CONSOLIDATE HALF-YEAR FINANCIAL REPORT

as at 30 June 2023

GRUPPO HERA

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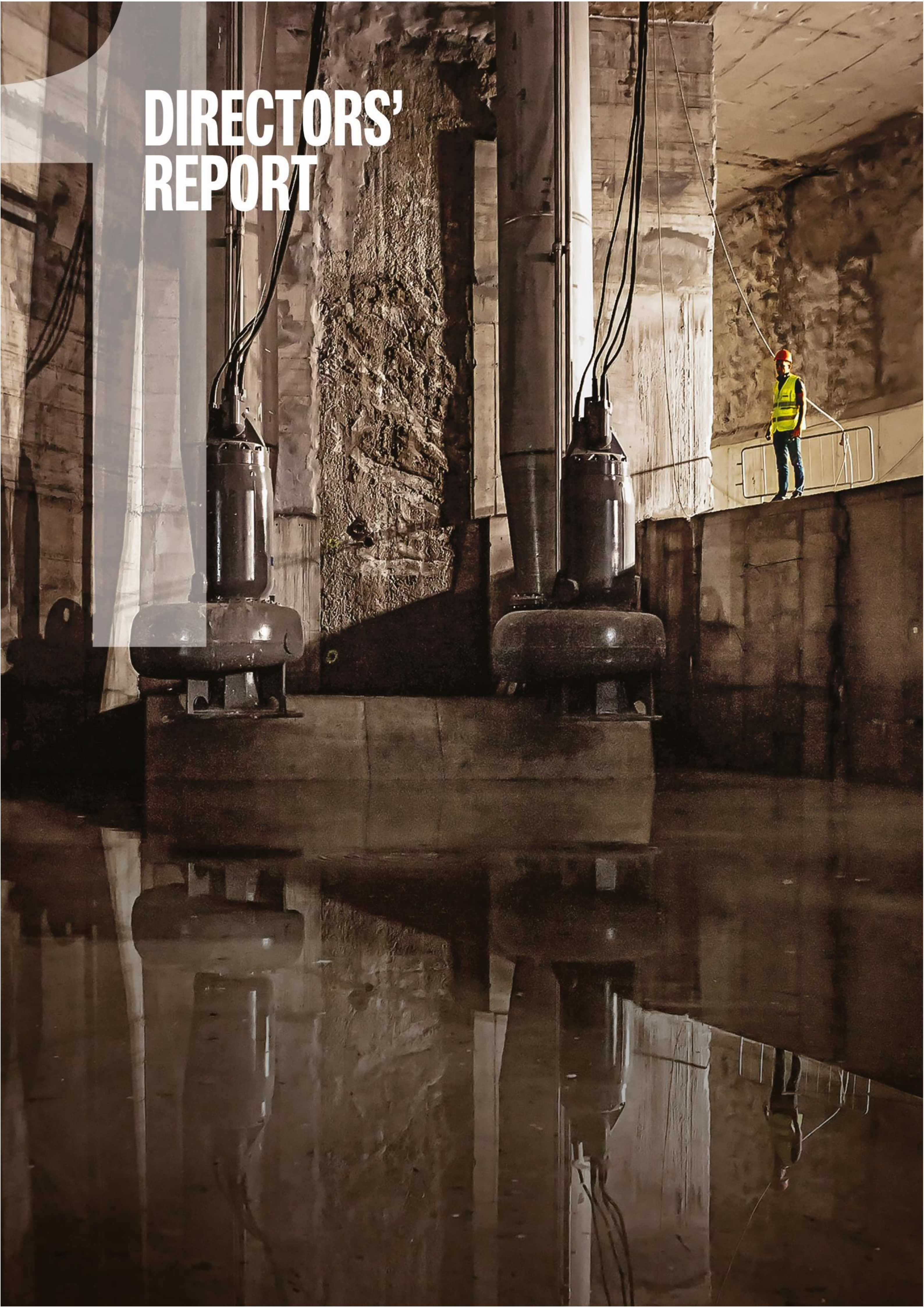


1.01 TRENDS AND CONTEXTS

Global economic trends and projections

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, and to operate based on an original business model, able to continuously innovate and maintain strong local roots while respecting the environment, the main updates in the macrotrends seen in the reference contexts are identified below. The most significant drivers of change and the Group's strategic approach are illustrated in the 2022 year-end financial report, which may be consulted for a more in-depth discussion.

1.01.01 Macroeconomy and finance

Almost one year after the invasion of Ukraine, global economic activity in the fourth quarter of 2022 confirmed a gradual slowdown compared to the recovery that started in the previous year. Growth in gross domestic product (GDP) slowed down in the US and China, while stagnating in Japan and the UK, and dropping by 2.1% in Russia (compared to forecasts prior to the conflict, which estimated growth at almost 3%).

In the early months of 2023, the global economic context showed a subdued pace of growth in the US and the UK, while in China, the disappearance of pandemic-related restrictions led economic activity to rise.

The global production system still suffers from a high degree of uncertainty, mainly associated with inflation and the related response in terms of monetary policy shown by central banks, as well as the availability of raw materials, on which the ongoing conflict is having a particularly negative impact.

These uncertainties, accentuated by possible repercussions of recent disruptions in the banking system (United States and Switzerland), do not rule out the risk of less favourable trends and have already led international institutions to foresee a slowdown in global growth this year, albeit less pronounced than the forecasts made last autumn, projecting GDP growth at 2.6% in 2023 and 2.9% in 2024.

Focus on the Eurozone

The Eurozone, which was the area most strongly affected by the war in Ukraine, mainly due to its proximity to the conflict zone and its dependence on gas supplies from Russia, saw stagnation in GDP during the last quarter of 2022.

The estimates available for 2023, made before the appearance of financial tension related to the bank disruptions mentioned above, indicate a slowdown in GDP coming to 1% (as against 3.5% one year earlier), to be followed by an acceleration in 2024-25, reaching 1.6% in each of the two years.

Due to the sharp drop in the energy component, consumer inflation projections were also revised down from those released last December, coming to 5.3 per cent for this year, 2.9 per cent for 2024 and 2.1 per cent for 2025. According to surveys carried out by the European Commission, the expectations shown by households and companies concerning consumer price trends have returned to the figures prior to last year's sharp price increase, while the European Central Bank (ECB) confirmed its goal of bringing price stability back to around 2 per cent as soon as the geopolitical tensions ease.

The current situation and the national economic outlook

In the fourth quarter of 2022, the situation seen in Italian closely followed the trends seen in the Eurozone, with an interruption in its phase of expansion, mainly due to a drop in household spending and bottlenecks along the supply chains.

Economic activity picked up slightly in early 2023, benefiting from both falling energy costs and normalised supply conditions. Accelerating investment, rising exports and declining imports, already seen in the first months of this year, are expected to drive growth.

Industrial production rose in the first half of 2023, mainly due to an increase in the production of consumer goods. However, a remarkable gap remained between sectors with a high requirement for energy input and the rest of the manufacturing sector. Expansion in the industrial sector had a positive impact on labour supply, which, while still below pre-pandemic figures, reflected an increase in the number of permanent employees in the private sector as a whole, particularly in services.

Forecasts for growth in national GDP, however, have been revised downward, to 0.6% in 2023 and 1.2% in both 2024 and 2025.

Despite the context described above, the consumer confidence index continued to grow, driven by improved opinions of the economic situation, expectations for a reduction in unemployment and trends in prices. In this respect, inflation, after peaking at the end of last year (12.6%), also started a downward trend nationwide, reflecting the drop in the energy component. Previous bottlenecks stemming from energy supply chains (passed on to the respective prices) are gradually easing, thanks to falling wholesale prices (which have now returned to figures equivalent to those prior to the invasion of Ukraine). Consumer inflation is estimated at 6.5% for the current year and is expected to drop to 2.6% in 2024 and 2% in 2025.

Financial markets

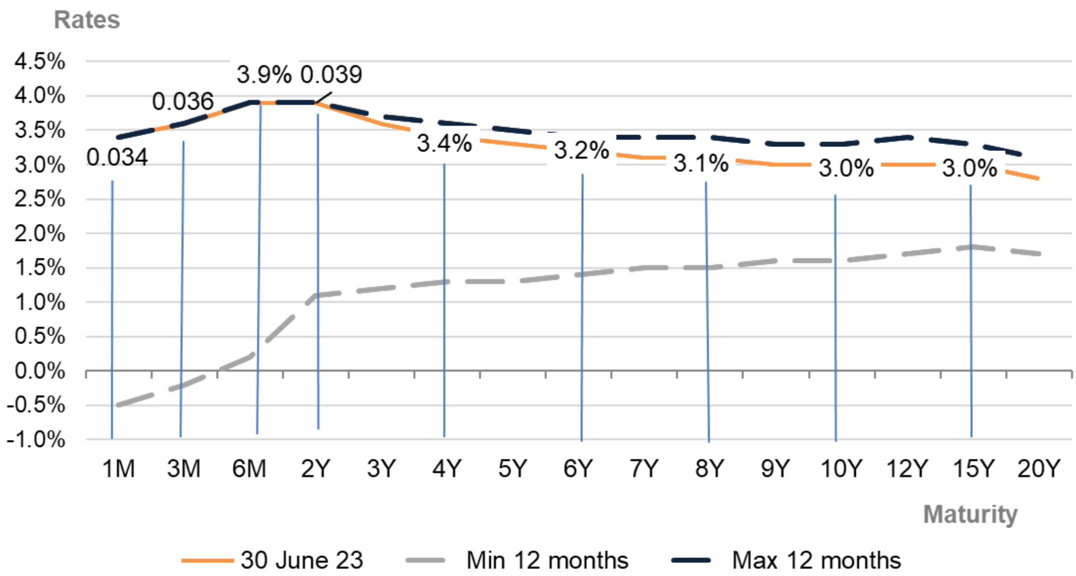
In the first half of the year, despite the crisis in the banking system, stock markets rebounded strongly from the low point seen at the end of October 2022, with some sectors leading this recovery. More specifically, the technology and communication services sectors, the hardest hit in 2022, showed significant growth. Furthermore, fears of a recession subsided, leading to a normalisation of investors' positions and lower stock price volatility. The major global stock markets indeed recorded significant increases, with rises ranging from around 3% to 29%. On the primary bond market, after a slowdown in the first part of the year, there were signs of recovery, and although volatility in rates was still quite high, market conditions remained particularly stable and supportive. Investor demand for solidly rated companies also increased, especially for those active in the utility sector and for securities with a short duration (2-5 years). During the second quarter, the market for bonds with longer durations, 8-10 years, reopened, confirming a scenario of recovery and pointing towards normalisation and stability.

Central banks and monetary policies

During the first half of the year, the ECB continued its restrictive monetary policy, which began during the previous year, with further increases in interest rates, bringing the reference level to 4%. The ECB revised its outlook for economic growth for the next two years downwards, while revising upwards its forecast for inflation to 5.1% for 2023. A substantial change in the outlook for inflation was ruled out at the last meeting, held in June. The prevailing view is that it is unlikely that the European central bank will be able to announce that interest rates will peak in the near future. For this reason, it stated that monetary policy will have to be decided on a meeting-by-meeting basis, remaining "data-dependent".
The British central bank (BoE) also raised the cost of money by 50 basis points at its 22 June meeting, going against expectations, which estimated a rise of only 25 basis points. Unlike the ECB's projections, the BoE's expectations for inflation involve a significant decline over the course of the year, mainly as a reflection of changes in energy prices. Overseas, the Fed, on the other hand, decided at its June meeting to suspend interest rate increases for the first time after ten consecutive hikes, leaving them unchanged at 5.00%-5.25%. Nevertheless, the prevailing market view points towards a further 25 basis point increase in July, on the basis of continued solid growth and a level of inflation that is struggling to settle back to 2%.

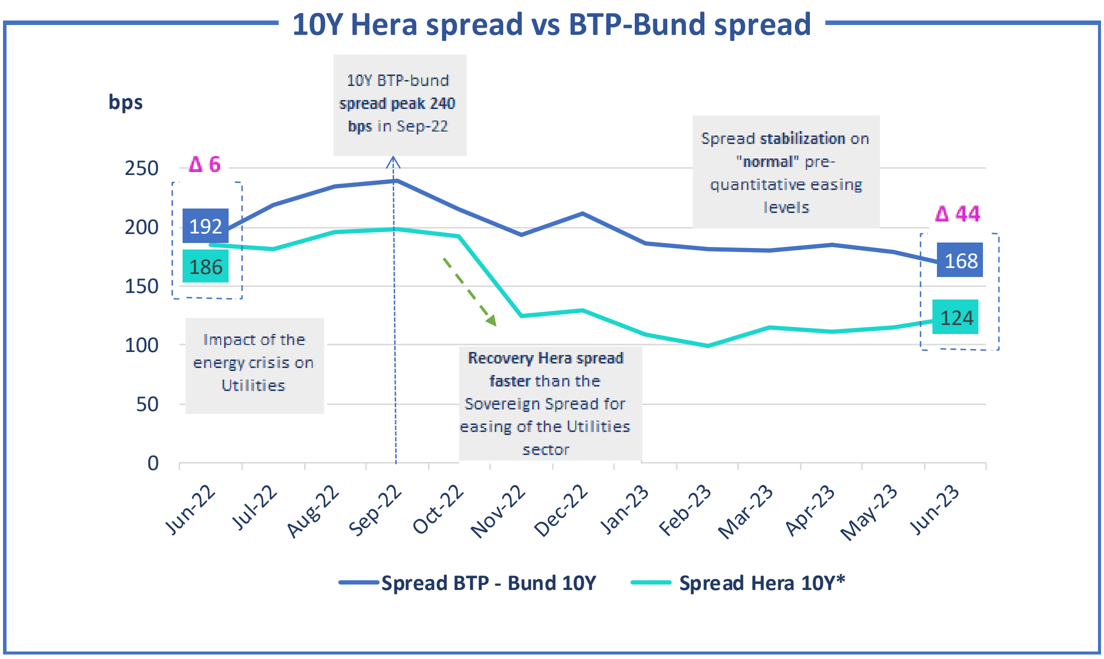
Interest rates

Compared to the same period of the previous year, the euro area interest rate curve showed an upward trend across all maturities. In particular, there was an average rise of about 380 basis points on short-term maturities (1-6 months) and about 180 basis points on medium/long-term maturities (2-15 years). In addition, an unusual phenomenon appeared with respect to the normal trend of the interest rate curve, with steepening on the short-term portion of the curve, showing a peak at 3.9%, and a flat trend on medium/long-term swap rates, settling at around 3.0%. In June, the 1-year forward scenario shows additional steepening on short-term rates, while the medium/long-term interest rate section remains flat at around 3% for the remainder of 2023.



Hera spread vs sovereign spread

Despite the interruption of secondary market purchases of corporate bonds by the ECB (quantitative easing), which led to an increase in corporate spreads, Hera's spread at 30 June 2023 decreased by approximately 62 bps compared to the previous year, thanks to both the recovery of the utility sector and the Group's confirmed solidity and creditworthiness in the opinion of rating agencies and investors.
The sovereign spread dropped compared to the previous year by approximately 24 bps, despite peaking in September 2022, thanks to the improved view on sovereign default risk.
The differential between Hera's spread and the sovereign spread widened in June by 44 bps compared to the previous year, going from 6 bps to 44 bps, with the yield on Italian ten-year bonds at 4.07% (-71 bps compared to December 2022) and the yield on German ten-year bonds at 2.39% (-18 bps compared to December 2022).



*Spread benchmark bond 2030-2034

1.01.02 Businesses and regulations

Business

In the current unstable national and international energy context, affected by the ongoing Russia-Ukraine conflict and the risks associated with reduced availability of Russian gas, the downward trend that began in early 2023 in crude and fuel prices continued, compared to the prices seen in the second half of 2022. In the first half of 2023, energy prices showed a significant year-on-year decrease, in line with the decline in natural gas spot prices. Although prices remain higher than in the past, the first six months of 2023 saw a gradual return to lower figures, due to a gradual rebalancing in global supply and demand and thanks to specific investments in new supply capacity.

