

	31 Dec 22	of which related parties
Earnings before taxes	**408.8**	
Adjustments to reconcile net profit to the cashflow from operating activities		
Amortisation and impairment of assets	478.6	
Allocation to provisions	188.5	
Effects from valuation using the net equity method	(10.0)	
Financial (income) expenses	135.0	
(Capital gains) losses and other non-monetary elements	41.6	
Change in provision for risks and charges	(27.8)	
Change in provision for employee and post-employment benefits	(12.7)	
Total cash flow before changes in net working capital	**1,202.0**	
(Increase) decrease in inventories	(627.4)	
(Increase) decrease in commercial receivables	(1,280.7)	(44.1)
Increase (decrease) in commercial payables	727.8	16.8
Increase/decrease in other current assets/liabilities	252.7	(1.3)
Changes in working capital	**(927.6)**	
Dividends collected	13.4	9.5
Interest income and other financial income collected	41.8	2.6
Interest expenses, net charges on derivatives and other paid financial charges	(128.0)	(0.3)
Taxes paid	(165.9)	
Cash flow from operating activities (a)	**35.7**	
Investments in tangible assets	(225.6)	
Investments in intangible assets	(483.9)	
Investments in subsidiary companies and business units net of cash holdings	(50.1)	
Other equity investments	(3.2)	(3.2)
Sale price of tangible and intangible assets	3.3	0.1
Divestments of shareholdings and contingent consideration	-	
(Increase) decrease in other investment activities	1.1	10.8
Cash flow from (for) investing activities (b)	**(758.4)**	
New issue of long-term bonds	2,127.0	
Repayments of non-current financial liabilities	-	
Repayments and other net changes in financial liabilities	(47.3)	(34.7)
Repayment of lease liabilities	(43.4)	(1.0)
Acquisition of Interests in consolidated companies	(10.6)	
Dividends paid out to Hera shareholders and non-controlling interests	(219.5)	(68.1)
Changes in treasury share	(26.7)	
Cash flow from (for) financing activities (c)	**1,779.5**	
Increase (decrease) in cash holdings (a+b+c)	**1,056.8**	
Cash and cash equivalents at the beginning of the period	885.6	
Cash and cash equivalents at the end of the period	1,942.4	

2.03.04 Net financial debt according to the Consob notice DEM/6064293 of 2006

		31 Dec 22					31 Dec 21				
			A	B	C	D		A	B	C	D
A	Cash holdings	1,942.4	-	-	-	-	885.6	-	-	-	-
B	Cash equivalents	-	-	-	-	-	-	-	-	-	-
C	Other current financial assets	77.7	-	9.2	3.7	1.4	29.3	-	4.8	4.4	3.2
D	**Liquidity (A+B+C)**	**2,020.1**					**914.9**				
	of which related parties		**-**	**9.2**	**3.7**	**1.4**		**-**	**4.8**	**4.4**	**3.2**
E	Current financial debt	(563.0)	-	-	(0.5)	-	(443.6)	-	-	(0.8)	(39.4)
F	Current part of non-current financial debt	(108.4)	-	(5.2)	(1.4)	(0.1)	(99.5)	-	-	(1.2)	(0.1)
G	**Current financial indebtedness (E+F)**	**(671.4)**					**(543.1)**				
	of which related parties		**-**	**(5.2)**	**(1.9)**	**(0.1)**		**-**	**-**	**(2.0)**	**(39.5)**
H	**Current net financial indebtedness (G+D)**	**1,348.7**					**371.8**				
	of which related parties		**-**	**(4.0)**	**1.8**	**1.3**		**-**	**4.8**	**2.4**	**(36.3)**
I	Non-current financial debt	(2,553.0)	-	-	(5.2)	(0.3)	(1,073.8)	-	-	(6.4)	(0.2)
J	Debt instruments	(3,197.3)	-	-	-	-	(2,702.0)	-	-	-	-
K	Commercial and other non-current payables	-	-	-	-	-	-	-	-	-	-
L	**Non-current financial indebtedness (I+J+K)**	**(5,750.3)**					**(3,775.8)**				
	of which related parties		**-**	**-**	**(5.2)**	**(0.3)**		**-**	**-**	**(6.4)**	**(0.2)**
M	**Total financial indebtedness (H+L) ESMA guidelines 32 – 382 – 1138**	**(4,401.6)**					**(3,404.0)**				
	of which related parties		**-**	**(4.0)**	**(3.4)**	**1.0**		**-**	**4.8**	**(4.0)**	**(36.5)**
	Non-current financial receivables	**151.8**					**142.7**				
	of which related parties		**-**	**14.3**	**12.1**	**25.3**		**-**	**18.6**	**13.6**	**29.8**
	Net financial debt	**(4,249.8)**					**(3,261.3)**				
	of which related parties		**-**	**18.3**	**8.7**	**26.3**		**-**	**23.4**	**9.6**	**(6.7)**

2.03.05 List of related parties

The values reported in the table at 31 December 2022 refer to the related parties listed below:

Group A - Non-consolidated subsidiaries

Group B- Affiliated and jointly controlled companies

Adria Link Srl
Aimag Spa
ASM SET Srl
Aurora Srl
Energo Doo
Enomondo Srl
Hea Spa
H.E.P.T. Co. Ltd
Natura Srl in liquidation
Oikothen Scarl in liquidation
SEA - Servizi Ecologici Ambientali Srl
Set Spa
Sgr Servizi Spa
Sinergie Italiane Srl in liquidation
Tamarete Energia Srl
Tre Monti Srl

Group C - Related parties with signficant influence

Municipality of Bologna
Municipality of Casalecchio di Reno
Municipality of Cesena
Municipality of Ferrara
Municipality of Imola
Municipality of Modena
Municipality of Padua
Municipality of Ravenna
Municipality of Rimini
Municipality of Trieste
CON.AMI
Holding Ferrara Servizi Spa
Ravenna Holding Spa
Rimini Holding Spa

Group D - Other related parties

Acosea Impianti Srl
Dragone Impianti Spa Acqeduct
Aloe Spa
Amir Spa - Asset
Apa2 consulting Sas
Aspes Spa
BPI Learning Consulting Spain SL
Calenia Energia Spa
CIR S.p.A.
Co.ra.b. Srl