In the first six months of 2023, the price index for natural gas at the Dutch hub (Ttf), taken as a reference for European short-term spot market prices, showed a 53% decrease compared to the same period in 2022. The information released by the national gas transmission network operator (Snam Rete Gas Spa) shows a 15.1% decrease in natural gas consumption compared to the same period of the previous year, settling at 33 billion m^3 (as against 38.9 billion m^3 in the first six months of 2022). The most significant decreases in consumption came from civil demand, which totalled 15.6 billion m^3 (-2.7 billion m^3 compared to the same period in 2022) and electricity generation, with volumes at 9.9 billion m^3 (-2.9 billion m^3 compared to the same period in 2022). Industrial demand also fell, albeit by lesser volumes (-0.7 billion m^3 compared to the same period in 2022). In terms of gas injected into the grid, 96.05% of demand was met by imports and the remainder by domestic production and by drawing on storage.

The day-ahead electricity market (MGP) saw prices fall by -45% in the first half of 2023 compared to the same period in 2022. Data made available by the company operating the national transmission grid (Terna Spa) shows that, in the first six months of the year, electricity consumption decreased by -5.3% to 150.5 TWh (159 TWh in the same period of the previous year). Overall, 83.4% of demand was met by domestic production, which decreased compared to the same period in 2022, while the foreign balance stood at 25 TWh.

In the first six months of 2023, net domestic production from renewable sources amounted to 36.5% of total net production, with volumes amounting to 45.9 TWh, higher than the 43.3 TWh produced in the same period of 2022. The portion of consumption met by renewables came to 30.5%, up compared to the volumes recorded on 30 June 2022, due to an increase in hydroelectric production (+16%) and photovoltaic production (+4.3%), while wind production (-2.6%) and geothermal production (-3%) decreased by -0.38 TWh overall. The drop in thermoelectric production was particularly significant, falling by -15.8 TWh compared to the same period one year earlier.

In the waste management sector, in terms of market dynamics, the utilities segment saw increased competitive pressure from foreign operators (especially from Northern Europe) with increasing plant availability and decreasing intermodal logistics costs, factors that affected prices, including those for the dry portions. Within Italy, a decrease was seen in the prices and volumes of waste managed by the National consortium for collection, recycling and recovery of plastic packaging, probably due to the joint effect of lower production in the plastics sector and increased direct exports.

Changes in the regulatory framework

In the first half of 2023, the reference legislative and regulatory context for the company's various business areas was mainly influenced by the new factors introduced concerning the national electronic register for waste traceability and the management of the flooding emergency that struck Emilia-Romagna.

Turning to legislative and regulatory factors, the most important aspects in the first six months of 2023 include:

- measures to support households and businesses in purchasing electricity and natural gas (so-called "bills" decree);
- regulations for criteria and modalities for eliminating the protected electricity service;
- Arera's provisions for the removal of the protected natural gas service;
- the Authority's introduction of general criteria and principles for expenditure and service targets for 2024-2031 concerning regulated infrastructure services in the electricity and gas sectors;
- Arera's provisions on new plans for developing a selective model for investments in the electricity distribution grid;

- the Authority's guidelines for updating the integrated text for active connections (TICA), aimed at simplifying and streamlining procedures;
- the rulings of the Regional Administrative Court of Milan partially annulling Resolution 570/19/R/gas concerning gas distribution tariff regulation for the fifth regulatory period (2020-2025);
- the beginning of the procedure to define the new water tariff method for the upcoming regulatory period, 2024-2027;
- administrative litigation against the waste tariff method (MTR-2) for the second regulatory period (2022-2025);
- Arera's proposals for efficient costing of municipal waste collection, transport and sorting, as well as its definition of technical and quality standards for disposal and recovery;
- final guidelines for the standard service contract between commissioning bodies and municipal waste service operators;
- guidelines for the 2024-25 two-year update of the waste tariff method (MTR-2);
- regulatory measures to deal with the emergency caused by the flooding that occurred in May 2023.

Measures to support the purchase of electricity and gas for the second quarter of 2023

The more significant regulatory interventions for the sector include the law converting the "bills" Decree-Law ("Conversion into law, with amendments, of Decree-Law no. 34 of 30 March 2023, containing urgent measures in support of households and businesses for purchasing electricity and natural gas, as well as in the area of health and tax compliance", Law no. 56/2023 converting Decree-Law no. 34/2023). These measures are aimed at reinforcing the social bonus for electricity and gas, reducing VAT and general charges in the gas sector for the second quarter of 2023, introducing a bonus in the autumn if the price of gas exceeds EUR 45/MW, confirming the tax credit for companies for purchasing electricity and natural gas, and a guarantee on credits granted to agricultural companies.

Path to eliminating the protected electricity service

As regards the termination of the protected electricity service, the Ministry for the environment and energy security intervened by approving the discipline of the criteria and modalities for the conscious entry of household customers into the free market for electricity (Ministerial Decree of 18 May 2023, no. 169). The most remarkable points include an allocation of the gradual protected service (STG) by means of auctions, foreseen only for non-vulnerable domestic customers, for a period not exceeding four years. In addition, a maximum amount set at 30% of local areas that can be allocated to each operator was established, and the "opt-out" mechanism at the end of the service was confirmed. This mechanism, already in force for micro-businesses, requires household customers who at the end of the gradual protection service have not independently chosen a seller on the free market, to be supplied by the exiting seller of the service, at the most convenient market offer. The mechanism is also extended to small businesses, but only at the end of the next allocation period. For vulnerable customers, instead, the protected service will continue to be applied until the adoption of the specific pricing scheme pursuant to Legislative Decree no. 210/2021, a task assigned to Arera, to be completed by 10 January 2024. The specific pricing regime will continue no later than 1 April 2027, and as of this date, the gradual protection service will also provide a last-resort function for vulnerable customers.
Based on the guidelines set out in the aforementioned decree, Arera, through consultation document 212/2023/R/eel, formulated proposals for assigning the gradual protection service for non-vulnerable household customers, who will find themselves without a supplier on the date of the elimination of the protected service. This proposal essentially consists of an assignment through a single-round auction with a closed envelope (sealed bid), carried out simultaneously for all regional areas, unlike what was applied in the case of the selection of STG operators for micro-enterprises. Arera also intends to set a duration of three years for the assignment of the service (from 1 April 2024 to 31 March 2027). This timeframe, according to the regulator, will indeed allow operators to cover the costs associated with the provision of a temporary service, and at the same time give them a reasonable amount of time to try to contract the end customers supplied in the STG in the free market, it being understood that, at the end of the period in which this service is assigned, the end customers still supplied will in any case be contracted in the free market by their respective operators, following the principle of silence indicating consent.

Removal of the protected gas service

As regards the elimination of the protected gas service, scheduled to take effect on 10 January 2024, Arera implemented the measures set out in the "Aiuti bis" Decree (Decree-Law no. 115 of 9 August 2022), providing for a path towards the gradual removal of this service (Resolution 100/2023/R/com). More specifically, this resolution introduces the modalities for both eliminating the protected gas service and identifying vulnerable customers, as defined by the same Decree. Provisions were also introduced on the obligation for sellers to inform end customers as to the end of this service and as to the rights of vulnerable customers. Lastly, changes were made to the Code of business conduct for gas and the Offers portal, resulting from the removal of protected prices.

Electricity and gas distribution

Following the consultation process launched in 2021, Arera approved, with Resolution 163/2023/R/com, its Integrated Text with the criteria and general principles of the Regulation by spending and service objectives ("Ross") for 2024-2031 (Tiross 2024-2031), which currently consists of the general provisions (Part I) and the general guidelines for the Ross method in its "basic" sense (Part II). The Ross is expected to be completed with Part III, dedicated to the "full" Ross, within the end of the year. The objective of the new regulation is to efficiently direct resources, eliminating the distortions of the current regulatory tools in the investment choices made by companies. The path towards the new method will begin with a simplified version, called Ross-base, which will be applied as of 2024 to electricity distribution operators and as of 2026 to gas distribution companies. The outlook provided by Dco 655/2022/R/com regarding the criteria for determining the recognised cost according to the Ross-base approach was essentially confirmed: the actual (total) spending of the distributors will be compared annually with a reference spending, defined by Arera (so-called total spending baseline); the total efficiency recovery will be partly allocated to operational management and partly to investments. Any efficiencies/inefficiencies that appear will be shared with users according to appropriate and differentiated mechanisms. Lastly, the tariff treatment of the capital stock existing at the date of transition to the new methodology will be implemented with the same criteria as before.

New electricity grid development plans for a selective investment model

Resolution 296/2023/R/eel, confirming the guidelines set out in Consultation document 173/2023/R/eel, established, for distribution companies with more than 100,000 end customers, the rules for preparing the new Development plans (DPs) for electricity networks, which will be far more complex than the current ones. The objective is a selective development model for investments in the electricity distribution grid, within a progressive coordination with the new Ross tariff approach. The new DPs will have to be drawn up and sent to both Mase and Arera after public consultation. They will also have to be drafted consistently with Terna's development plan and in coordination with it; they will be drawn up every two years and have a five-year validity; they will include flexibility requirements, with a comparison of the costs of investments and flexibility measures, and the infrastructures needed to connect new generation capacity. For the 2023 Development plans, to be submitted to Arera by the end of this year, there will be a transitional period containing some initial elements, in response to the requirements of Legislative Decree 210/21. When fully operational, and thus as of 2025, there will be more detailed content and integration with output-based regulatory mechanisms.

Guidelines for updating the Integrated Text of Active Connections.

Consultation document 301/2023/R/eel sets out the Authority's guidelines aimed at simplifying and streamlining connection procedures for production plants. It differentiates, on the one hand, between new connection requests and requests to upgrade existing connections, and, on the other, between types of interventions – simple and complex – to be carried out on the infrastructure, serving the connection of the plants. The proposed changes are intended to streamline the connection process by identifying simplified and faster processes for all those involved.

Milan Regional administrative court rulings partially annul Resolution 570/19 on gas distribution tariff regulations

During the first half of 2023, Lombardy's Regional administrative court published several rulings on the administrative appeals made by various operators against Resolution 570/2019/R/gas, concerning the updating of the fifth regulatory tariff period (2020-25) for gas distribution. Among the grounds for the appeals upheld by the administrative judges, the main one concerns the recognition of operating costs, on which the Lombardy court noted the lack of preliminary investigation by Arera during the consultation phase, as well as the illegitimacy of the tariff method drawn up, which does not seem to reflect the differences in the cost structure of the companies and does not allow for the definition of the impact on these costs deriving from environmental shocks or from the regional price lists for production factors. The sentences published cannot be directly interpreted in their effects, because Arera has decided to appeal to the State Council. The ruling on the appeal made by Inrete Distribuzione Energia Spa has not yet been published.

Integrated water service

As regards the integrated water service, with Resolution 64/2023/R/idr Arera initiated the procedure for revising the tariff method valid from 2024 until 2027 (so-called MTI-4) and at the same time published the amount for the average sector cost for the recognition of the expenses incurred for the procurement of electricity in 2022 (285 €/MWh). This document also states that the instruments introduced for 2021 to mitigate the effects of the extraordinary increase in energy costs could also be extended for 2022. There will also be additional mechanisms to increase management efficiency and measures to promote innovative choices aimed at fostering energy and environmental sustainability objectives, such as energy efficiency measures, interventions to reduce the use of plastic, recovery of raw materials, reuse of water and reduction of sludge disposed of in landfills.

Integrated waste cycle

The Lombardy Regional administrative court (First section) annulled (with rulings no. 486 of 24 February 2023, no. 501 of 27 February 2023, and no. 578 of 6 March 2023) Arera's Resolution "Waste Tariff Method (MTR-2) for the second regulatory period, 2022-2025" with regard to the part in which it regulates the criteria for defining "minimum" treatment plants. The rulings of the Regional administrative court, while originating from different proponents and interests, are related to the same legal institution introduced by Arera, and in particular the regulation of the criteria for defining "minimum" treatment plants, i.e. those serving to conclude the municipal waste cycle of the regional area in question. In the opinion of the Regional administrative court, the regulation introduced by Arera on minimum plants infringes the constitutional competencies of the State and the Regions, the only authorities entitled to define plants having a significant national interest (and thus the characteristics of a "minimum plant"). Following this ruling, Arera appealed against the Lombardy Regional administrative court.

Proposals for efficient costs for sorted municipal waste collection, transport, sorting operations and definition of technical and quality standards for disposal and recovery

With consultation document 214/2023/R/RIF, the Authority set out its guidelines for defining the efficient costs of sorted waste collection, transport, sorting and other preliminary operations, as well as the definition of technical and quality standards for carrying out disposal and recovery. Arera intends to introduce measures aimed at ensuring that those having obligations as extended producers be responsible for charges consistent with those attributable to the products they place on the national market, strengthening incentives to promote the efficiency of collection and transport activities carried out locally and introducing forms of transparency in costs for an effective design of mechanisms to cover the efficient costs of activities related to sorted waste collection. Furthermore, Arera intends to promote an improvement in the performance of recycling plants that may be able to compensate, at least in part, for the lower quality of sorted waste collection, following a rationale of redistribution along the entire chain in the efforts made to achieve the unitary EU targets on this subject, and tending, in general, to ensure greater reliability in the recovery and disposal infrastructure system, through the identification of technical and quality standards.

Guidelines for the model service contract between commissioning bodies and waste service operators

With consultation document 262/2023/R/rif, Arera illustrated the final guidelines for the standard outline of the service contract for regulating relations between entrusting bodies and managers of the municipal waste service. The measure in question follows up on consultation document 643/2022/R/RIF concerning the approach and general criteria for defining the model outline of the service contract between contracting bodies and managers of the municipal waste service (one or more activities in the chain). This further consultation document illustrates the final guidelines to be adopted in regulating the standard outline of service contracts. The model concerns the regulation of relations between contracting bodies and the managers of the integrated municipal waste management service, as well as the managers of one of the services that make it up; furthermore, with the necessary adaptations, it deals with all the management methods established for entrusting this service by the regulations in force (entrusting to third parties by means of a public tender procedure; entrusting to a mixed company; entrusting to an in-house company).

Guidelines for the 2024-25 biennial update of the waste tariff method (MTR-2)

Consultation document 275/2023/R/rif illustrates the Authority's guidelines for identifying the methods necessary to proceed with the two-year updating of operating-financial plans (as provided for by articles 7 and 8 of Resolution 363/2021/R/RIF - Waste Tariff Method for the second regulatory period, MTR-2). More specifically, the methods for updating the cost components eligible for tariff recognition on the basis of the data inferable from the financial statements for the year (a-2) are submitted for consultation, and certain quantitative parameters are redefined. An attempt is also being made to integrate the current system of tariff regulations, due to the need to reduce the risk that, in numerous regional contexts, the final recognition of costs – with particular reference to the trend in production price factors as of 2022 – may not be covered within the limit on changes in tariff revenues for the integrated municipal waste management service, as per paragraph 4.1 of MTR-2, identifying mechanisms that ensure, on the one hand, service continuity and, on the other, sustainability in fees for the end user.

Regulatory measures to deal with the flood emergency

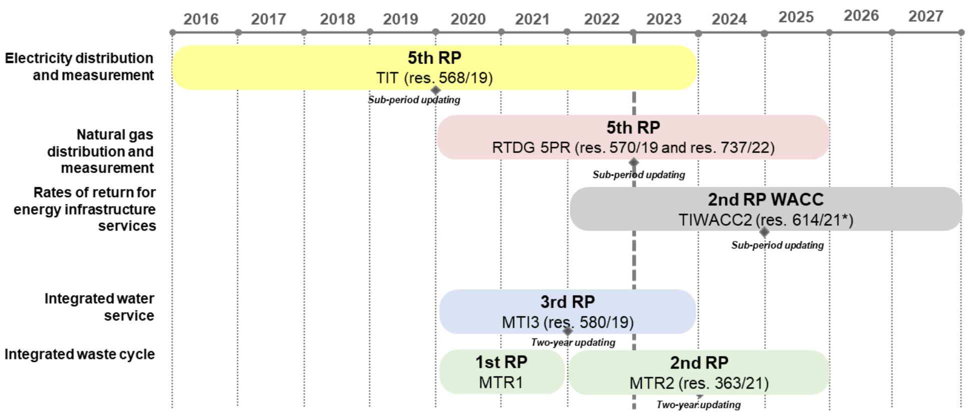
To face the emergency triggered by the flooding that occurred in the Emilia-Romagna region and other neighbouring areas, the Government and Arera have established a number of measures to deal with the significant hardship seen in the localities affected.

As regards the supply of electricity and gas, the water service and the integrated municipal waste cycle, with resolution 216/2023/R/com, similarly to what was introduced in other emergency situations, Arera ordered, as of 1 May 2023, a suspension of payment terms for invoices issued or to be issued and the non-application of regulations for suspensions concerning arrears, leaving the definition of the local scope of application to subsequent regulatory measures.

With the so-called "Flood" decree-law ("Urgent measures to deal with the emergency caused by the flooding that occurred on or after 1 May 2023", decree-law no. 61 of 1 June 2023), the Government identified the local area to which the suspension of payment terms already foreseen by Arera refer, mandating Arera regulations on the timing of the suspension of bill payment, foreseeing a period of not more than six months as of 1 May 2023. The list of areas included in the perimeter of the suspension of payment terms concerns 91 municipalities or their districts located in the provinces of Ferrara, Bologna, Forlì-Cesena, Ravenna, Rimini, Pesaro-Urbino and Florence.

Following Decree-Law no. 61/2023, Arera intervened with further provisions, which set at four months the period of validity of the suspension of the terms of payment of bills or payment notices previously determined by the Regulator, clarifying the possibility of extending this period up to a maximum of six months, subject to a more precise definition by the competent authorities of the local areas most damaged by the adverse weather events. The Authority also intervened by defining mechanisms for payment by instalments following the expiry of the suspension of payment terms and mechanisms for economic advances for the benefit of the operators involved.

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



- *Resolution 614/21 set out the new methodology for determining the rates of return on energy capital and established the WACCs 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 2023 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 cycle waste
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 (Ambit Government Body, ARERA)	Dual level (territorially competent body, ARERA)
Recognised investment capital for regulatory purposes (Rab)	Historical cost revalued (distribution) Weighted average between actual cost and standard cost (measurement) Parametric recognition (centralised capital)	Parametric recognition for assets up to 2007 Historical cost revalued per asset since 2008	Historical cost revalued	Historical cost revalued
Regulatory Lag investment recognition	1 year	1 year	2 years	2 years
Return on investment (3) (real, pre-tax)	2019 6.3% Distribution 6.8% Measurement Years 2020-2021 6.3% Distribution and Measurement Year 2022-2023 5.6% Distribution and Measurement	2019-2021 5.9% Year 2022-2023 5.2% Distribution and Measurement	2018-2019 5.31% Years 2020-2021 5.24% Years 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 Years 2022-2025 (4) 5.6% Collection (adjusted when setting tariffs for the years 2024-2025, until then 6.3%) 6.0% Treatment
Recognised Operating Costs	Average actual cost values by business groupings (size/density), based on 2011 (for revenues until 2019) and 2018 (for revenues from 2020) (5) Sharing of efficiencies achieved against recognised costs Upgrade with price-cap	Average actual segment cost values on a 2014 basis (for revenues until 2019) and 2018 basis (for revenues from 2020) Sharing of 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 Processing Actual operator costs with 2-year regulatory lag Additional Costs for Quality Improvement and Changes in the Management Perimeter (forecast nature) Additional charges for specific purposes (provisional nature)
Annual efficiency operating costs	Annual X-factor Year 2019 Distribution: 1.7% large enterprises 2.5% medium-sized enterprises Measurement and marketing: 0% From 2020: Distribution:	Annual X-factor Year 2019 Distribution: 1.9%. Measurement: 1.3%. From 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	

	3.53% large enterprises 4.79% medium-sized enterprises Measurement: 0% Marketing: 1.57%.			
Incentive mechanisms		Net revenue sharing from fibre transit in the electricity infrastructure	Sharing of electricity costs based on energy savings achieved; Recognition of 75 per cent 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 growth			On an asymmetrical basis and depending on: - investment needs - cost-effectiveness of management - changes in scope Instance to guarantee financial balance	Collection On an asymmetrical basis and depending on the presence of: -perimeter changes -improved level of service quality Treatment Limit to growth less tight since the efficiency factor is not provided for, it is a function of -inflationary increases -environmental impact of plants Collection and Processing Instance to guarantee financial balance

(1) Resolution 443/19 is applied to the managers of the integrated waste cycle, including treatment activities (for disposal or recovery) only if these activities are included in the operator's company 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 concluding 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 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, like other sector operators, challenged the measure before the Lombardy-Milan Regional Administrative Court (TAR) with regard to the significant reduction in the recognition of operating costs brought about by Resolution No. 570/2019.

1.02 MAIN EVENTS OCCURRED

1.02.01 May 2023 flood events

The flood that struck a significant portion of Emilia-Romagna from 1 to 3 May and from 16 to 17 May had a devastating impact on the region and some neighbouring areas.
The flooding affected 44 municipalities in Emilia-Romagna, mainly in the provinces of Ravenna, Forlì-Cesena, Rimini, Bologna, Modena and Reggio Emilia.
Heavy rainfall caused 23 rivers to overflow, and more than 1,100 hydrogeological instabilities and landslides occurred in the area of the Tuscan-Emilian and Tuscan-Romagna Apennines.
These calamitous events also affected the northern provinces of the Marche region, including Pesaro and Urbino, Ancona, Macerata and Fermo, as well as some municipalities in Tuscany, among which Fiorenzuola, Marradi, Palazzuolo sul Senio and Londa.
Faced with this emergency, the Hera Group took immediate action to restore the services provided in the areas affected by the disaster to their normal operations as quickly as possible, including gas distribution, electricity, district heating, public lighting and the integrated water service, as well as waste collection and disposal. In particular, a continuous presence was guaranteed thanks to the immediate establishment of a task force involving more than a thousand operators and 250 vehicles that, in addition to working on plants, provided support to the populations affected, collaborating with the Civil Protection and police forces.
To date, over 70,000 tonnes of waste have been collected in the affected areas. This waste is still being disposed of, generated as a result of the flooding and equivalent to the amount normally collected in the same areas over a 10-month period. Furthermore, integrated water, gas distribution, district heating and public lighting services have been restored for almost all customers. More specifically, approximately 25,000 integrated water service users were disconnected, while 4,550 lighting points and 25,400 gas meters were damaged and 15 power station were flooded.
At present, an initial estimate of the costs caused by the disaster, which takes into account both the initial emergency interventions and the damage suffered to plants, amounts to about 124 million euro, about half of which is related to network services and the remainder to waste management services.

To deal with the flood, the Group immediately activated association channels, the regulatory authority (Arera), local regulators (Egato) and the Emilia-Romagna region, to direct actions supporting families and businesses, as well as identifying the instruments that will have to guarantee the recognition of the above-mentioned costs and the maintenance of the economic-financial balance, through appropriate reporting activities as yet to be defined. The Group also activated its insurance coverage and is working with insurance companies to define and agree upon an estimate of the damage suffered by its plants, which will be followed by appropriate reimbursements.

The Government, with Decree Law No. 61 of 1 June 2023, allowed the municipalities affected to suspend the terms of payment of the Tari due in the period from 1 May 2023 to 31 August 2023, and mandated Arera to regulate the procedures for the temporary suspension of the terms of payment of invoices issued, or to be issued, or payment notices due in the aforementioned period, relating to the following services: gas, electricity, water and waste.
Responding to this decree, Arera set the period for suspension of bill payment terms at four months (starting in May), established the possibility of automatically paying them by instalments, without discrimination and without applying interest, without prejudice to the right of customers to pay in a single instalment, or to pay the amounts due according to an instalment plan to be agreed with the supplier.
In order to ensure the operators' financial balance, Arera also established a mechanism of free advances, payable by Csea, with the first report to be prepared as of 10 July 2023. Subsequent statements must be submitted within the 15th of each month, until the end of October.
The first statement submitted by the Hera Group defined the value of the advance due at 25.6 million euro.

Considering the above, subject to a time lag in the payment of invoices, the recovery of costs incurred and the reimbursement of damages sustained, in order to recuperate the necessary investments, due to the finalisation of estimates and the definition of the reporting processes vis-à-vis the respective authorities and insurance companies, it is reasonable to assume that the impact of the calamitous events on the Group is, on the whole, negligible and that these effects will be compensated for in the coming months without leading to any significant operating or financial repercussions on the Group's structure.

1.02.02 Business and financial events

Sustainability-linked bond

On 20 April 2023, Hera Spa issued its second sustainability-linked bond with a nominal value of 600 million euro repayable in 10 years. This second sustainability-linked bond instrument, similarly to the one issued in 2021, met with great interest and requests for subscription came to roughly 2.7 billion, equivalent to 4.5 times the offer. The coupon is expected to have a fixed rate of 4.250%, while the yield at the time of issue is 4.310%. Starting from the interest payment date of 2032, a possible step-up (interest rate increase) has been foreseen in the event that the company does not meet the targets for reducing greenhouse gas emissions, measured in tonnes of CO2 (rate increase of 0.30%), and increasing the amount of recycled plastic, measured in thousands of tonnes (rate increase of 0.20%).
This sustainability-linked bond is part of the Hera Group's strategy aimed at reducing greenhouse gas emissions and increasing the amount of recycled plastic. More specifically, the Hera Group aims to reduce greenhouse gas emissions by 37% within 2030 (compared to 2019), thanks to concrete actions both internally and with the involvement of suppliers and customers, as regards electricity and gas sales. This is one of the most ambitious targets for a company in Italy, and has been validated by the prestigious international network Science Based Target initiative (SBTi). As for the second target, the Group aims to increase the amount of recycled plastic by 150% within 2030 (compared to 2017), thanks to the approximately 1.2 billion in investments planned in the waste management sector in the 2022-2026 Business Plan. In particular, the subsidiary Aliplast, a leader in plastics recycling, has planned new industrial development projects with investments coming to over 80 million euro, both to expand plant capacity in the segments already covered (recycled PET) and to extend its range of action to include the recovery of rigid plastics thanks to a new plant.
The bond will be listed, as of the date of issue, on the regulated market of Euronext Dublin, on the regulated market of the Luxembourg Stock Exchange and on the ExtraMOT Pro multilateral trading system of Borsa Italiana.

Significant corporate operations

A.C.R. Spa

On 8 March 2023, the Hera Group, acting through its subsidiary Herambiente Servizi Industriali Srl, acquired 60% of the company A.C.R. di Reggiani Albertino Spa (A.C.R. Spa), headquartered in Mirandola (Modena) and one of Italy's leading companies operating in the remediation, industrial waste treatment, industrial plant decommissioning and oil & gas-related civil works sectors.
This operation created 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.

Asco TLC

The Hera Group, acting through its subsidiary Acantho Spa, and Ascopiave Spa were awarded the public tender called by Asco Holding Spa for the sale of 92% of the shares in Asco TLC Spa, held by Asco Holding itself and by the Treviso-Belluno Chamber of Commerce. The partnership between Ascopiave and Acantho called for a shareholding in this tender involving 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 extending for over 2,200 km of fibre optics, 56 radio links and 24 xDsl exchanges in unbundling, and provides its 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.

Other corporate operations

Horowatt

On 11 May, Hera Spa and Orogel Società Cooperativa Agricola established the company Horowatt Srl. Thanks to an investment coming to roughly 8 million euro, an innovative agri-voltaic plant will be built, capable of producing 10 thousand MWh per year, equivalent to 25% of the energy needs of Orogel's Cesena plant and paving the way for future initiatives aimed at exploiting all the possibilities of agriculture 4.0. The agri-voltaic plant, which will be constructed on a 13-hectare plot of land owned by the cooperative in front of its headquarters in Cesena, will be built and managed by Horowatt and will be integrated with the existing cogeneration plant built and managed by Hera Servizi Energia, the Hera Group's ESCo.
This project's objectives include experimenting with a virtuous coexistence between agri-voltaic technology and agricultural crops, without consuming soil and creating synergies with the crops, which will be protected from drought and excessive temperatures and will benefit from greater soil moisture. The photovoltaic panels will be mounted on metal structures at a height of approximately 4-5 metres, sufficient to allow all agricultural activities to take place underneath. Moreover, thanks to a sophisticated mechanism integrated with sensors on the ground, the panels will be oriented not only to follow the sun's rotation, guaranteeing maximum production efficiency, but also to meet specific agricultural needs, benefiting the crops below.
Work on the plant is scheduled to begin in 2023 and be completed within the second half of 2024.

F.lli Franchini

On 29 June 2023, Hera Comm Spa acquired 60% of F.lli Franchini Srl, a Rimini-based company with consolidated experience in design, installation and maintenance of all types of technological systems for companies, public administrations and hospitality facilities. This company has been active for 17 years in producing high-yield renewable energy sources for public and private industrial customers throughout Italy.
This partnership with a long-standing operator, active both locally and nationally, will enable the Hera Group to acquire new technical skills, particularly in the photovoltaic market, expand its portfolio of solutions for business customers, and respond to the growing demand for plant solutions using renewable sources, thus further strengthening its position in the Italian energy market.

Significant events occurred after the reporting period

Tiepolo

On 6 July 2023, the Hera Group completed the acquisition of Tiepolo Srl, owned by Combigas and Greenfield Renewables, which has developed a project for the construction of a photovoltaic power station in Bondeno (Ferrara). This plant, which will have a capacity of 8.9 Megawatts and will produce roughly 13 GWh/year when fully operational, is one of the Hera Group's numerous projects aimed at producing renewable energy already included in the Business Plan to 2026, to support citizens, businesses and public administrations in the decarbonisation and electrification of consumption.

1.03 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 (operational adjustments) considered to be useful in understanding the results.

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 operational 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 operational adjustments 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 operational adjustments / balance sheet reconciliation", as are any operating, financial and fiscal special items.

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 operational 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 operational 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 operational 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 operational adjustments used to bring certain accounting valuation items back into line with operational 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.
Net investments are calculated as the sum of investments in tangible fixed assets, intangible assets and equity investments net of capital grants.

Financial APMs

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 operational adjustments).
Adjusted net working capital is made up of the sum of: inventories (adjusted to reflect the different operational 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 operational 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 (hereinafter 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 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 operational 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.
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.
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.
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 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€)	June 23	June 22	Abs. change	% change
Revenues	**8,297.5**	**8,896.0**	**(598.5)**	**(6.7)%**
Adjusted Ebitda	**718.3**	**631.2**	**87.1**	**+13.8%**
Adjusted Ebitda/revenues	8.7%	7.1%	1.6 p.p.	0.0%
Adjusted Ebit	**374.7**	**334.9**	**39.8**	**+11.9%**
Adjusted Ebit/revenues	4.5%	3.8%	0.7 p.p.	0.0%
Adjusted net profit	**208.0**	**201.7**	**6.3**	**+3.1%**
Adjusted net profit/revenues	2.5%	2.3%	0.2 p.p.	0.0%
Net investments	**330.3**	**288.5**	**41.8**	**+14.5%**

Financial APMs (mn€)	June 23	Dec 22	Abs. change	% change
Adjusted net non-current assets	7,791.2	7,522.3	268.9	+3.6%
Adjusted net working capital	612.2	1,096.0	(483.8)	(44.1)%
Provisions	(668.1)	(657.6)	(10.5)	+1.6%
Net invested capital	7,735.3	7,960.7	(225.4)	(2.8)%
Net debt	**(4,145.7)**	**(4,249.8)**	**104.1**	**(2.4)%**

Special items and operational adjustments / IFRS balance sheet reconciliation

As described in detail in the Half-year financial report at 30 June 2022 and in the Year-end financial report at 31 December 2022, which may be consulted for a complete discussion, starting from the previous period, and as a supplement to the statements drafted in accordance with IFRS standards, the Group's management held it appropriate to present the results by valuing the natural gas inventories according to an operational criterion, in order to provide a representation that is consistent with the market context, which showed significant and sudden changes in prices with respect to previous trends.