Cora costr. Resid. Artig. Srl
Dental invest Srl
Executive Advocacy Srl
Fiorano Gestioni Patrimoniali Srl
Fonderia cab Srl
Fonderia fomar ghisa Srl
Formigine Patrimonio Srl
Ire immobiliare riqualificazione ed
Maranello Patrimonio Srl
Medeopart 2 Srl
Medeopart 3 Srl
Medeopart 4 Srl
Medeopart 5 Srl
Medeopart 6 Srl
Medeopart associates Srl
Medeor Capital S.r.l.
Rabofin Srl
Romagna Acque Spa
Sassuolo Gestioni Patrimoniali Srl
Se.r.a. Srl catering service
Serramazzoni Patrimonio Srl
Sis Società Intercomunale di Servizi Spa in liquidation
Società Italiana Servizi Spa - Sis Spa asset
SOGEFI S.p.A.
SPS S.r.l.
Te.Am Srl
Team Srl
Unica Reti Spa - Asset
Vanpart Srl

Auditors, directors, strategic executives, family members of strategic executives

2.03.06 Explanatory notes to relations with related parties

Service management

In most of the areas it serves competence and in almost all of shareholding municipalities for the provinces of Modena, Bologna, Ferrara, Forlì-Cesena, Ravenna, Rimini, Padua, Udine, Trieste, Gorizia and Pesaro, the Hera Group holds the concession for the local public services of economic interest (distribution of natural gas through local gas pipelines, integrated water service and environmental services, including sweeping, waste collection, transport, recovery and disposal). The electricity distribution service is carried out in the areas of Modena and Imola, and in the municipalities of Trieste and Gorizia. Other public utilities (including urban district heating, energy services and public lighting) are carried out in a free market regime or through specific agreements with the local authorities concerned. Through specific relations with the local authorities and/or local agencies, the Hera Group is also responsible for waste treatment and disposal services, not included in urban hygiene activities.

Water sector

The water services managed by the Hera Group are carried out in the areas served in the Emilia-Romagna, Veneto, Friuli-Venezia Giulia and Marche regions. It is carried out on the basis of conventions with the relevant local agencies, with a variable duration, which is usually twenty years.

The Hera Group's mandate for managing integrated water services refers to activities of water collection and drinking water treatment and distribution for civil and industrial applications as well as sewerage and sewage treatment. The agreements signed with the local area authorities also require the operator to carry out the planning and construction of new networks and plants aimed at providing the service. The

conventions regulate the economic aspects of the contractual agreement, as well as the modes of managing the service, and the performance and quality standards.
Beginning in 2012, authority for rates was transferred to the national agency ARERA which, as part of this task it has been assigned, approved a transitional rate method for the period 2012-2013, a two-year period of consolidation from 2014 to 2015, an additional rate method in force for 2016-2019 and the current provision regime 2020-2023.

The adjustment for 2020-2023 is in continuity with the 2016-2019 period with the introduction of a number of new elements aimed at encouraging energy and environmental sustainability actions as well as contract and technical quality. Each operator is granted revenue (VRG) independently of the trends of the volumes distributed and it is established on the basis of operating costs (efficient and exogenous) and capital costs in relation to the investments made, as well as for the Rimini area, the outcome of the tender procedure that led to the new concession contract signed for the period 2022 -2039.

For the purpose of carrying out the service, the operator uses networks, facilities and other equipment owned by the company itself, municipalities and Asset companies. These assets, part of the inaccessible water stores, or granted or leased to the provider, must be returned to the municipalities, Asset companies or local area authorities at the end of the concession to be made available to the incoming provider. Any work carried out by the Hera Group for the water service must be returned to the above mentioned entities following payment or the residual value of the assets in question.

Hera's relations with users are regulated by provisioning regulations as well as Service Charters drafted on the basis of templates approved by local area authorities in compliance with provisions set out by ARERA regarding the quality of the service and the resource.

Waste management sector

The municipal waste service managed by the Hera Group in the area it serves is provided on the basis of agreements with local authorities and comprises the exclusive management of the collection, transportation, sweeping and cleaning of streets, preparations for waste recovery or disposal and other minor services. The agreements entered into with the relevant local authorities regulate the economic aspects of the contractual agreement, as well as the modes of organising and managing the service, and the performance and quality standards. Beginning in 2020, the considerations due to the operator for the services rendered, including municipal waste disposal/treatment/recovery activities, have been defined annually on the basis of the ARERA new national rate regulation (Authority resolution 2019/433), as well as on the basis of the consideration resulting from competitive procedures already concluded, for the areas of new awarding of contracts (the areas of Ravenna and Cesena, Bologna, Modena, and Saccolongo).

The municipal waste management service is billed by the Hera Group to the individual municipalities in the case of the Tari regime or to the individual users in the case of the application of the punctual correspondent tariff.

To run treatment plants for municipal waste, the Hera Group is required to obtain provincial authorizations; furthermore, for 2022, the subsidiary Herambiente Spa as well is required to comply with the new national regulation with regard to unsorted waste disposal plants and composting and digester plants, as they are classified as "minimum plants" by the regions and are crucial for the closure of the municipal waste management cycle, without prejudice to the outcome of pending administrative litigation proceedings In particular, these judgments concern, with two different appeals, the qualification of so-called minimum plants made by the competent Regions with regard to organic waste treatment plants and disposal plants.
In compliance with the principle of continuity of public services, under the terms of the existing agreements, the operator is obliged to continue the service also in the territories where the expiry date of the entrustment has already passed and until new entrustments take effect.

Energy sector

The duration of licenses for the distribution of natural gas via local gas pipelines, initially set for periods ranging between ten and thirty years by the original agreements stipulated with the municipalities, was revised by Italian decree 164/2000 (so-called Letta Decree, transposing Directive 98/30/EC) and by subsequent reforms of the energy market. Inrete Distribution Energy Spa, an Hera Group company that took over natural gas and electricity distribution from Hera Spa, takes advantage of longer residual terms established for operators that have promoted partial privatizations and mergers. The duration of distribution concessions is unchanged with respect to that foreseen in the company's stock exchange listing. The agreements associated with the distribution licenses regarding the distribution of natural gas or other similar gases for heating, domestic, handicraft and industry uses, and for other general uses. Rates for the distribution of gas are fixed under current regulations and by periodical resolutions issued by the agency in charge of this sector (Arera).
The area in which Inrete Distribuzione Energia Spa provides gas distribution services is divided into rate zones in which a uniform distribution rate is applied to different categories of customers. The tariff regulations in force at the time these annual financial statements were approved are ARERA resolution 620/2021/R/gas of 29 December 2021 (Update of tariffs for gas distribution and metering services, for the year 2022), which replaced the 596/2020/R/gas of 29 December 2020 and which serve to approve the mandatory tariffs for natural gas distribution, metering and marketing services for 2022.

The tariff rates valid as from 1 January 2022 are shown in Table 1 attached to the aforementioned resolution. The tariffs for the 2022 financial year are part of the so-called 2020-2025 tariff period. Beginning 1 January 2020, in fact, the new Regulation governing gas distribution and metering service rates for the regulation period 2020-2025 (Rtdg 2020-2025) came into force, approved with resolution 570/2019/R/gas.

Pursuant to Article 43 of the Rtdg 2020-2025, the mandatory natural gas distribution and metering tariffs are broken down into different rate areas:
- the northwest area, which includes the regions of Valle d'Aosta, Piedmont and Liguria;
- the northeast area, including the regions of Lombardy, Trentino - Alto Adige, Veneto, Friuli - Venezia Giulia, and Emilia - Romagna;
- the central area, comprising the regions of Tuscany, Umbria and the Marche;
- the central-south-eastern area, including the regions of Abruzzo, Molise, Apulia and Basilicata;
- the central-southwestern area, including the Lazio and Campania regions;
- the southern area, including the regions of Calabria and Sicily;
- the Sardinia area, including the region of Sardinia.

The value of the tariff components GS, RE, RS and UG1 referred to in paragraph 42.3, sections c), d), e), f) of the Rtdg 2020-2025 is subject to quarterly updating.

Beginning 1 January 2022, for the first six months the values of the last three months of 2021 were confirmed - Resolution 635/2021/R/com and Table t attached to Resolution 396/2021/R/com and beginning 1 April 2022 - Resolution 141/2022/R/com and Table 7 attached to Resolution 396/2021/R/com.
For the second half of the year beginning 1 June 2022 with Resolution 295/2022/R/com, the regulatory authority again confirmed the values in Table 7 attached to Resolution 396/2021/R/com, reconfirming them again beginning 1 October 2022 with Resolution 462/2022/R/com.

Beginning 1 October 2021 the values are those of Table 7 attached to Resolution 396/2021/R/com.

With regard to electricity, the contracts (lasting thirty years and renewable pursuant to the current regulations) govern power distribution activities comprising, inter alia, the management of distribution networks and the operation of associated plants, ordinary and extraordinary maintenance, the planning and identification of development projects, and metering. The contract may be suspended or terminated, on the judgement of the national Authority, if defaults and violations occur on the part of the concessionary company that seriously affect the performance of the distribution and metering of electricity. The distribution company is obliged to apply to its customers (so called Distribution Users) the rates set by current regulations and resolutions adopted by the sector Authority. The rate regulations in effect at the time the annual financial statements were approved is that of the Authority's resolution 654/2015/R/Eel of 23 December 2015 (Rate regulations for electricity transmission, distribution and metering, for the regulatory period 2016-2023), which replaced the previous Authority resolution Arg/elt no. 199/2011 and subsequent amendments and additions (Official directives for the provision of electricity transmission, distribution and metering services for the regulatory period 2012-2015 and provisions on economic conditions for the provision of connection services), in force until 31 December 2015. With this resolution, the Authority issued the provisions on the tariff regulation of electricity transmission, distribution and measurement services for the 2016-2023 regulatory period, defining an eight-year regulatory period made up of two four-year semi-periods, also providing for an intra-period update between the first and second semi-periods.

The mandatory rate for distribution services covers the costs of transporting electricity along distribution networks. It is applied to all end customers, with the exception of low-voltage household customers. The rate has a trinomial structure and is expressed in hundredths of a euro per sampling point per year (fixed component), euro cents per KW per year (power component) and euro cents per kWh consumed (energy component).

The compulsory tariff for the distribution service is periodically updated by the national authority Arera by means of an appropriate provision, therefore, on 27 December 2019, resolution 568/2019/R/Eel was issued, approving the tariff regulation of electricity transmission, distribution and measurement services for the 2020-2023 regulatory semi-period.

For household customers for the year 2022, the update of tariffs for the delivery of electricity transmission, distribution and metering services has been established by Resolution 623/2021/R/eel of 28 December 2021.

For non-household customers, the tariff update for 2022 for the distribution and metering services as well as the economic conditions for the provision of the connection service was established by Resolution 623/2021/R/eel of 28 December 2021.