At the end of the first quarter of 2023, at the conclusion of the winter and as a result of the sale of the expected flows, the previous valuation differential was fully recovered. Therefore, this had an effect on the change in inventories recorded in the income statement, but not on the value of inventories recorded in the balance sheet. The following period of injection, which began in the second half of March, was also subject to a double valuation process, consistent with the approach used during the previous year. From an accounting point of view, in particular, all gas deliveries made during the injection period (March – June) were considered according to a calculation of the average carrying cost, regardless of their destination, while from an operational point of view, only the procurement flows identified as having the purpose of injection into storage were considered. On the basis of this operational valuation, and as part of the balanced management of its portfolio, the Group introduced the appropriate hedges, corresponding to the withdrawals planned for the winter.

The combined effect of sharply decreasing prices and the timespan required for filling resulted in an accounting valuation that was higher than the operational valuation, since purchases that from an operational point of view are intended for sale to end customers also had to be taken into account in the balance sheets. This means that the book value at 30 June 2023 was higher than the net sale value, identified in the operational valuation that represents the basis for the hedges mentioned above, implemented in compliance with risk management policies. Consequently, an impairment was introduced and recorded in the income statement. For further details, see paragraph 2.02.09 "Operating working capital" and Note 30 "Inventories".

The following table provides a reconciliation between the income statement referred to in the remarks on operations and the consolidated income statement drafted pursuant to accounting standards.

	June 23			June 22		
mn€	Published statement	Operational adjustments	Operations statement	Published statement	Operational adjustments	Operations statement
Revenues	8,297.5		8,297.5	8,896.0		8,896.0
Other operating revenues	299.3		299.3	219.4		219.4
Raw and other materials	(5,868.0)	(93.0)	(5,961.0)	(7,150.5)	88.3	(7,062.2)
Service costs	(1,576.2)		(1,576.2)	(1,105.2)		(1,105.2)
Personnel costs	(330.4)		(330.4)	(308.7)		(308.7)
Other operating expenses	(41.5)		(41.5)	(39.3)		(39.3)
Capitalised costs	30.6		30.6	31.2		31.2
Ebitda	**811.3**	**(93.0)**	**718.3***	**542.9**	**88.3**	**631.2***
Amortization, depreciation and provisions	(343.6)		(343.6)	(296.3)		(296.3)
Ebit	**467.7**	**(93.0)**	**374.7***	**246.6**	**88.3**	**334.9***
Financial operations	(90.5)		(90.5)	(50.9)		(50.9)
Pre-tax result	**377.2**	**(93.0)**	**284.2***	**195.7**	**88.3**	**284.0***
Taxes	(103.0)	26.8	(76.2)	(56.7)	(25.6)	(82.3)
Net result	**274.2**	**(66.2)**	**208.0***	**139.0**	**62.7**	**201.7***
Result from special items						
Net profit	**274.2**	**(66.2)**	**208.0***	**139.0**	**62.7**	**201.7***
Attributable to:						
Parent company shareholders	253.9	(66.2)	187.7*	120.6	62.7	183.3*
non-controlling interests	20.3		20.3	18.4		18.4

* adjusted results, as defined above

As regards the first half of 2023, the change in inventories related to gas storage was adjusted by 93 million euro, resulting in a positive tax effect coming to 26.8 million euro. In this way, the valuation differential recorded at the end of the previous year, as illustrated above, was fully recovered.

In the first half of 2022, instead, the change in inventories related to gas storage was adjusted by 88.3 million euro, resulting in a negative tax effect coming to 25.6 million euro.

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

	Giu-23			Dec 22		
mn€	Published values	Operational adjustments	Operational values	Published values	Operational adjustments	Operational values
Net non-current assets	7,791.2	-	7,791.2*	7,549.1	(26.8)	7,522.3*
Net working capital	612.2	-	612.2*	1,003.0	93.0	1,096.0*
Provisions	(668.1)	-	(668.1)	(657.6)		(657.6)
Net invested capital	**7,735.3**	**-**	**7,735.3***	**7,894.5**	**66.2**	**7,960.7***
Equity	(3,589.6)	-	(3,589.6)*	(3,644.7)	(66.2)	(3,710.9)*
Net debt	(4,145.7)	-	(4,145.7)	(4,249.8)		(4,249.8)
Total sources of financing	**(7,735.3)**	**-**	**(7,735.3)***	**(7,894.5)**	**(66.2)**	**(7,960.7)***

* adjusted results, as defined above

With reference to 30 June 2023, as described above, no operational adjustments were identified.

With reference to 31 December 2022, the inventories were adjusted by 91.3 million euro, with a negative effect involving deferred taxation coming to 26.8 million euro and a consequent positive impact on equity amounting to 66.2 million euro overall.

1.03.01 Operating results and investments

Increases in operating results and investments

The first half of 2023 closed for the Hera Group with operating results and investments rising compared to the previous year. Adjusted Ebitda amounted to 718.3 million euro, up 13.8%; adjusted Ebit rose by 11.9%, and adjusted net profit increased by 3.1%. Investments also showed significant growth, up 14.5% compared to June 2022, reflecting the Group's ongoing focus on growth, enhancing the value and resilience of assets under management.

The results for the first half of the year must be seen within an external scenario showing less volatility in energy commodity prices, which allowed the Hera Group to operate once again in a more stable market context. The Group's performance is still driven by its multi-business strategy, balanced between regulated and free market activities, with a focus on sustainability and the circular economy. The Hera Group pursues this model both through internal growth and by grasping the opportunities offered by the market, through external development.

With respect to June 2022, note the integration into the Hera Group's waste management area of two important companies: 60% of A.C.R. di Reggiani Albertino Spa, which operates in the remediation sector, industrial waste treatment, decommissioning of industrial plants and civil works related to oil & gas, was acquired by Herambiente Servizi Industriali Srl; and Macero Maceratese Srl, which specialises in waste recovery and treatment, was acquired by Marche Multiservizi Spa.

Also note that 60% of F.lli Franchini Srl, a company based in Rimini that operates in the sector of thermo-hydraulic and electrical system installations and photovoltaic solutions for business customers, was acquired by Hera Comm Spa, and 36.8% of Asco Tlc Spa, a company active in the provision of ICT services mainly to companies and public administrations, was acquired by Acantho Spa. Both transactions have not yet produced any economic effects.

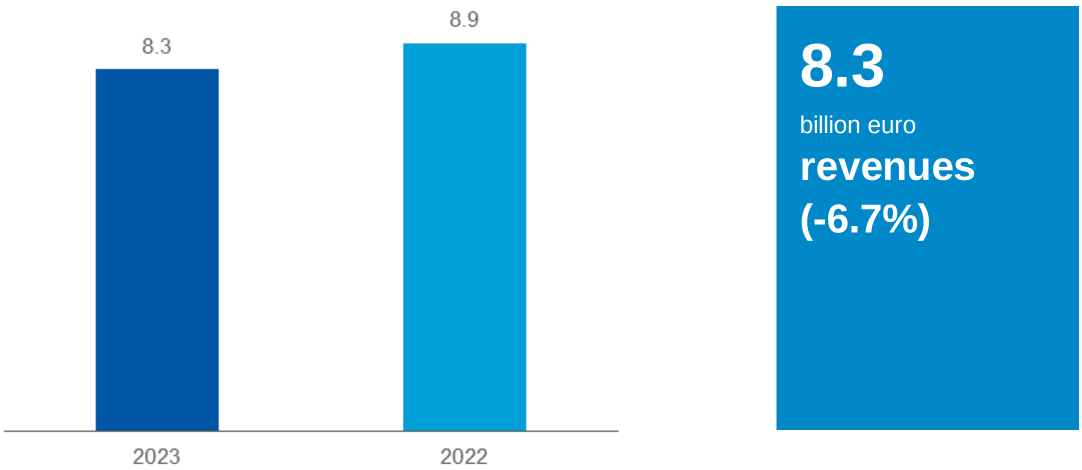
Furthermore, note that Hera Comm Spa was awarded two of the nine lots of the protected service for 2023 and 2024, one lot more than in the previous two-year period, and one of the twelve lots of the gradual protected service for supplying electricity to micro-businesses for the period going from 1 April 2023 to 31 March 2027. Detailed information on this matter is provided in paragraph 1.05.02.

The following table shows operating results at 30 June 2023 and 2022:

Income statement (mn€)	June 23	% inc.	June 22	% inc.	Abs. change	% change
Revenues	8,297.5	0.0%	8,896.0	0.0%	(598.5)	(6.7)%
Other operating revenues	299.3	3.6%	219.4	2.5%	79.9	36.4%
Raw and other materials	(5,961.0)	(71.8)%	(7,062.2)	(79.4)%	(1,101.2)	(15.6)%
Service costs	(1,576.2)	(19.0)%	(1,105.2)	(12.4)%	471.0	42.6%
Other operating expenses	(41.5)	(0.5)%	(39.3)	(0.4)%	2.2	5.6%
Personnel costs	(330.4)	(4.0)%	(308.7)	(3.5)%	21.7	7.0%
Capitalised costs	30.6	0.4%	31.2	0.4%	(0.6)	(1.9)%
Ebitda*	**718.3**	**8.7%**	**631.2**	**7.1%**	**87.1**	**13.8%**
Amortization, depreciation and provisions	(343.6)	(4.1)%	(296.3)	(3.3)%	47.3	16.0%
Ebit*	**374.7**	**4.5%**	**334.9**	**3.8%**	**39.8**	**11.9%**
Financial operations	(90.5)	(1.1)%	(50.9)	(0.6)%	39.6	77.7%
Pre-tax result*	**284.2**	**3.4%**	**284.0**	**3.2%**	**0.2**	**0.1%**
Taxes	(76.2)	(0.9)%	(82.3)	(0.9)%	(6.1)	(7.4)%
Net profit for the period*	**208.0**	**2.5%**	**201.7**	**2.3%**	**6.3**	**3.1%**
Attributable to:						
Parent company shareholders*	**187.7**	**2.3%**	**183.3**	**2.1%**	**4.4**	**2.4%**
Minority shareholders	20.3	0.2%	18.4	0.2%	1.9	10.3%

* adjusted results, as defined in paragraph 1.03

REVENUES (bn€)



Revenues in June 2023 dropped by 598.5 million euro compared to the same period in 2022. The energy sectors showed an 897.7 million euro decrease, mainly due to lower energy prices and lower volumes of gas sold due to the mild weather in the first part of the year. This fall was partially mitigated by the higher volumes of electricity sold, thanks to actions in commercial development, the Consip tenders and the lots awarded in the protected and gradual protected services, as mentioned above.

In addition, note the increased turnover in energy services, due to ongoing opportunities related to energy efficiency incentives in residential buildings (insulation bonus and 110% super-bonus), and an increase in activities for value-added services for customers. These factors jointly contributed with an amount coming to roughly 223 million euro.

Lastly, revenues in the waste management sector accounted for 74 million euro of this growth, an increase caused in particular by acquisitions made in the industrial market and in treatment.

For further details, see the analyses of the individual business areas in paragraph 1.05.

Other operating revenues in June 2023 increased by 79.9 million euro compared to the same period in 2022. Note the higher revenues for orders on assets under concession and energy efficiency certificates.

Costs for raw materials linked to the trend in revenues

Costs for raw and other materials decreased by 1,101.2 million euro compared to June 2022. This drop is mainly related to the trend in energy revenues and changes in prices for energy as a raw material.

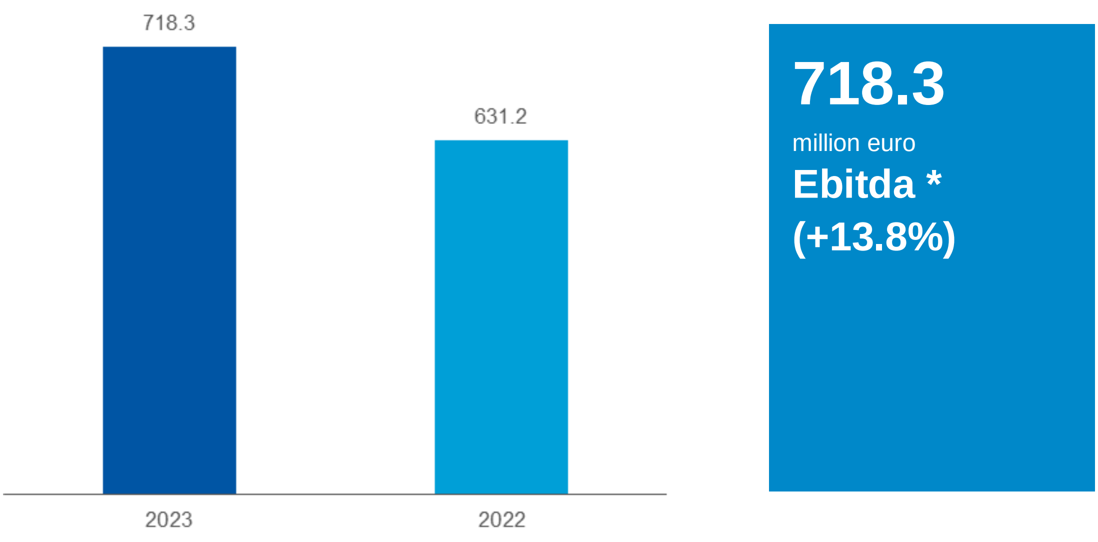
Other operating expenses increased by 473.2 million euro (higher service costs totalling 471.0 million euro and higher operating expenses amounting to 2.2 million euro). Overall, costs for increased works in energy services, for energy efficiency and value-added services, amounted to roughly 202.0 million euro. These were accompanied by higher costs for waste collection and treatment coming to roughly 72 million euro, mainly due to corporate acquisitions, a rise in transport costs and increased activities in developing new sorted waste collection projects.
Furthermore, higher costs for gas transport and storage were partially offset by the decrease in system charges discussed in paragraphs 1.05.01 and 1.05.02

+2.6% cost of personnel, excluding changes in scope of consolidation

Personnel costs increased by 7.0%, or 21.7 million euro, compared to June 2022. Of this increase, 13.7 million euro was due to the changes in the scope of consolidation following the corporate acquisitions described above. Net of these events, the increase in personnel costs was limited to 2.6%, due to the salary increases provided for in the national collective labour agreement and the higher average presence seen in the period in question.

Capitalised costs decreased by 0.6 million euro, due to lesser works involving investments on Group-owned assets.

EBITDA * (mn€)

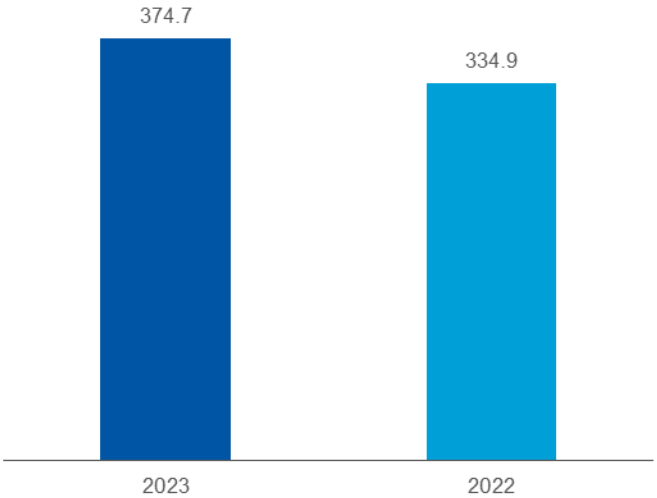


Adjusted Ebitda increased by 87.1 million euro compared to June 2022, up 13.8%. This performance was due to the overall contribution coming from the energy areas, which amounted to 68.1 million euro, the good performance seen in the waste management area, up by 12.2 million euro, and lastly the contributions coming from the integrated water cycle, with 3.3 million euro, and the other services area, with 3.6 million euro.

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

Depreciation, amortisation and provisions at 30 June 2023 increased by 47.3 million euro, or 16.0%, year-on-year. Higher amortisation and depreciation were mainly due to new operating investments, increased activities, incremental costs incurred linked to the acquisition of new customers, and changes in the scope of operations resulting from the consolidation of companies involved in the remediation and waste treatment business. An overall increase was also seen in provisions for bad debts, attributable to traditional, mainly electricity, and protected markets.