2.04 SHAREHOLDINGS

2.04.01 List of consolidated companies

Subsidiaries

Registered name	Registered office	Share capital (euro) (*)	Consolidated percentage		Total interest
			direct	indirect	
Acantho Spa	Imola (BO)	23,573,079	80.64%		80.64%
AcegasApsAmga Spa	Trieste	284,677,324	100.00%		100.00%
AcegasApsAmga Servizi Energetici Spa	Udine	11,168,284		100.00%	100.00%
Alibardi Fiorenzo Srl	Quinto di Treviso (TV)	100,000		100.00%	100.00%
Aliplast Spa	Istrana (TV)	5,000,000		75.00%	75.00%
Aliplast France Recyclage Sas	La Wantzenau (France)	1,025,000		75.00%	75.00%
Aliplast Iberia SL	Calle Castilla -Leon (Spain)	815,000		75.00%	75.00%
Aliplast Polska Spoo	Zgierz (Poland)	1,200,000 PLN		75.00%	75.00%
Aresenergy Eood	Varna (Bulgaria)	50,000 Lev		100.00%	100.00%
AresGas Ead	Sofia (Bulgaria)	22,572,241 Lev		100.00%	100.00%
Ares Trading Eood	Varna (Bulgaria)	50,000 Lev		100.00%	100.00%
Asa Scpa	Castelmaggiore (BO)	1,820,000		38.25%	38.25%
Atlas Utilities Ead	Varna (Bulgaria)	50,000 Lev		100.00%	100.00%
Biorg Srl	Bologna	10,000,000		75.00%	75.00%
Black Sea Gas Company Eood	Varna (Bulgaria)	5,000 Lev		100.00%	100.00%
Con Energia Spa	Forlì (FC)	500,000		100.00%	100.00%
Eco Gas Srl	Castel di Sangro (AQ)	100,000		100.00%	100.00%
EstEnergy Spa	Trieste	299,925,761		100.00%	100.00%
Etra Energia Srl	Cittadella (PD)	100,000		51.00%	51.00%
Feronia Srl	Finale Emilia (MO)	100,000		75.00%	75.00%
Frullo Energia Ambiente Srl	Bologna	17,139,100		38.25%	38.25%
Green Factory Srl	Pesaro	500,000		46.70%	46.70%
Herambiente Spa	Bologna	271,648,000	75.00%		75.00%
Herambiente Servizi Industriali Srl	Bologna	5,000,000		75.00%	75.00%
Hera Comm Spa	Imola (BO)	53,595,899	100.00%		100.00%
Hera Comm Marche Srl	Urbino (PU)	1,977,332		100.00%	100.00%
Hera Luce Srl	Cesena	1,000,000		100.00%	100.00%
Hera Servizi Energia Srl	Forlì	1,110,430		67.61%	67.61%
Heratech Srl	Bologna	2,000,000	100.00%		100.00%
Hera Trading Srl	Trieste	22,600,000	100.00%		100.00%
HestAmbiente Srl	Trieste	1,010,000		82.50%	82.50%
Hydro Mud Srl	Torrebelvicino (VI)	50,000		75.00%	75.00%
Inrete Distribuzione Energia Spa	Bologna	10,091,815	100.00%		100.00%
Macero Maceratese Srl	Macerata (MC)	1,032,912		46.70%	46.70%
Marche Multiservizi Spa	Pesaro	16,388,535	46.70%		46.70%

Marche Multiservizi Falconara Srl	Falconara Marittima (AN)	100,000		46.70%	46.70%
Primagas AD	Varna (Bulgaria)	1,149,860 Lev		97.34%	97.34%
Recycla Spa	Maniago (PN)	90,000		75.00%	75.00%
Tri-Generazione Scarl	Padua	100,000		70.00%	70.00%
Uniflotte Srl	Bologna	2,254,177	97.00%		97.00%
Vallortigara Servizi Ambientali Spa	Torrebelvicino (VI)	330,000		75.00%	75.00%
Vallortigara Angelo Srl	Torrebelvicino (VI)	80,000		75.00%	75.00%
Wolmann Spa	Bologna	400,000		100.00%	100.00%

(*) unless otherwise specified

Jointly controlled entities

Registered name	Registered office	Share capital (€)	Percentage held		Total interest
			direct	indirect	
Enomondo Srl	Faenza (RA)	14,000,000		37.50%	37.50%

Associated companies

Registered name	Registered office	Share capital (euro) (*)	Percentage held		Total interest
			direct	indirect	
Aimag Spa*	Mirandola (MO)	78,027,681	25.00%		25.00%
ASM Servizi Energetici e Tecnologici-ASM SET Srl	Rovigo	200,000		49.00%	49.00%
SEA - Servizi Ecologici Ambientali Srl	Camerata Picena (AN)	100,000		31.00%	31.00%
Set Spa	Milan	120,000	39.00%		39.00%
Sgr Servizi Spa	Rimini	5,982,262		29.61%	29.61%
Tamarete Energia Srl	Ortona (CH)	3,600,000	40.00%		40.00%

*The share capital of these companies consists of 67,577,681 euro of ordinary shares and 10,450,000 euro of related shares.

2.04.02 Key figures in the financial statements of subsidiaries and associated companies

Summary of key figures of the financial statements of subsidiaries pursuant to Article 2429, last paragraph, of the Civil Code.

thous. €	Acantho Spa	AcegasApsAmga SpA*	AcegasApsAmga Servizi Energetici Spa*	Alibardi Fiorenzo Srl	Aliplast Spa
ASSETS					
Fixed assets	61,049	1,052,237	90,648	79	62,232
Circulating assets	34,335	166,743	258,843	649	85,456
Total assets	**95,384**	**1,218,980**	**349,491**	**728**	**147,688**
LIABILITIES					
Share capital	23,573	284,677	11,168	95	5,000
Reserves	10,579	273,331	31,809	301	27,190
Net profit /(loss)	5,883	21,955	16,281	75	35,226
Provisions	36	29,263	2,100	-	1,128
Severance pay provision	637	11,013	1,033	1	673

Payables	54,676	598,741	287,100	256	78,471
Total liabilities	**95,384**	**1,218,980**	**349,491**	**728**	**147,688**
INCOME STATEMENT					
Production value	79,266	383,534	204,958	621	214,174
Production costs	(70,029)	(347,760)	(188,771)	(516)	(168,825)
Financial income/ (expenses)	(591)	(7,608)	4,260	-	(1,415)
Extraordinary income/ (expenses)	-	-	-	-	-
Taxes for the year	(2,763)	(6,211)	(4,166)	(30)	(8,708)
Net profit /(loss)	**5,883**	**21,955**	**16,281**	**75**	**35,226**

thous. €	Aliplast France Recyclage Sarl	Aliplast Iberia Sl	Aliplast Polska SP O.O	AresGas Ead	Aresenergy Eood
ASSETS					
Fixed assets	3,423	640	372	83,448	10
Circulating assets	2,792	1,256	1,368	7,250	584
Total assets	**6,215**	**1,896**	**1,740**	**90,698**	**594**
LIABILITIES					
Share capital	1,025	815	256	11,541	26
Reserves	527	84	623	16,861	(215)
Net profit /(loss)	432	92	230	1,215	63
Provisions	-	-	-	26	-
Severance pay provision	-	-	-	25	-
Payables	4,231	905	631	61,030	720
Total liabilities	**6,215**	**1,896**	**1,740**	**90,698**	**594**
INCOME STATEMENT					
Production value	7,871	2,557	6,010	68,302	2,101
Production costs	(7,424)	(2,460)	(5,724)	(65,744)	(2,023)
Financial income/ (expenses)	(15)	-	5	(1,167)	(15)
Extraordinary income/ (expenses)	-	26	-	-	-
Taxes for the year	-	(31)	(61)	(176)	-
Net profit /(loss)	**432**	**92**	**230**	**1,215**	**63**

thous. €	Con Energia Spa	Eco Gas Srl	EstEnergy Spa*	Etra Energia Srl*	Feronia Srl
ASSETS					
Fixed assets	196	125	515,002	87	2,746
Circulating assets	19,671	9,708	631,806	5,421	2,884
Total assets	**19,867**	**9,833**	**1,146,808**	**5,508**	**5,630**
LIABILITIES					
Share capital	500	100	299,926	100	100
Reserves	6,272	1,880	259,501	1,071	1,160
Net profit /(loss)	699	695	21,376	506	(498)
Provisions	4	-	4,997	-	4,141
Severance pay provision	140	104	2,185	66	-
Payables	12,253	7,054	558,823	3,765	727

Total liabilities	**19,867**	**9,833**	**1,146,808**	**5,508**	**5,630**
INCOME STATEMENT					
Production value	28,361	17,358	1,414,473	15,831	316
Production costs	(27,435)	(16,416)	(1,387,711)	(15,128)	(996)
Financial income/ (expenses)	44	55	1,390	9	-
Extraordinary income/ (expenses)	-	-	-	-	-
Taxes for the year	**(271)**	**(302)**	**(6,776)**	**(206)**	**182**
Net profit /(loss)	699	695	21,376	506	(498)

thous. €	Frullo Energia Ambiente Srl*	Green Factory Srl	Hera Comm Marche Srl*	Hera Comm Spa*	Hera Luce Srl*
ASSETS					
Fixed assets	49,574	3,797	21,501	721,542	113,631
Circulating assets	32,864	662	62,402	2,132,308	68,624
Total assets	**82,438**	**4,458**	**83,903**	**2,853,850**	**182,255**
LIABILITIES					
Share capital	17,139	500	1,977	53,596	1,000
Reserves	26,248	(39)	13,165	389,687	54,264
Net profit /(loss)	17,040	(16)	962	30,268	6,723
Provisions	2,625	-	-	7,139	105
Severance pay provision	1,442	-	653	3,493	625
Payables	17,943	4,014	67,146	2,369,668	119,538
Total liabilities	**82,438**	**4,458**	**83,903**	**2,853,850**	**182,255**
INCOME STATEMENT					
Production value	48,359	-	164,802	7,179,599	108,786
Production costs	(24,972)	(16)	(160,213)	(7,186,957)	(102,284)
Financial income/ (expenses)	(103)	-	104	40,215	2,292
Extraordinary income/ (expenses)	-	-	-	-	-
Taxes for the year	(6,243)	-	(3,732)	(2,590)	(2,071)
Net profit /(loss)	**17,040**	**(16)**	**962**	**30,268**	**6,723**

thous. €	Hera Servizi Energia Srl	Hera Trading Srl*	Herambiente Servizi Industriali Srl*	Herambiente Spa*	Heratech Srl*
ASSETS					
Fixed assets	75,770	2,794	142,316	1,040,138	156
Circulating assets	489,248	4,187,303	64,178	373,642	67,945
Total assets	**565,019**	**4,190,097**	**206,494**	**1,413,781**	**68,101**
LIABILITIES					
Share capital	1,110	22,600	5,000	271,600	1,981
Reserves	19,854	201,950	20,174	80,570	4,964
Net profit /(loss)	29,330	1,533	5,366	34,048	3,576
Provisions	12,791	-	5,410	164,293	44
Severance pay provision	860	603	2,629	6,509	5,090
Payables	501,074	3,963,411	167,915	856,761	52,446

Total liabilities	**565,019**	**4,190,097**	**206,494**	**1,413,781**	**68,101**
INCOME STATEMENT					
Production value	455,369	16,454,417	164,890	497,454	180,591
Production costs	(403,636)	(16,448,731)	(164,283)	(449,635)	(175,029)
Financial income/ (expenses)	(10,641)	(3,910)	1,019	(5,907)	-
Extraordinary income/ (expenses)	-	-	-	-	(452)
Taxes for the year	(11,763)	(242)	3,740	(7,863)	(1,535)
Net profit /(loss)	**29,330**	**1,533**	**5,366**	**34,048**	**3,576**

thous. €	HestAmbiente Srl*	Hydro Mud Srl	Inrete Distribuzione Energia Spa*	Macero Maceratese Srl	Marche Multiservizi Spa
ASSETS					
Fixed assets	101,234	48	1,313,364	6,082	253,277
Circulating assets	24,076	782	198,821	8,021	79,192
Total assets	**125,310**	**830**	**1,512,185**	**14,103**	**332,469**
LIABILITIES					
Share capital	1,010	50	9,901	1,033	16,389
Reserves	18,547	406	564,318	4,850	106,183
Net profit /(loss)	10,317	230	37,516	965	15,319
Provisions	5,887	-	128,219	183	38,360
Severance pay provision	589	12	7,969	485	5,364
Payables	88,960	132	764,262	6,587	150,855
Total liabilities	**125,310**	**830**	**1,512,185**	**14,103**	**332,469**
INCOME STATEMENT					
Production value	80,293	764	364,333	16,994	145,797
Production costs	(64,383)	(448)	(298,140)	(15,370)	(124,639)
Financial income/ (expenses)	(1,835)	-	7	(75)	(392)
Extraordinary income/ (expenses)	-	-	(15,639)	(157)	-
Taxes for the year	(3,758)	(85)	(13,046)	(426)	(5,447)
Net profit /(loss)	**10,317**	**230**	**37,516**	**965**	**15,319**

thous. €	Marche Multiservizi Falconara Srl	Primagas AD	Recycla Spa	Tri-Generazione Srl*	Uniflotte Srl*
ASSETS					
Fixed assets	2,703	2,301	13,160	-	121,384
Circulating assets	2,596	1,195	11,310	862	30,536
Total assets	**5,300**	**3,496**	**24,470**	**862**	**151,920**
LIABILITIES					
Share capital	100	588	90	100	2,254
Reserves	561	340	6,514	289	27,885
Net profit /(loss)	274	460	3,903	-	3,896
Provisions	236	-	636	-	-
Severance pay provision	883	-	1,045	-	1,562
Payables	3,246	2,108	12,282	473	116,323
Total liabilities	**5,300**	**3,496**	**24,470**	**862**	**151,920**