EBIT * (mn€)



374.7
million euro
Ebit *
(+11.9%)

Adjusted Ebit amounted to 374.7 million euro, up 11.9%. The increase resulting from the growth in Ebitda* was partially offset by higher depreciation and amortisation, as described above.

Financial operations increase

Financial operations increased by 39.6 million euro, mainly due to a significant change in the scenario concerning interest rates, which saw a notable increase in the cost of money, and the Group's higher average requirements for funding and flexibility, with respect to an energy price scenario that has not yet fully stabilised.
Thanks to the funding activities carried out in 2022 and the liability management operations seen in early 2023, the financial structure is now stronger and more optimised, to insure the Group against potential liquidity risks and to guarantee operations and the significant amount of investments.

The adjusted pre-tax result showed a slight rise coming to 0.1% compared to June 2022; the increase resulting from Ebit was almost entirely absorbed by the trend in financial operations described above.

Tax rate at 26.8%

Taxes for the first half of 2023, as shown in the income statement, amounted to 76.2 million euro, down significantly from the 82.3 million euro seen in the first half of 2022.The tax rate, which came to 26.8%, was also down from 29%, due to the recording of benefits arising from the exemption from the higher values arising from the acquisition of Con Energia Spa, as well as the tax credits recognised for the purchase of electricity and gas, pursuant to Decree Law 4/2022 and subsequent measures, which are not relevant for tax purposes. When comparing the two periods, also note that the taxes accrued in the first half of 2022 include the "non-recurring contribution against high utility bills" provided for by Law No. 51/2022, which converted Article 37 of Decree Law No. 21/2022, amounting to 2.3 million euro.

+3.1% net profit *

Reflecting of all the events described above, adjusted net profit for the period increased by 6.3 million euro compared to the amount seen at June 2022.

Net investments rise to 330.3 million euro

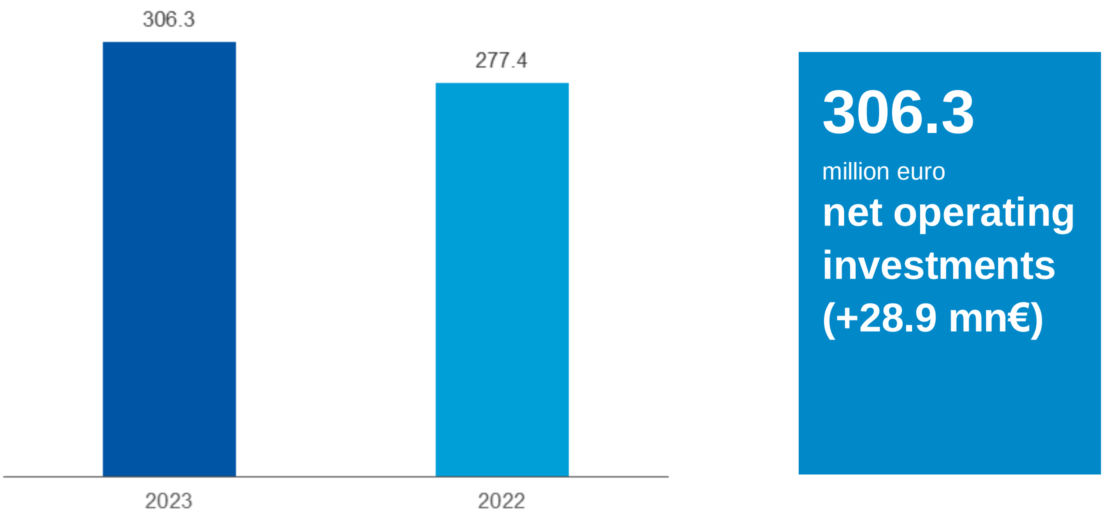
In the first half of 2023, the Group's net investments amounted to 330.3 million euro, up 41.8 million euro compared to the same period of the previous year.
This amount also includes financial investments coming to 24.0 million euro concerning shareholdings in Franchini Srl, amounting to 9.0 million euro or 60% of the company's shares, and Asco Tlc Spa, coming to 14.9 million euro or 36.8%. These companies operate respectively in the photovoltaic system installation and ICT services sectors.

Capital grants amounted to 12.1 million euro, of which 9.4 million euro involved FoNI investments, as required by the tariff method for the integrated water service. Net operating investments amounted to 306.3 million euro, up 28.9 million euro compared to the previous year.

A breakdown of investments by business area, with separate mention of capital grants, is provided below.

Total investments (mn€)	June 23	June 22	Abs. change	% change
Gas area	89.3	65.9	23.4	+35.5%
Electricity area	48.3	32.0	16.3	+50.9%
Integrated water cycle area	92.9	96.2	(3.3)	(3.4)%
Waste management area	48.8	59.4	(10.6)	(17.8)%
Other services area	4.5	4.6	(0.1)	(2.2)%
Headquarters	34.5	29.2	5.3	+18.2%
Total gross operating investments	**318.4**	**287.1**	**31.3**	**+10.9%**
Capital grants	12.1	9.7	2.4	+24.7%
of which FoNi (New Investments Fund)	9.4	8.1	1.3	+16.0%
Total net operating investments	**306.3**	**277.4**	**28.9**	**+10.4%**
Financial investments	24.0	11.1	12.9	+116.2%
Total net investments	**330.3**	**288.5**	**41.8**	**+14.5%**

TOTAL NET OPERATING INVESTMENTS (mn€)



Including capital grants, the Group's operating investments amounted to 318.4 million euro, up 31.3 million euro compared to the previous year, and were mainly related to works on plants, networks and infrastructures. Regulatory upgrading also contributed, mainly concerning gas distribution with the large-scale meter replacement and the purification and sewerage area.
Remarks on investments in the individual areas are provided in the analyses 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 amounted to 34.5 million euro, up 5.3 million euro compared to the previous year, mainly due to interventions on the vehicle fleet.

1.03.02 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 30 June 2023.

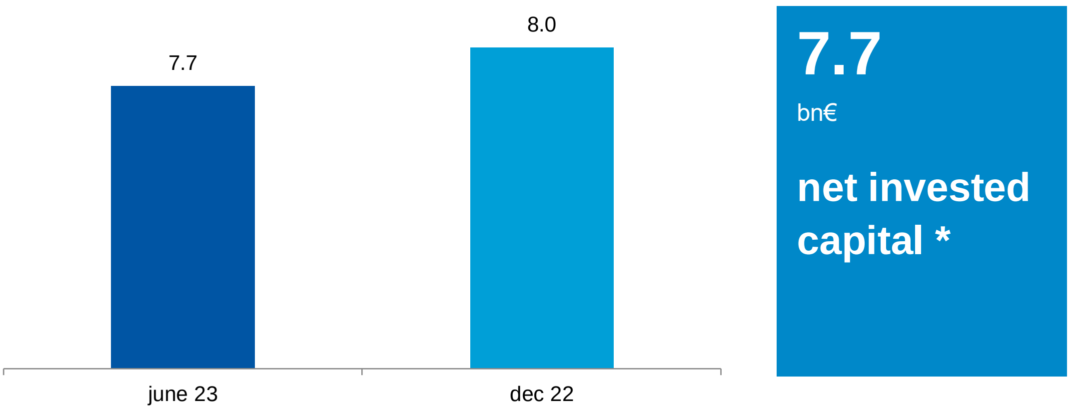
Invested capital and sources of financing (mn€)	June 23	% inc.	Dec 22	% inc.	Abs. change	% change
Net non-current assets*	7,791.2	+100.7%	7,522.3	+94.5%	268.9	+3.6%
Net working capital*	612.2	+7.9%	1,096.0	+13.8%	(483.8)	(44.1)%
(Provisions)	(668.1)	(8.6)%	(657.6)	(8.3)%	(10.5)	(1.6)%
Net invested capital*	**7,735.3**	**+100.0%**	**7,960.7**	**+100.0%**	**(225.4)**	**(2.8)%**
Equity*	(3,589.6)	+46.4%	(3,710.9)	+46.6%	121.3	+3.3%
Long-term borrowings	(5,067.5)	+65.5%	(5,598.5)	+70.3%	531.0	+9.5%
Net current financial debt	921.8	(11.9)%	1,348.7	(16.9)%	(426.9)	+31.7%
Net debt	(4,145.7)	+53.6%	(4,249.8)	+53.4%	104.1	+2.4%
Total sources of financing*	**(7,735.3)**	**+100.0%**	**(7,960.7)**	**+100.0%**	**225.4**	**+2.8%**

* adjusted results, as defined in the section on alternative performance measures (APMs)

Group solidity confirmed

Net invested capital* (NIC), which amounted to 7,735.3 million euro, decreased compared to 31 December 2022, due to the benefits on net working capital mainly resulting from the reduction in the value of gas storage coming to 142.7 million euro and the reduction in energy prices. The increase in net non-current assets was due to investments (net of depreciation and amortisation) and corporate transactions carried out during the period, mainly referring to the acquisition of 60% of A.C.R. Spa, operating in the waste management sector, and 60% of the Rimini-based company F.lli Franchini Srl, a leader in technological plants and renewable energy.

NET INVESTED CAPITAL * (bn€)



668.1 million euro provisions

In June 2023, provisions amounted to 668.1 million euro, in line with the figure seen at the end of the previous year. This result is a consequence of reserves for the period and adjustments of the post-mortem provisions for landfills and restoration of third-party assets, which offset the outflows for utilisations.

3.6 billion euro equity*

Equity* decreased from 3,710.9 million euro in 2022 to 3,589.6 million euro in 2023. The Group's solidity was strengthened by the positive net result coming from operations in the first six months of 2023, amounting to 208.1 million euro, which was more than offset by the dividends paid, totalling 216.7 million euro and the effect of the reduction in reserves for cash flow hedge derivatives.

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

mn€		30 June 23	31 Dec 22
A	Cash	1,254.8	1,942.4
B	Cash equivalents	-	-
C	Other current financial assets	65.8	77.7
D	**Liquidity (A+B+C)**	**1,320.6**	**2,020.1**
E	Current financial debt	(301.5)	(563.0)
F	Current portion of non-current financial debt	(83.0)	(108.4)
G	**Current financial indebtedness (E+F)**	**(384.5)**	**(671.4)**
H	**Net current financial indebtedness (G+D)**	**936.1**	**1,348.7**
I	Non-current financial debt	(898.6)	(1,997.0)
J	Debt instruments	(3,788.3)	(3,197.3)
K	Non-current trade and other payables	-	-
L	**Non-current financial indebtedness (I+J+K)**	**(4,686.9)**	**(5,194.3)**
M	**Total financial indebtedness (H+L)**	**(3,750.8)**	**(3,845.6)**
	Non-current financial receivables	146.6	151.8
	Net financial debt (excluding put option)	**(3,604.2)**	**(3,693.8)**
	Nominal amount - fair value put option	(480.7)	(475.9)
	Net financial debt with adjusted put option	**(4,084.9)**	**(4,169.7)**
	Portion of future dividends - fair value put option	(60.9)	(80.1)
	Net financial debt (Net debt)	**(4,145.7)**	**(4,249.8)**

The total amount of net financial debt came to 4,145.7 million euro, down roughly 104.1 million euro compared to the previous year.

With a view to rebalancing net working capital, considering the ongoing uncertainty in commodity prices, the Group continued, on a routine basis during the half-year, to reschedule trade payables, by means of letters of credit, totalling 152.4 million euro. At the end of the half-year, the amount of outstanding transactions, exclusively through letters of credit, amounted to 56.6 million euro. By means of these transactions, the Group optimised its payment terms, while keeping the same amount recorded under trade payables, since this is part of its typical working capital management. In fact, it should be noted 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.

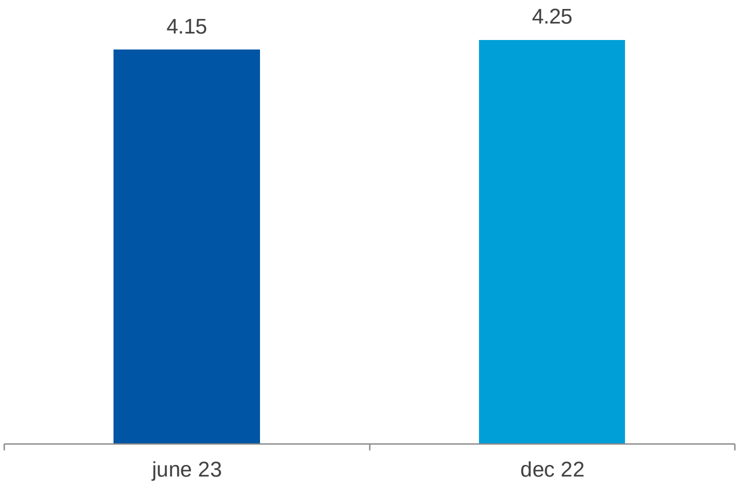
The financial structure shows current debt at 384.5 million euro, of which 71.8 million euro is due to banks, referring to drawdowns on current account lines amounting to roughly 34.0 million euro, and accruals for interest on loans totalling 37.8 million euro.
The current portion of debt to other lenders stood at 223.8 million euro, including 77.3 million euro for the daily fair value adjustment of commodity derivatives.
As regards the current portion of non-current financial debt, 83.0 million euro refers to the portion of medium-term bank loans due within the year. This also includes 20.1 million euro referring to current payables for leasing contracts.

Non-current financial debt decreased by 507.4 million euro compared to the previous year, thanks to the repayment of 1,100 million euro in loans against a new 600 million euro bond issue completed in April 2023 (Sustainability-Linked Bond).

Cash and cash equivalents decreased from 1,942.4 million euro in 2022 to 1,254.8 million euro at 30 June 2023.

At 30 June 2023, 80.7% of medium/long-term debt consisted of bonds with repayment at maturity. The total debt has an average residual maturity of approximately five years and six months, while 45.3% of the debt matures after at least five years.

NET FINANCIAL DEBT (bn€)



4.15

billion euro

net financial debt

1.04 SHARE PERFORMANCE AND INVESTOR RELATIONS

Confidence returns to markets

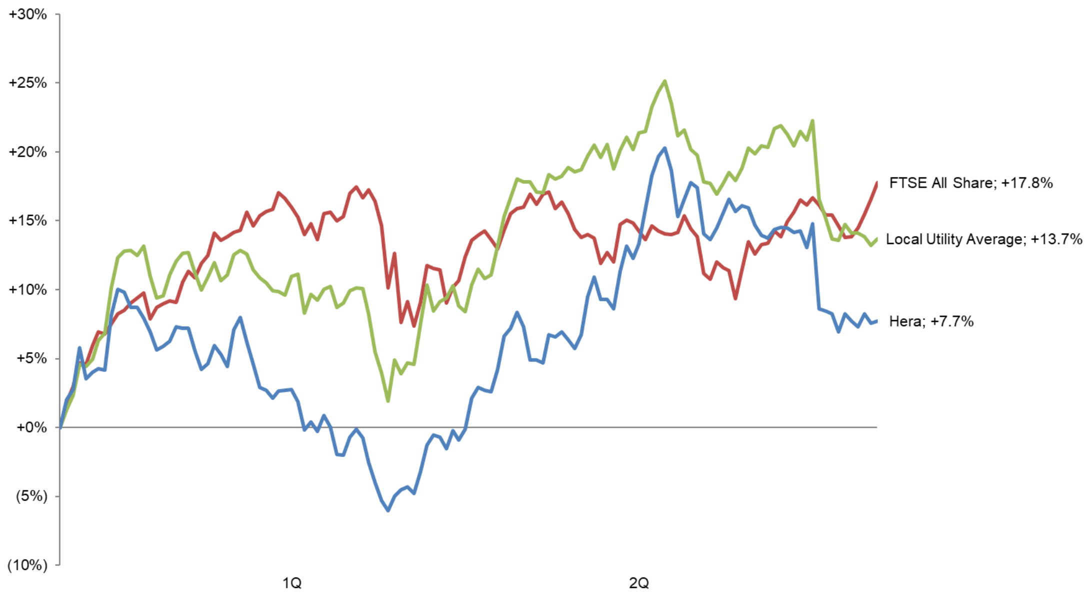
During the first half of 2023, all major stock markets performed positively, recovering from the heavy losses seen during the previous year. Even in a context in which central banks continued the cycle of increasing rates to control inflation, investors looked favourably on both the fall in energy commodity prices and macroeconomic data, which, while showing an economic slowdown, dispelled fears of a deep recession. In fact, as a result of the pandemic period and the more recent Ukrainian conflict, growth continues to be sustained by expansionary fiscal policies, with investments mainly directed at the energy transition and defence.