INCOME STATEMENT					
Production value	8,212	6,370	24,032	1,173	99,947
Production costs	(7,811)	(5,837)	(18,792)	(990)	(93,226)
Financial income/ (expenses)	(7)	(28)	(64)	(174)	(2,292)
Extraordinary income/ (expenses)	-	-	-	-	-
Taxes for the year	(120)	(45)	(1,273)	(9)	(533)
Net profit /(loss)	**274**	**460**	**3,903**	**-**	**3,896**

thous. €	Vallortigara Angelo Srl	Vallortigara Servizi Ambientali Spa	Wolmann Spa
ASSETS			
Fixed assets	879	10,668	308
Circulating assets	4,202	11,690	18,591
Total assets	**5,081**	**22,358**	**18,899**
LIABILITIES			
Share capital	80	330	400
Reserves	3,095	9,481	(663)
Net profit /(loss)	380	2,242	1,354
Provisions	8	195	46
Severance pay provision	360	506	109
Payables	1,159	9,602	17,653
Total liabilities	**5,081**	**22,358**	**18,899**
INCOME STATEMENT			
Production value	6,048	26,758	21,342
Production costs	(5,656)	(24,227)	(19,263)
Financial income/ (expenses)	17	477	(255)
Extraordinary income/ (expenses)	-	-	(46)
Taxes for the year	(28)	(765)	(424)
Net profit /(loss)	**380**	**2,242**	**1,354**

*The company applies the international accounting standards, therefore the values stated comply with them.

Summary of key figures of the financial statements of joint ventures pursuant to Article 2429, last paragraph, of the Civil Code.

thous. €	Enomondo Srl
ASSETS	
Fixed assets	39,678
Circulating assets	23,392
Total assets	**63,070**
LIABILITIES	
Share capital	14,000
Reserves	23,546
Net profit /(loss)	4,679
Provisions	1,167
Severance pay provision	19

Payables	19,659
Total liabilities	**63,070**
INCOME STATEMENT	
Production value	32,319
Production costs	(25,728)
Financial income/ (expenses)	(125)
Extraordinary income/ (expenses)	
Taxes for the year	(1,787)
Net profit /(loss)	**4,679**

Summary of key figures of the financial statements of associated companies pursuant to Article 2429, last paragraph, of the Civil code.

thous. €	Aimag Spa	ASM SET Srl	SEA - Servizi Ecologici Ambientali Srl	Set Spa	Sgr Servizi Spa	Tamarete Energia Srl
ASSETS						
Fixed assets	380,984	65	13,040	109,031	1,483	51,506
Circulating assets	224,238	12,063	12,749	109,105	131,180	15,300
Total assets	**605,222**	**12,128**	**25,789**	**218,136**	**132,663**	**66,806**
LIABILITIES			-			
Share capital	78,028	200	100	120	5,982	3,600
Reserves	136,649	69	10,275	72,917	43,455	1,972
Net profit /(loss)	17,286	2,982	4,590	(1,532)	8,992	21
Provisions	32,423		1,723		143	3,760
Severance pay provision	3,588	263	499	301	1,587	
Payables	337,248	8,614	8,602	146,330	72,504	57,453
Total liabilities	**605,222**	**12,128**	**25,789**	**218,136**	**132,663**	**66,806**
INCOME STATEMENT			-			
Production value	423,482	54,500	19,564	284,545	312,852	40,711
Production costs	(398,465)	(50,320)	(12,915)	(285,070)	(301,094)	(38,340)
Financial income/ (expenses)	(1,397)	2	(90)	(759)	801	(2,183)
Extraordinary income/ (expenses)	427			(1,004)		
Taxes for the year	(6,761)	(1,200)	(1,969)	756	(3,567)	(167)
Net profit /(loss)	**17,286**	**2,982**	**4,590**	**(1,532)**	**8,992**	**21**

2.05 INFORMATION REQUIRED BY LAW 124 OF 4 AUGUST 2017 ART. 1 PARAGRAPHS 125-129 AND FOLLOWING AMENDMENTS

Law 124/2017, Art. 1, paragraphs 125-129 and following amendments established that companies must disclose in the explanatory notes to the financial statements the "subsidies, grants, benefits, contributions or aid, in cash or in kind, without consideration, remuneration or compensation" received from the Public Administration, above the threshold of 10,000 euro and on a cash basis.

The following table shows the cases present within the Group:

Operating grants

Issuing entity	Description	Amount received (euro)
Authorithy for water and waste services - Friuli-Venezia Giulia region	Regional funds - purification plant of Servola, municipality of Trieste	2,110,926
Emilia Romagna Region	Covid emergency and sorted waste collection in the municipality of Bologna	991,937
Atersir	Ambit Fund lines LFA and LFB1 year 2022	605,420
Emilia Romagna Region	Interventions on vegetation to secure facility areas	300,000
Presidency of the Council of Ministers - Family Policy Department	Project Conciliamo - AcceleHERAzioni: inclusion, smart working and welfare	278,276
CNR-Institute of Photonics and Nanotechnologies	Initiatives to develop innovative sensors for gas network monitoring	92,500
Bi-Rex	Smart Sustainable Community	70,135
Municipality of Padua	Regular maintenance in the Padua commercial area	43,721
Municipality of Ravenna	Waste reduction public establishments in the municipality of Ravenna	19,200

Plant investment grants

Issuing entity	Description	Amount received (euro)
Meeting of the Optimal Territory Environment Area n. 1 North Marche	Water and sewerage network interventions in the locality of Cionara and Rio Salso	741,573
Emilia Romagna Region	Remediation and upgrading of water and sewerage networks	692,768
Emilia Romagna Region	Measures to restore gas networks	662,338
Ministry of the Environment and Energy Security	PNRR project: Masterplan Friuli-Venezia Giulia aqueducts	181,884
Municipality of Pesaro	Water and sewerage network interventions in the locality of Schieti (Urbino)	130,000
A.U.S.I.R. Authority for water and waste services	Maintenance work on the Zaule Lampade UV purifier of Zaule (TS)	108,500
Acosea Impianti Srl	Upgrading of water and sewerage networks	94,223
Bi-Rex	Smart Sustainable Community project	83,523
Municipality of Urbino	Water and sewerage network interventions in the locality of Mirafiore and Parco 25 Aprile	15,000