Italian stock exchange the best in Europe

Against this backdrop, the Italian FTSE All Share stock exchange rose by 17.8% during the reporting period, achieving the best performance among all major European stock exchanges, supported by the brilliant performance of banking stocks, whose results benefited from the interest rate hike introduced by the European central bank.

With an official price of 2,724 euro at 30 June, Hera stock rose by 7.7%, as can be seen in the graph below.

1H 2023 HERA STOCK, LOCAL UTILITY SECTOR AND ITALIAN MARKET PERFORMANCE COMPARISON



Dividend rises to 12.5 cents per share

Hera's Board of Directors, which met on 21 March 2023 to approve the year-end results for 2022, decided to submit a proposal to the Shareholders meeting for a dividend of 12.5 cents per share, up +4.2% compared to the previous year and consistent with the indications set out in the Business plan. Following the shareholders' approval, expressed at the 27 April 2023 meeting, the ex-dividend date was set at 19 June, with payment on 21 June. Hera thus confirmed its ability to remunerate shareholders thanks to the resilience of its business portfolio, which has allowed it to pay progressively increasing dividends every year since its listing in 2002.

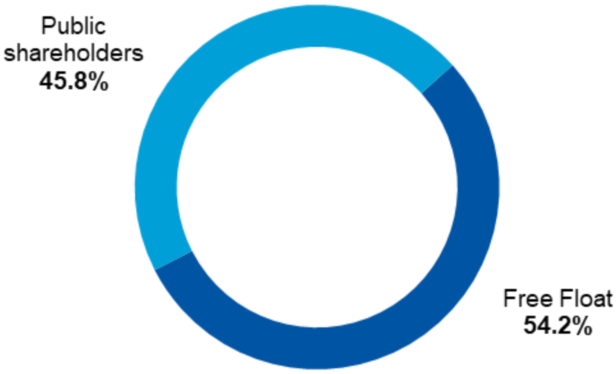
+261%: total shareholders' return since the IPO

The joint effect of continuously remunerating shareholders through dividends and the rise in the price of the stock over the years allowed the total shareholders return accumulated since listing to remain consistently positive and to stand at over +260.6% at the end of the reporting period.

3.37 euro: consensus target price

The number of financial analysts covering the stock (Banca Akros, Equita Sim, Exane Bnp Paribas, Intermonte, Intesa Sanpaolo, Kepler Cheuvreux, Mediobanca) increased with Banca Akros' resumed coverage, with a positive rating. They almost unanimous expressed positive opinions, with a target price that continues to show significant potential for improvement. At the end of the six-month period, the consensus target price came to 3.37 euro and showed a 23.7% upside potential.

SHAREHOLDER BREAKDOWN AT 30 JUNE 2023



45.8%: share capital pertaining to the public stockholders agreement

At 30 June 2023, 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 further three years and effective from 1 July 2021 to 30 June 2024, and 54.2% of the free float. The shareholding structure includes a high number of public shareholders (111 municipalities, the largest of which hold less than 10%) and a significant number of private institutional and retail shareholders.

Treasury share plan approved

Since 2006, Hera has adopted a share buyback plan, most recently renewed by the Shareholders Meeting held on 27 April 2023 for a further 18 months, for an overall maximum amount of 240 million euro. This plan is aimed at financing M&A opportunities involving smaller companies, and smoothing out any abnormal market price fluctuations vis-à-vis those of the main comparable Italian companies. At 30 June 2023, Hera held 42.2 million treasury shares.

Ongoing communication with the market in 2023 as well

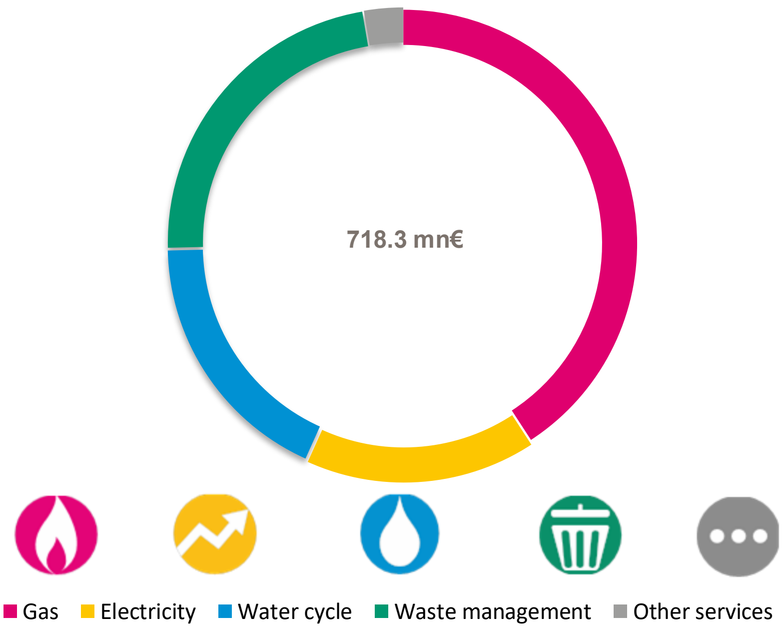
The Group continued to engage in intense communications with financial market players in 2023. After presenting the 2022-2026 Business plan, the Group's top management took part in a road show to meet investors in the main financial centres and update them on business trends and future prospects. Following a renewal in corporate positions, the new management immediately made itself available to meet analysts and investors and participated in important conferences organised by Italian and international brokers. The intensity of the Group's commitment to dialogue with investors contributes to strengthening its market reputation and represents an intangible asset benefiting Hera stock and stakeholders.

1.05 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 * JUNE 2023



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

The following analyses of each 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, waste collection services and public lighting services.

The value of adjusted Ebitda, broken down by strategic business areas, reflects the adjustment to the valuation of stored gas described in the introduction to paragraph 1.03. For a detailed identification of the effects of this adjustment, the values of Adjusted Ebitda and Ebitda are provided below:

	June 23		June 22	
(mn€)	Ebitda *	Ebitda	Ebitda *	Ebitda
Gas area	293.1	386.1	299.3	211.0
Electricity area	114.4	114.4	40.1	40.1
Integrated water cycle area	128.6	128.6	125.3	125.3
Waste management area	162.9	162.9	150.7	150.7
Other services area	19.4	19.4	15.8	15.8
Total	**718.3**	**811.3**	**631.2**	**542.9**

* refers to adjusted results, as described in chapter 1.03

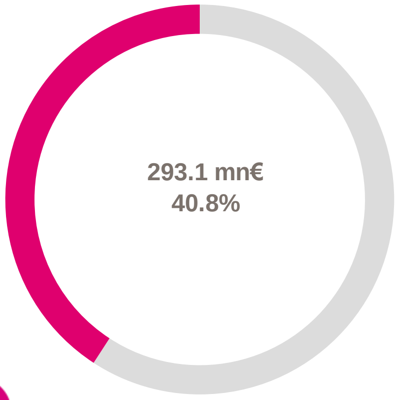
1.05.01 Gas

Ebitda drops

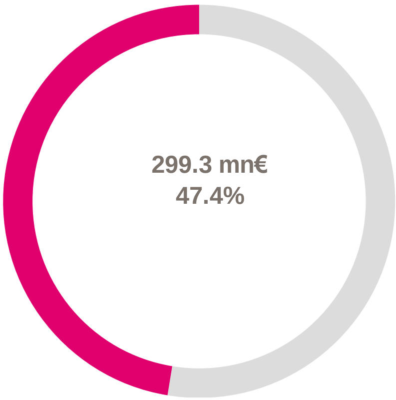
The first half of 2023 showed a decrease in volumes sold compared to the same period of 2022, due to the mild weather seen in the first part of the year. Opportunities remained in the Energy Services segment, concerning energy efficiency incentives, 110% super-bonus and insulation bonuses, and the tenders awarded to Hera Comm Spa in the following lots nationwide:

- six of the nine lots as Last resort gas service supplier (for customers providing public services or without a supplier) for the period going 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 going from 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 2022-23, both in Lombardy.

EBITDA * GAS AREA 2023



EBITDA * GAS AREA 2022



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

(mn€)	June 23	June 22	Abs. change	% change
Area Ebitda*	**293.1**	**299.3**	**(6.2)**	**(2.1)%**
Group Ebitda*	718.3	631.2	87.1	+13.8%
Percentage weight	40.8%	47.4%	(6.6) p.p.	

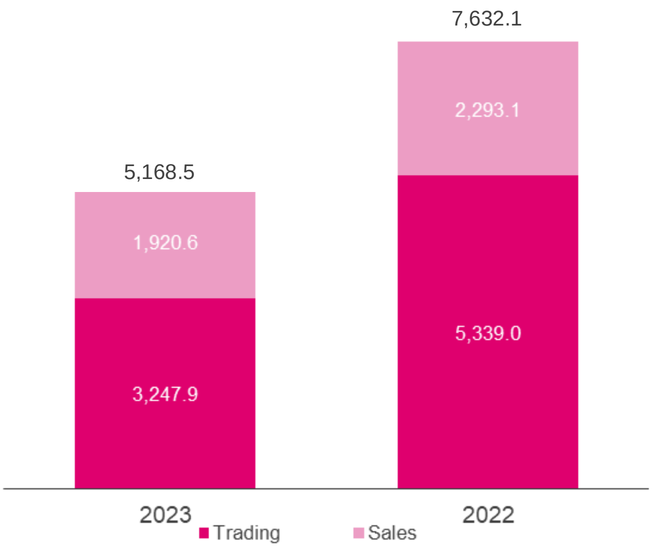
* refers to adjusted results, as described in chapter 1.03

CUSTOMERS (k)

2.1
million
gas customers
(+0.5%)

The number of gas customers increased by 10.8 thousand, or 0.5%, compared to the first half of the previous year. This trend was mainly due to growth in last resort markets, where the customer base, following the tenders awarded for 2021-2023, increased by 30.7 thousand. This increase was partially offset by traditional markets, which saw a drop coming to 19.9 thousand.

VOLUMES SOLD (mn m^3)



5.2
billion
m^3 sold
(-32.3%)

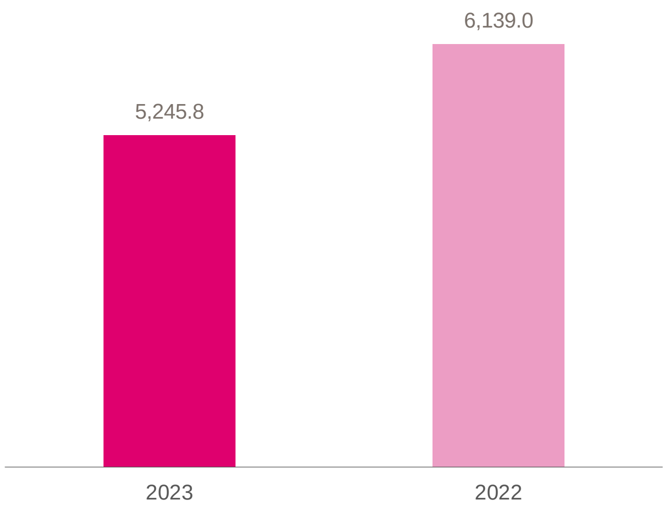
Total volumes of gas sold decreased by 2,463.6 million m^3 (-32.3%), mainly due to a drop in trading, amounting to 2,091 million m^3. Volumes sold to end customers also decreased by 372.5 million m^3 (-16.2%), compared to the same period of the previous year. This trend is due to a drop in traditional markets coming to 471.7 million m^3 (-22.9% compared to the first half of 2022 and -20.6% of total volumes sold). This was due to both the weather, which in the first months of the year saw higher temperatures than in the previous year, and lower consumption by the customer base, linked to changed consumption habits in the household and industrial segments. This effect was only partially offset by an increase in last resort markets coming to 99.3 million m^3, or (+42.1% compared to the first half of 2022 and +4.3% of total volumes sold), thanks to the result coming from the increased number of customers, as mentioned above.

The following table summarises operating results for the gas area:

Income statement (mn€)	June 23	% inc.	June 22	% inc.	Abs. change	% change
Revenues	5,245.8		6,139.0		(893.2)	(14.5)%
Operating costs	(4,891.6)	(93.2)%	(5,772.2)	(94.0)%	(880.6)	(15.3)%
Personnel costs	(67.9)	(1.3)%	(71.9)	(1.2)%	(4.0)	(5.6)%
Capitalised costs	6.8	0.1%	4.4	0.1%	2.4	+54.5%
Ebitda *	**293.1**	**5.6%**	**299.3**	**4.9%**	**(6.2)**	**(2.1)%**

* refers to adjusted results, as described in chapter 1.03

REVENUES (mn€)



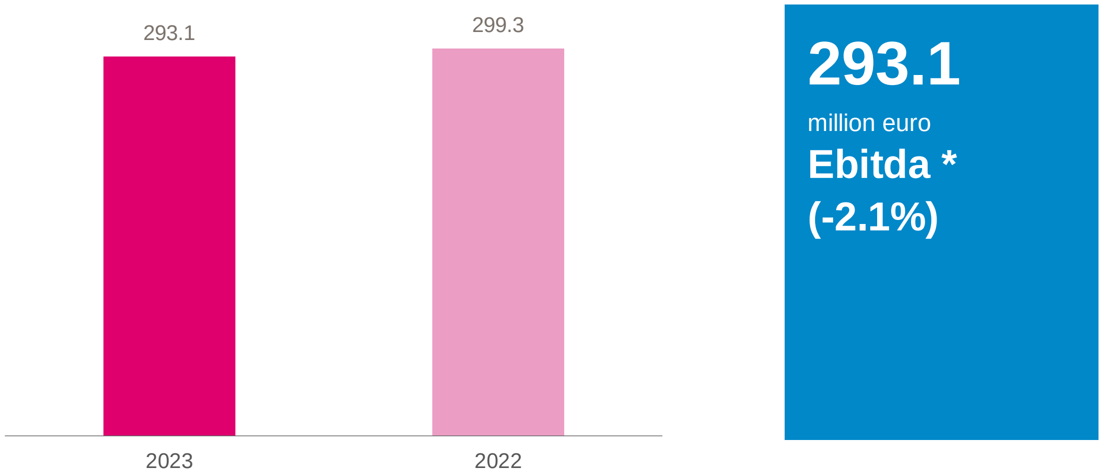
5.2
billion euro
revenues
(-14.5%)

Revenues decreased by 893.2 million euro compared to the same period of the previous year. The reasons for this mainly lie in lower sales and trading activities, amounting to 1,134 million euro, due to the aforementioned unfavourable weather conditions, lower consumption by the customer base, lower raw material prices, and lower revenues mainly related to system charges, which had an equal effect on costs, following Resolution 735/2022/R/com. This decrease was only partially offset by higher revenues coming from energy efficiency activities, amounting to 217 million euro, and higher revenues for IFRIC 12 concession assets and energy efficiency certificates, which together increased by roughly 20 million euro.

Regulated revenues were up by 5 million euro compared to the same period of the previous year. From a regulatory perspective, the regulation of gas distribution and metering (RTDG) was updated for the 2023-2025 three-year period by the Authority's Resolution 737/2022/R/gas.

The decrease in revenues was proportionally reflected by operating costs, which showed an overall drop coming to 880.6 million euro. This trend was mainly related to lower sales and brokerage activities and a lower cost of raw materials.