Guarantees from Public Entities

Issuing body	Description	Amount received (euro)
Sace Spa	Guarantee on Unicredit loan	450,000,000

2.06 OUTLINE OF ARTICLE149 DUODECIES OF THE CONSOB ISSUER'S REGULATION

thous. €	2022
Services provided to certify the financial statements	1,068
Provision of other services for the issue of an attestation by the independent auditor company	365
Provision of other services by the independent auditor	86
Total	**1,519**

2.07 DECLARATION ON THE CONSOLIDATED FINANCIAL STATEMENT PURSUANT TO ART. 154-BIS OF LEGISLATIVE DECREE 58/98

1 – The undersigned Orazio Iacono, who holds the office of CEO, and Massimo Vai, acting as Manager responsible for preparing Hera Spa's corporate accounting documents, certify, taking into account the provisions of Article 154-bis, paragraphs 3 and 4, of Legislative Decree 58 of 24 February 1998:

- the appropriateness with regard to the characteristics of the company and
- the effective application

of the administrative and accounting procedures used in preparing the consolidated financial statements for the financial year 2022.

2 - They additionally certify that:
2.1 - the consolidated financial statements:
a. have been prepared in accordance with the applicable international accounting standards recognised in the European Community pursuant to Regulation (EC) 1606/2002 of the European Parliament and of the Council of 19 July 2002;
b. correspond to the results of the accounting books and records;
c. give a true and fair view of the financial position, results of operations and cash flows of the issuer and the group of consolidated companies.

2.2 – The report on operations includes a reliable analysis of trends and results of operations, as well as the situation of the issuer and the group of consolidated companies, along with a description of the main risks and uncertainties to which they are exposed.

The Chief Executive Officer

Orazio Iacono

The Manager responsible
for preparing the corporate
accounting documents
Massimo Vai

Bologna, 21 March 2023

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INDEPENDENT AUDITOR'S REPORT PURSUANT TO ARTICLE 14 OF LEGISLATIVE DECREE No. 39 OF JANUARY 27, 2010 AND ARTICLE 10 OF THE EU REGULATION 537/2014

To the Shareholders of
Hera S.p.A.

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Opinion

We have audited the consolidated financial statements of Hera S.p.A. and its subsidiaries (the "Group" or "Hera Group"), which comprise the statement of financial position as of December 31st, 2022, the income statement, statement of comprehensive income, statement of changes in net equity, cash flows statement for the year then ended, and explanatory notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of the Group as of December 31st, 2022, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union and the requirements of national regulations issued pursuant to art. 9 of Italian Legislative Decree no. 38/2005.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of Hera S.p.A. (the "Company") in accordance with the ethical requirements applicable under Italian law to the audit of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Revenue recognition – revenue earned but not yet billed	
Description of the key audit matter	As disclosed in the explanatory notes to the consolidated financial statements in the paragraph addressing *"Accounting policies and consolidation principles - Revenue and cost recognition"*, revenue from electricity, gas and water sales is recognised and accounted for when the service is rendered and includes an accrual for revenue earned but not yet billed at the reporting date. As disclosed in Note 1, this accrual, which as of December 31st, 2022 amounted to Euro 1,261 million, is determined, as far as electricity and gas are concerned, by estimating the daily consumption by customer, based on the customer's historical profile, adjusted to reflect the weather conditions and other factors that could impact consumption, while, as far as the integrated water network is concerned, by estimating the revenue guaranteed by the regulated reference tariff (guaranteed revenue commitment, *"VRG"*). We have considered the procedure used for the determination of the above accrual to be a key matter for the audit of the Group's consolidated financial statements for the year ended on December 31st, 2022 in view of: *i)* the discretionary component inherent in the estimated nature of the accrual; *ii)* the materiality of its total amount; *iii)* the high number of the Group's users; *iv)* the complexity of calculation algorithms adopted by the Group for the determination of the accrual, which made it necessary to have the support of IT specialists to perform the related audit procedures.
Audit procedures performed	The audit procedures that we carried out on the accrual for revenue earned but not yet billed at the reporting date included, among others, the following: • analysis of the IT procedures adopted by the Group for the determination of the accrual for revenue earned but not yet billed and of the related calculation algorithms, with the support of our IT specialists; • identification and understanding of the key controls implemented by the Group to monitor the risk of an incorrect accrual and testing of the effectiveness thereof. This work was performed with the support of our IT specialists; • testing on a sample basis to verify the completeness and accuracy of the main data used by management to determine the accrual; • testing, based on a sample of users, of the process for the estimation of quantities consumed and the application of the correct reference tariff; • a comparative analysis of the key parameters pertaining to users and consumption used for the determination of the above accrual;

- verification of the correct determination of the guaranteed revenue using the regulated reference tariff;

- review of the adequacy and compliance of disclosure provided on the recognition of revenue earned but not yet billed at the reporting date with the applicable accounting standards.

Recognition and measurement of derivative financial instruments	
Description of the key audit matter	On account of the business in which it operates and of its financial structure, the Group holds derivatives to hedge its exposure to the risk of fluctuations in interest rates, in exchange rates and in natural gas and electricity prices. As disclosed in the paragraph in the explanatory notes to the consolidated financial statements addressing *"Accounting policies and consolidation principles - Derivative instruments* ", the Group enters into transactions, which, if they satisfy the requirements laid down by International Financial Reporting Standards to qualify for hedge accounting, are designated as hedging instruments and are classified as fair value hedges or as cash flow hedges; alternatively, they are classified as held for trading. The determination of the fair value of derivatives is performed by the Group using models developed internally that include an estimation component. Moreover, the recognition methods vary based on the nature of the derivative. Lastly, the impact of the fair value measurement of derivatives is material to the results and financial position. Specifically, as disclosed in detail in Note 29 to the consolidated financial statements, the following are recognised in the consolidated financial statements for the year ended December 31st, 2022: i) in the statement of financial position, assets and liabilities arising from the measurement of derivatives of Euro 1,623 million and Euro 1,354 million, respectively, and cash flow hedge reserve recognized in equity for an amount of Euro 257 million; ii) in the income statement, net operating costs and net financial income arising from the measurement of derivatives of Euro 5 million and Euro 1 million, respectively, as well as net operating income and net financial costs realised during the year with reference to derivatives of Euro 80 million and Euro 4 million, respectively. For the above mentioned reasons, we have considered the recognition and fair value measurement of derivatives to be a key matter for the audit of the Group's consolidated financial statements for the year ended on December 31st, 2022.
Audit procedures performed	The audit procedures that we carried out on the recognition and measurement of derivatives, performed also through the involvement of specialists from our network, included, among others, the following:

- identification and understanding of the key internal controls implemented by the Group, as well as testing to check compliance with internal policy for the determination of the fair value of derivative financial instruments, for the designation of hedging instruments, for the measurement of their prospective effectiveness and for the determination of the ineffectiveness of the hedging relationship;

- understanding of the fair value hierarchy allocation criteria, of the valuation techniques and methodologies used to verify the effectiveness of hedging relationships and for the measurement of any ineffectiveness and an analysis of the reasonableness thereof in compliance with market standards and best practices;

- analysis and verification of the sources used by the Group for the determination of market parameters and verification of the reliability of the key market inputs used;

- verification of the consistency of the accounting treatment adopted by the Group with applicable accounting standards;

- independent determination, on a sample basis, of fair value of some derivative financial instrument;

- verification, on a sample basis, of the formal documentation for the designation and verification of the measurement of effectiveness, as well as verification of the accuracy of the effectiveness test;

- review of the adequacy and compliance of the disclosures provided in the explanatory notes with the applicable accounting standards.

Responsibilities of the Directors and the Board of Statutory Auditors for the Consolidated Financial Statements

The Directors are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and the requirements of national regulations issued pursuant to art. 9 of Italian Legislative Decree no. 38/2005 and, within the terms established by law, for such internal control as the Directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Directors are responsible for assessing the Group’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless they have identified the existence of the conditions for the liquidation of the Company or the termination of the business or have no realistic alternatives to such choices.

The Board of Statutory Auditors is responsible for overseeing, within the terms established by law, the Group’s financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing (ISA Italia) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with International Standards on Auditing (ISA Italia), we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;

- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;

- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors;

- conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern;

- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation;

- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance, identified at an appropriate level as required by ISA Italia, regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence applicable in Italy, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report.

Other information communicated pursuant to art. 10 of the EU Regulation 537/2014

The Shareholders' Meeting of Hera S.p.A. has appointed us on April 23, 2014 as auditors of the Company for the years from December 31st, 2015 to December 31st, 2023.

We declare that we have not provided prohibited non-audit services referred to in art. 5 (1) of EU Regulation 537/2014 and that we have remained independent of the Company in conducting the audit.

We confirm that the opinion on the financial statements expressed in this report is consistent with the additional report to the Board of Statutory Auditors, in its role of Audit Committee, referred to in art. 11 of the said Regulation.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Opinion on the compliance with the provisions of the Delegated Regulation (EU) 2019/815

The Directors of Hera S.p.A. are responsible for the application of the provisions of the European Commission Delegated Regulation (EU) 2019/815 with regard to the regulatory technical standards on the specification of the single electronic reporting format (ESEF – European Single Electronic Format) (hereinafter referred to as the "Delegated Regulation") to the consolidated financial statements as of December 31st, 2022, to be included in the annual financial report.

We have carried out the procedures set forth in the Auditing Standard (SA Italia) n. 700B in order to express an opinion on the compliance of the consolidated financial statements with the provisions of the Delegated Regulation.

In our opinion, the consolidated financial statements as of December 31st, 2022 have been prepared in XHTML format and have been marked up, in all material respects, in accordance with the provisions of the Delegated Regulation.

Due to certain technical limitations, some information contained in the explanatory notes to the consolidated financial statements, when extracted from XHTML format in an XBRL instance, may not be reproduced in the same way as the corresponding information displayed in the consolidated financial statements in XHTML format.

Deloitte.

Opinion pursuant to art. 14 paragraph 2 (e) of Legislative Decree 39/2010 and art. 123-bis, paragraph 4, of Legislative Decree 58/1998

The Directors of Hera S.p.A. are responsible for the preparation of the report on operations and the report on corporate governance and the ownership structure of Hera Group as of December 31st, 2022, including their consistency with the related consolidated financial statements and their compliance with the law.

We have carried out the procedures set forth in the Auditing Standard (SA Italia) n. 720B in order to express an opinion on the consistency of the report on operations and some specific information contained in the report on corporate governance and the ownership structure set forth in art. 123-bis, n. 4 of Legislative Decree 58/1998, with the consolidated financial statements of Hera Group as of December 31st, 2022 and on their compliance with the law, as well as to make a statement about any material misstatement.

In our opinion, the above-mentioned report on operations and some specific information contained in the report on corporate governance and the ownership structure are consistent with the consolidated financial statements of Hera Group as of December 31st, 2022 and are prepared in accordance with the law.

With reference to the statement referred to in art. 14, paragraph 2 (e), of Legislative Decree 39/2010, made on the basis of the knowledge and understanding of the Group and of the related context acquired during the audit, we have nothing to report.

Statement pursuant to art. 4 of the Consob Regulation for the implementation of Legislative Decree 30 December 2016, no. 254

The Directors of Hera S.p.A. are responsible for the preparation of the non-financial statement pursuant to Legislative Decree 30 December 2016, no. 254.

We verified the approval by the Directors of the non-financial statement.

Pursuant to art. 3, paragraph 10 of Legislative Decree 30 December 2016, no. 254, this statement is subject of a separate attestation issued by other auditor.

DELOITTE & TOUCHE S.p.A.

Signed by
Francesco Masetti
Partner

Bologna, Italy
April 4, 2023

This independent auditor's report has been translated into the English language solely for the convenience of international readers. Accordingly, only the original text in Italian language is authoritative.

Consolidated financial statements at 31 December 2022, approved by Hera Spa's Board of Directors on 21 March 2023.

Design: Koan moltimedia

Subjects portrayed in the photos at the beginning of each chapter:
Introduction: Disidrat plant, Ravenna
Directors' report: Bathing safeguard plan, Piazzale Kennedy construction site, Rimini
Consolidated financial statements: Wastewater purification plant (IDAR), Bologna
Separate Financial Statements of Hera Spa: Plant to produce biomethane from bio-waste in S. Agata Bolognese (Bo)

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Translation: SpeakEasyGroup.it

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