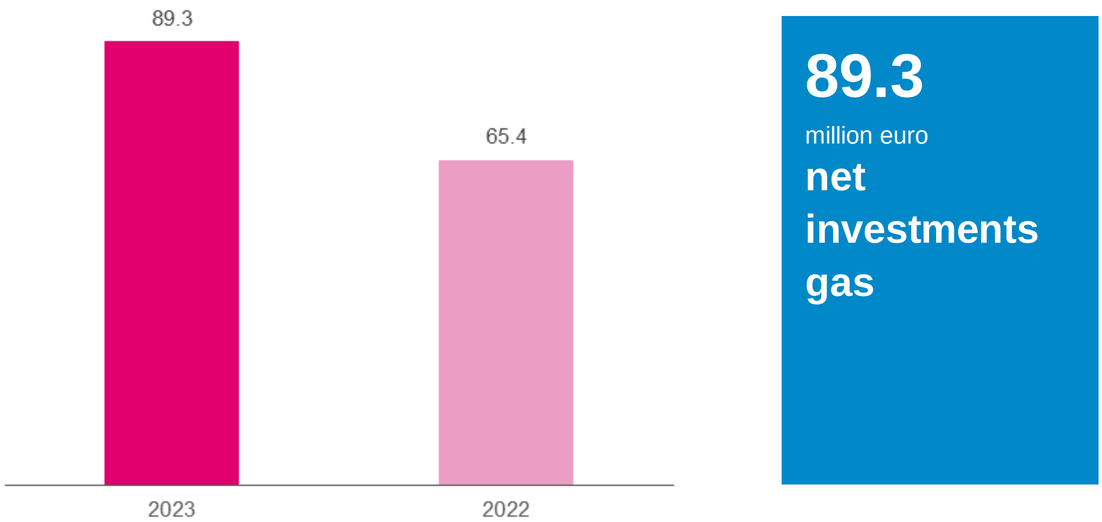
EBITDA * (mn€)



* refers to adjusted results, as described in chapter 1.03

Adjusted Ebitda decreased by 6.2 million euro, or 2.1%, due to the lower volumes sold, mainly resulting from the weather, which had an unfavourable impact in the first quarter of the year. This was offset by the ongoing opportunities grasped in Energy Services, related to incentivised energy efficiency activities.

NET INVESTMENTS GAS (mn€)



In the first half of 2023, net investments in the gas area increased by 23.9 million euro compared to the previous year and totalled 89.3 million euro. In gas distribution, there was an overall increase of 13.2 million euro, 12.1 million euro of which came from the investment related to the reimbursement for plants and networks in complementary municipalities, awarded through the ATEM Udine2 tender. In gas sales, investments rose by 6.2 million euro for activities related to the acquisition of new customers. Investments also increased overall in the district heating and heat management service, up 4.1 million euro due to the activities of the company Hera Servizi Energia Spa and for work on district heating networks and plants. Requests for new connections in the gas area were also up slightly compared to the previous year.

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

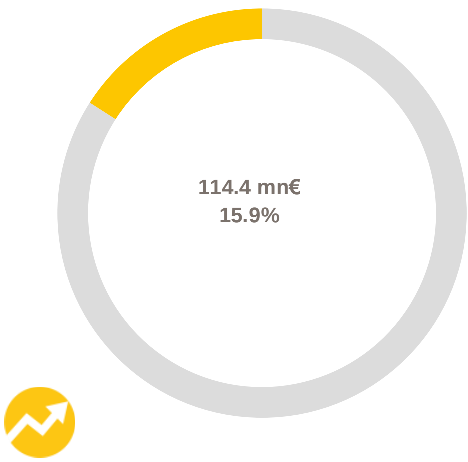
Gas (mn€)	June 23	June 22	Abs. change	% change
Networks and plants	64.6	51.4	13.2	+25.7%
Acquisition gas customers and other sales	13.0	6.8	6.2	+91.2%
DH/Energy services	11.7	7.6	4.1	+53.9%
Total gas gross	**89.3**	**65.9**	**23.4**	**+35.5%**
Capital grants	-	0.5	(0.5)	(100.0)%
Total gas net	**89.3**	**65.4**	**23.9**	**+36.5%**

1.05.02 Electricity

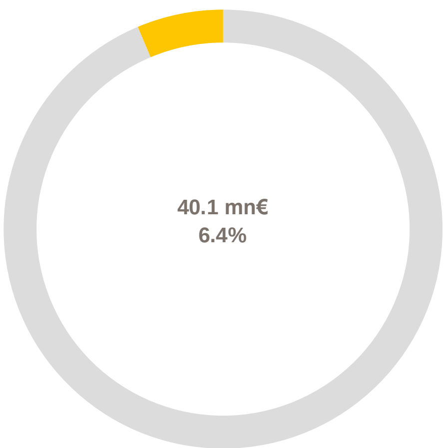
The first half of 2023 showed significant growth compared to the same period of 2022, both in terms of Ebitda and volumes sold to end customers, thanks to commercial development, mainly in the free market, innovative offers (relating to electric mobility, photovoltaics, heating and air conditioning) and value-added services. In addition to this, Hera Comm Spa was awarded the following lots nationwide, through tenders:

- four of the seventeen lots of the Consip EE20 tender for supplying electricity to public administrations in 2023, in: the province of Roma, Campania, Calabria and the Italy lot, confirming the number of lots awarded in the previous tender;
- three of the nine lots of the gradual protection service for supplying electricity to public administrations for the period going from 1 July 2021 to 30 June 2024 in: Campania, Marche, Umbria, Abruzzo, Molise, Basilicata, Calabria, Sicilia and Sardinia;
- two of the nine lots of the safeguarded market for the years 2023 and 2024 in: Campania, Abruzzo and Umbria and Calabria, one lot more than in the previous two-year period;
- one of the twelve lots for the gradual protection service for supplying electricity to micro-enterprises for the period going from 1 April 2023 to 31 March 2027 in: Friuli-Venezia Giulia, Trentino-Alto Adige and the provinces of Belluno, Venice and Verona.

EBITDA ELECTRICITY AREA 2023



EBITDA ELECTRICITY AREA 2022

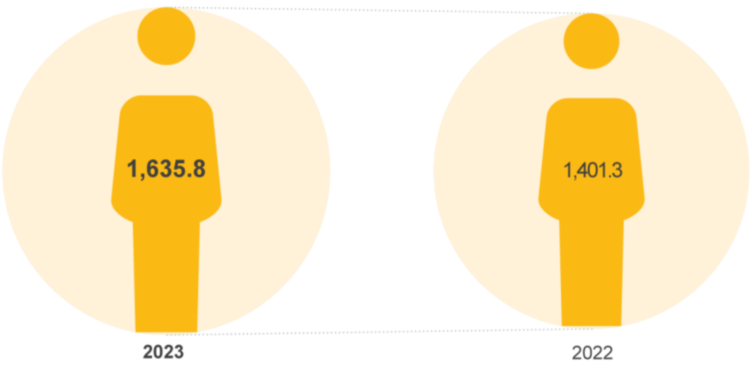


The following table shows the changes occurred in terms of Ebitda:

(mn€)	June 23	June 22	Abs. change	% change
Area Ebitda	**114.4**	**40.1**	**74.3**	**+185.3%**
Group Ebitda*	718.3	631.2	87.1	+13.8%
Percentage weight	15.9%	6.4%	9.5 p.p.	

* refers to adjusted results, as described in chapter 1.03

CUSTOMERS (k)

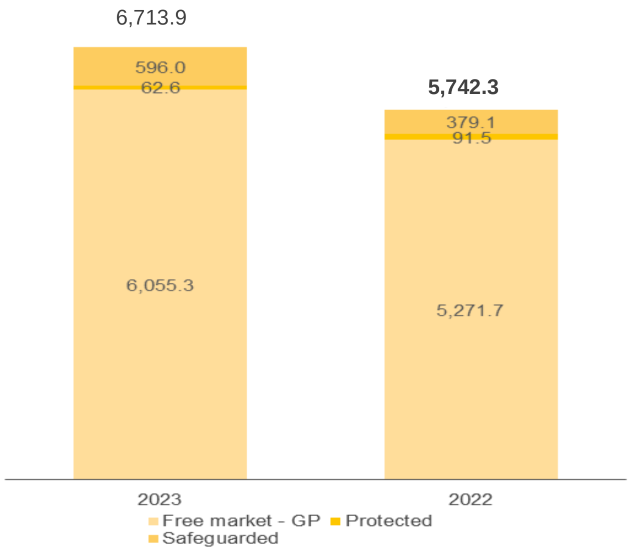


1.6
million
electricity customers (+16.7%)

The number of electricity customers rose by 234.5 thousand, corresponding to a 16.7% increase compared to the same period in 2022. This growth occurred mainly in the free market, coming to roughly 247.2 thousand customers (+19.2%, or +17.6% of the total), due to both the reinforced commercial actions put in place and the positive contribution coming from the Consip tenders and the gradual protection service, partially thanks to the new lot, mentioned above, which supplies electricity to micro-businesses. The safeguarded market also increased by 15.2 thousand (+106.8%, or +1.1% of the total) thanks to the award of an additional lot in the tender for the 2023-2024 period. These effects largely succeeded in offsetting the drop of about 27.9 thousand customers (-28.0%, or -2% of the total) seen in the protected market.

The positive response and loyalty shown by customers due to the value-added services offered by the Group was confirmed, with about 45,000 customers adhering in the first six months of 2023.

VOLUMES SOLD (GWh)



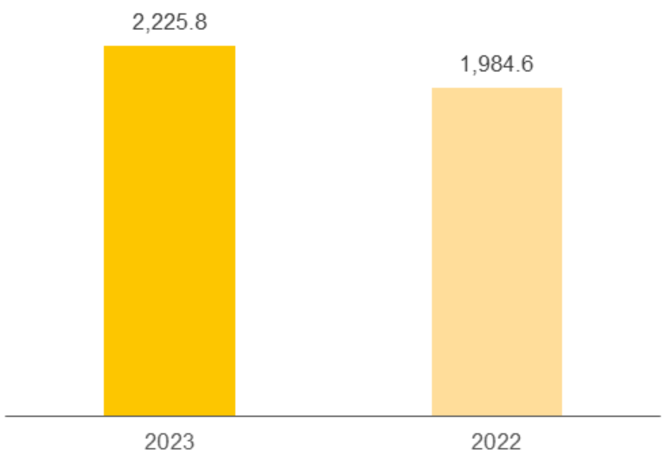
6.7
TWh
sold (+16.9%)

The volumes of electricity sold increased by 971.6 GWh, or 16.9%, compared to the same period one year earlier. This trend was generated by an increase in volumes in traditional markets, up 754.7 GWh (13.1% compared to the total), rising from 5,363.2 GWh in 2022 to 6,117.9 GWh in 2023, mainly driven by the contribution of Consip tenders in the free market, which was partially offset by a slight decrease in the protected market. In the safeguarded market, the increase came to 216.9 GWh, or 3.8% compared to the total, due to the different scope of operations.

The following table summarises operating results for the electricity area:

Income statement (mn€)	June 23	% inc.	June 22	% inc.	Abs. change	% change
Revenues	2,225.8		1,984.6		241.2	+12.2%
Operating costs	(2,095.2)	(94.1)%	(1,931.2)	(97.3)%	164.0	+8.5%
Personnel costs	(27.3)	(1.2)%	(21.4)	(1.1)%	5.9	+27.5%
Capitalised costs	11.1	0.5%	8.1	0.4%	3.0	+37.2%
Ebitda	**114.4**	**5.1%**	**40.1**	**2.0%**	**74.3**	**+185.3%**

REVENUES (mn€)

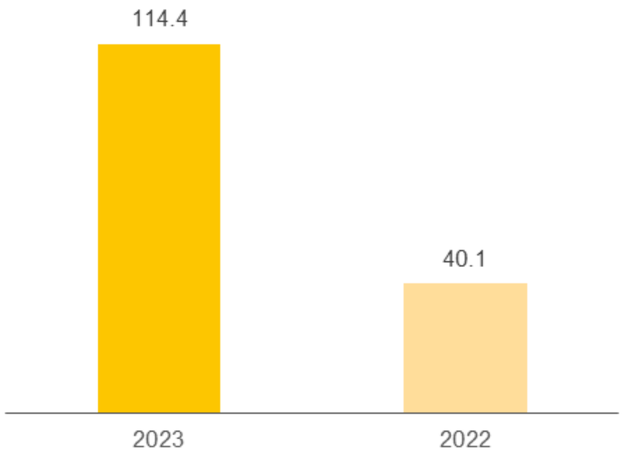


2.2
billion euro
revenues
(+12.2%)

Revenues increased by 241.2 million euro compared to the same period of the previous year. This performance, despite the drop in energy prices, benefited from higher revenues from sales and trading activities coming to 311 million euro, mainly due to an increase in volumes sold and system charges. The latter, which had been annulled to face the energy crisis, were entirely restored. These effects were partially offset by lower revenues coming from electricity production, amounting to 79 million euro. Lastly, higher revenues came from value-added services for customers, totalling 7 million euro.

The increase in revenues was also reflected proportionally in operating costs, which increased by 164 million euro. This trend was due mainly to sales activities, due to higher volumes sold.

EBITDA (mn€)

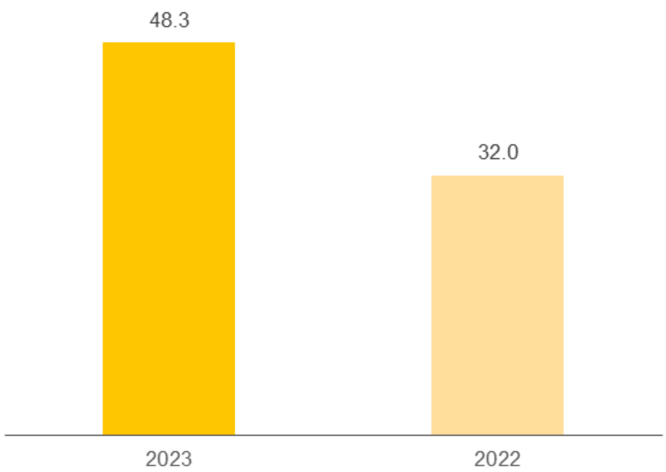


114.4
million euro
Ebitda
(+185.3%)

Ebitda increased by 74.3 million euro, or 185.3%, mainly due to sales activities related to the higher volumes sold as a result of growth in the customer base both in traditional markets and in the safeguarded service, due to the new lot awarded. The value-added services business also grew, showing a 3.0 million euro rise in Ebitda.
In the electricity area, investments amounted to 48.3 million euro in the first half of 2023, up 16.3 million euro year-on-year.

In the electricity distribution area, investments were mainly related to non-recurring maintenance and upgrading on plants and distribution networks in the Modena, Imola, Trieste and Gorizia areas, as well as the ongoing large-scale meter replacement and work to improve network resilience.
In energy sales, investments in activities related to acquiring new customers increased by 12.8 million euro. Requests for new connections were also up slightly compared to the previous year.

NET INVESTMENTS ELECTRICITY (mn€)



48.3
million euro
net investments electricity

Operating investments in the electricity area were as follows:

Electricity (mn€)	June 23	June 22	Abs. change	% change
Networks and plants	25.2	21.6	3.6	+16.7%
Acquisition electricity customers and other sales	23.2	10.4	12.8	+123.1%
Total electricity gross	**48.3**	**32.0**	**16.3**	**+50.9%**
Capital grants	-	-	-	+0.0%
Total electricity net	**48.3**	**32.0**	**16.3**	**+50.9%**

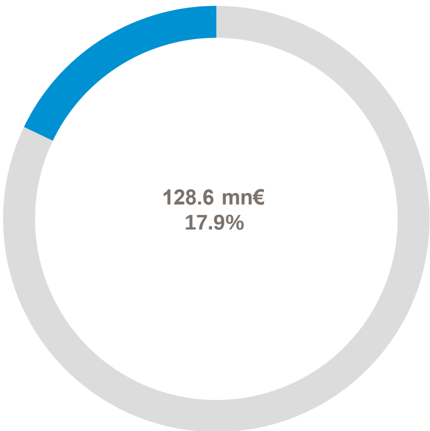
1.05.03 Integrated water cycle

Growth in results for the first half of 2023

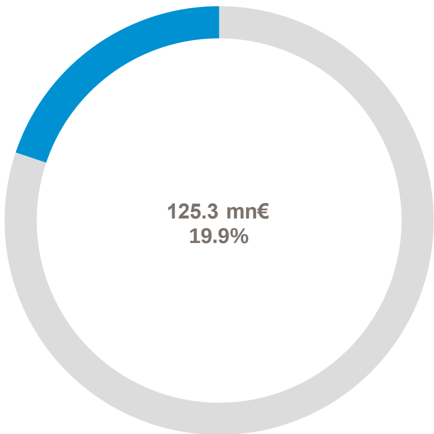
In the first half of 2023, the integrated water cycle area showed an increase in results compared to the previous year, with Ebitda amounting to 128.6 million euro.

From a regulatory point of view, note that 2023 was the fourth 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.

EBITDA WATER CYCLE AREA 2023



EBITDA WATER CYCLE AREA 2022

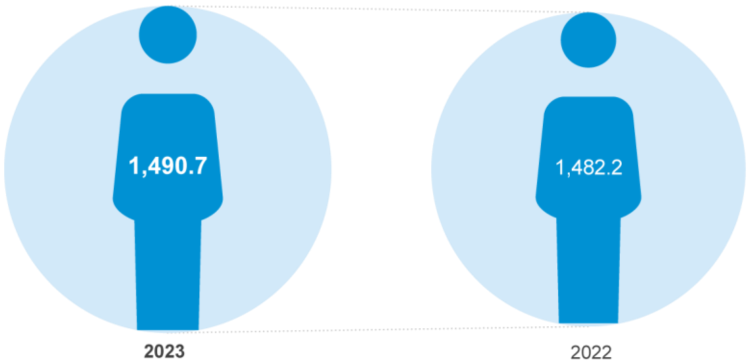


The following table shows the changes occurred in terms of Ebitda:

(mn€)	June 23	June 22	Abs. change	% change
Area Ebitda	**128.6**	**125.3**	**3.3**	**+2.6%**
Group Ebitda*	718.3	631.2	87.1	+13.8%
Percentage weight	17.9%	19.9%	(2.0) p.p.	

* refers to adjusted results, as described in chapter 1.03

CUSTOMERS (k)

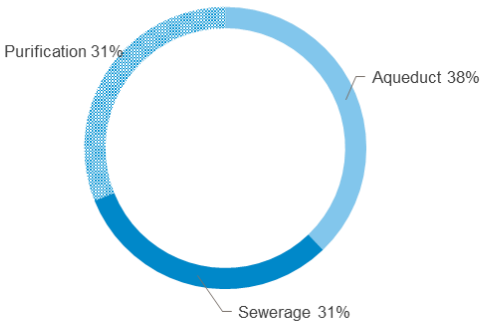


1.5
million
customers integrated water cycle
(+0.6%)

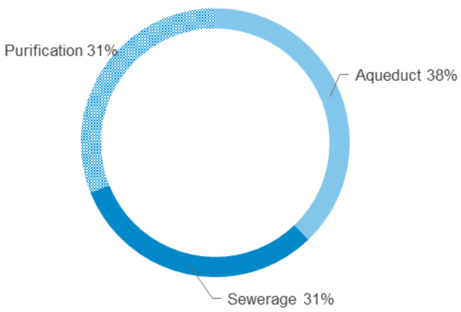
The number of water customers increased compared to June 2022 by 8.7 thousand, or 0.6%, confirming the moderate trend of internal growth in the Group's reference localities. The Emilia-Romagna area managed by Hera Spa accounted for 84% of this growth, while 8% occurred in the area served by AcegasApsAmga Spa and the remainder in the area served by Marche Multiservizi Spa.

The main indicators for the area are as follows:

QUANTITY MANAGED 2023 (mn m^3)



QUANTITY MANAGED 2022 (mn m^3)



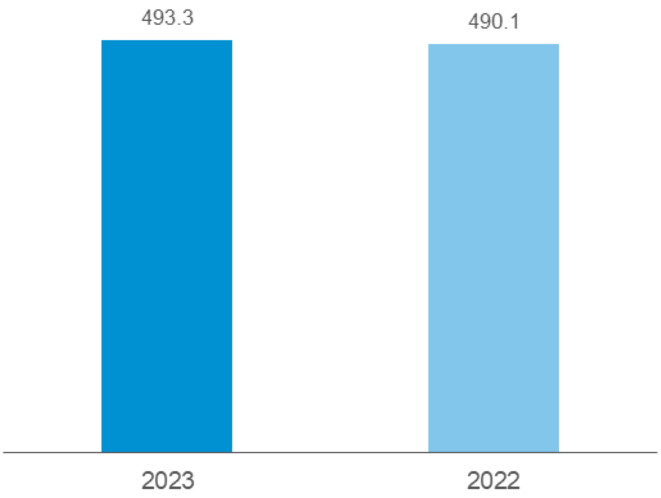
The volumes supplied through the aqueduct, which amounted to 139.1 million m^3, showed a slight decrease compared to June 2022, coming to 0.6% or 0.8 million m^3. At June 2023, the quantities supplied relating to sewerage amounted to 114.3 million m^3, up slightly by 0.3% compared to the previous year, while those related to purification amounted to 114.3 million m^3, up 1.5% compared to June 2022. 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 as a result of the regulations that provide for the recognition of a regulated revenue independent of the volumes distributed.

139.1 million m^3: quantity managed in the aqueduct

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

Income statement (mn€)	June 23	% inc.	June 22	% inc.	Abs. change	% change
Revenues	493.3		490.1		3.2	+0.7%
Operating costs	(267.5)	(54.2)%	(272.5)	(55.6)%	(5.0)	(1.8)%
Personnel costs	(99.4)	(20.2)%	(94.0)	(19.2)%	5.4	+5.7%
Capitalised costs	2.1	0.4%	1.8	0.4%	0.3	+17.1%
Ebitda	**128.6**	**26.1%**	**125.3**	**25.6%**	**3.3**	**+2.6%**

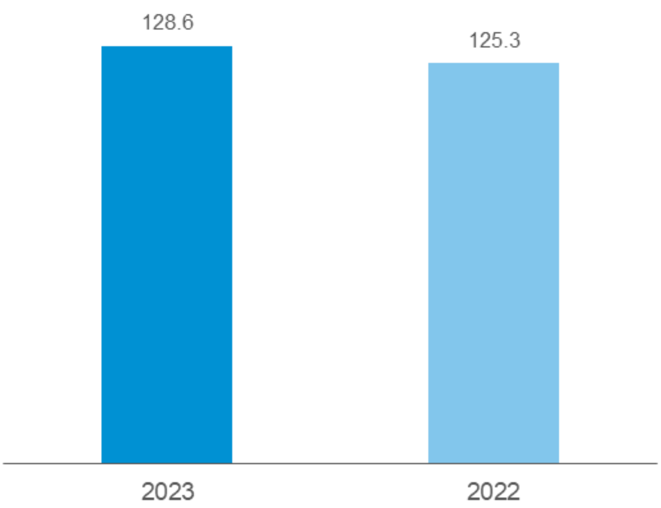
REVENUES (mn€)



Revenues for the water cycle area increased slightly year-on-year, going from 490.1 million euro in June 2022 to 493.3 million euro in the same month of 2023. In particular, higher revenues amounting to approximately 2.0 million euro were seen for contracts and third-party works carried out in the first six months of 2023.

The decrease in operating costs at June 2023 was mainly related to lower procurement costs for energy components, as a result of an energy scenario with falling energy commodity prices compared to one year earlier. This effect was only partially contained by rising costs for the higher contracted and third-party works carried out in the first half of this year. Lastly, note the increase in operating costs for the management of networks and plants, and higher costs related to the increase in the price lists of all main materials supplied and, in particular, chemical products and services.

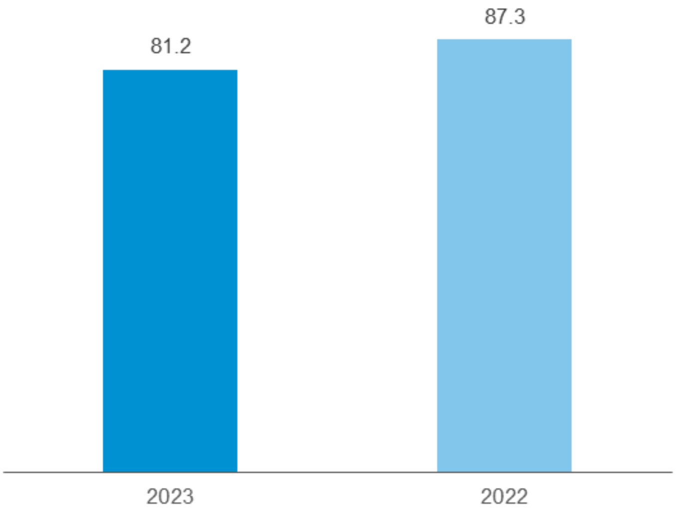
EBITDA (mn€)



Ebitda rose by 3.3 million euro, up 2.6%, going from 125.3 million euro in June 2022 to 128.6 million euro in the same period of 2023.
In the first half of 2023, net investments in the integrated water cycle area amounted to 81.2 million euro, as against 87.3 million euro in the previous year. This 6.1 million euro decrease was mainly caused by delays in the execution of works, due to the effect of the floods that affected vast areas of Romagna and the Emilia-Romagna Apennines. Including the capital grants received, the investments made amounted to 92.9 million euro.

The investments mainly involved extensions, reclamation and upgrading on networks and plants, as well as regulatory adjustments mainly in the purification and sewerage sectors, and amounted to 58.8 million euro in the aqueduct, 23.7 million euro in sewerage, and 10.5 million euro in purification.

NET INVESTMENTS WATER CYCLE (mn€)



81.2
million euro
net investments water cycle

The main interventions include: in the aqueduct, ongoing reclamation activities on networks and connections related to Arera's Resolution 917/2017 on the regulation of the technical quality of the integrated water service, with specific renewal and upgrading interventions also aimed at countering the risk of water shortages related to the increasingly frequent drought conditions, such as the construction of hydraulic connections capable of expanding the interconnections of the water systems. Significant maintenance work continued on the intake from the Setta stream, serving the Sasso Marconi drinking water treatment plant, and in reinforcing water networks in other areas served, as well as a large-scale metre replacement; in addition, development began concerning the project for the new Castel Bolognese supply system, as well as the significant reclamation of a water adduction pipeline from Pontelagoscuro to Ferrara. In the sewerage sector, in addition to the ongoing implementation of the Rimini seawater protection plan (Psbo), maintenance concerned upgrading the sewerage network in other localities served and works to upgrade discharges to Dgr 201/2016. In purification, note the expansion of the plant in the municipality of San Giovanni in Persiceto and the ongoing revamping of the Gramicia purification plant in Ferrara, with the replacement of the sludge centrifuges. Requests for new water and sewerage connections decreased compared to the previous year. Capital grants, amounting to 11.8 million euro, increased by 2.9 million euro compared to the previous year and included 9.4 million euro from the tariff component foreseen by the tariff method of the New Investment Fund (FoNI).

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

Integrated water cycle (mn€)	June 23	June 22	Abs. change	% change
Aqueduct	58.8	59.3	(0.5)	(0.8)%
Purification	10.5	16.0	(5.5)	(34.4)%
Sewerage	23.7	20.8	2.9	+13.9%
Total integrated water cycle gross	**92.9**	**96.2**	**(3.3)**	**(3.4)%**
Capital grants	11.8	8.9	2.9	+32.6%
of which FoNI (New Investments Fund)	9.4	8.1	1.3	+16.0%
Total integrated water cycle net	**81.2**	**87.3**	**(6.1)**	**(7.0)%**

1.05.04 Waste management

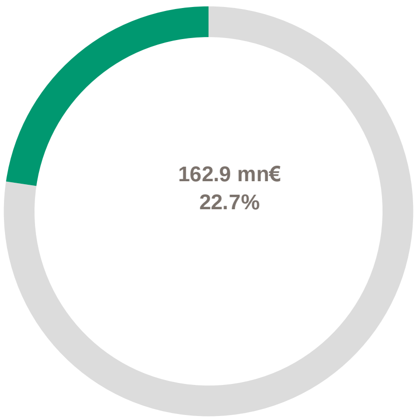
Ebitda rises

In the first half of 2023, the waste management area accounted for 22.7% of the Hera Group's overall Ebitda, with area up 12.2 million euro over the previous year. In this first half of the year, therefore, the Group continued to guarantee a significant rate of growth, within a context marked by a slowdown in inflation, a downturn in manufacturing, with repercussions also on industrial waste production in particular, and increased competitive pressure in the markets in which it is present.

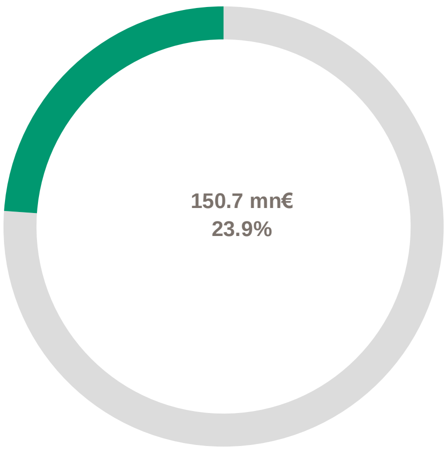
In the first six months of 2023, all main initiatives in terms of the circular economy continued, in addition to the production of renewable energy and material recovery, including work with local companies to support them in the use of processes and technologies that reduce the impact of their activities on the environment, with particular attention to waste management by minimising the percentage destined for disposal.
All this is the result of the careful work on the processes of partner companies carried out by the Herambiente Servizi Industriali (Hasi) team. A subsidiary of the Hera Group, this company is capable of engineering the separation of waste at the time it is produced, with the utmost effect and special attention also paid to the logistics chain, so as to optimise its handling.

In 2023, the protection of environmental resources was confirmed as a priority objective, as was the maximisation of their reuse; this is also proven by the particular attention dedicated to increasing separate waste collection which, thanks to the strong commitment the Group has made in all areas served, increased by four percentage points compared to the amount seen in the first six months of 2022.

EBITDA WASTE MANAGEMENT AREA 2023



EBITDA WASTE MANAGEMENT AREA 2022



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

(mn€)	June 23	June 22	Abs. change	% change
Area Ebitda	**162.9**	**150.7**	**12.2**	**+8.1%**
Group Ebitda*	718.3	631.2	87.1	+13.8%
Percentage weight	22.7%	23.9%	(1.2) p.p.	

* refers to adjusted results, as described in chapter 1.03

Volumes marketed and treated by the Group in the first six months of 2023 are as follows:

Quantity (k tons)	June 23	June 22	Abs. change	% change
Municipal waste	1,166.6	1,082.0	84.6	+7.8%
Market waste	1,397.1	1,353.1	44.0	+3.3%
Waste commercialised	**2,563.7**	**2,435.1**	**128.6**	**+5.3%**
Plant by-products	1,486.9	1,237.6	249.3	+20.1%
Waste treated by type	**4,050.6**	**3,672.7**	**377.9**	**+10.3%**

An analysis of this quantitative data shows an increase in waste commercialised, due to increases in both municipal and market waste. As far as municipal waste is concerned, in the first half of 2023 a 7.8% increase was seen compared to the previous year, mainly due to waste from flooding. For further details see paragraph 1.02.01, dedicated entirely to the flood.

Market volumes, instead, increased by 3.3% compared to the same period in 2022, due to the consolidation of existing business relationships, the development of the customer portfolio and recent corporate acquisitions.

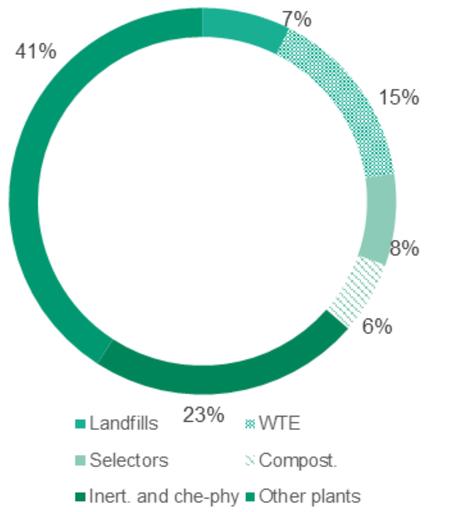
Finally, plant by-products showed an amount rising by 20.1% year-on-year, mainly due to higher rainfall compared to the same period in 2022.

SORTED WASTE (%)

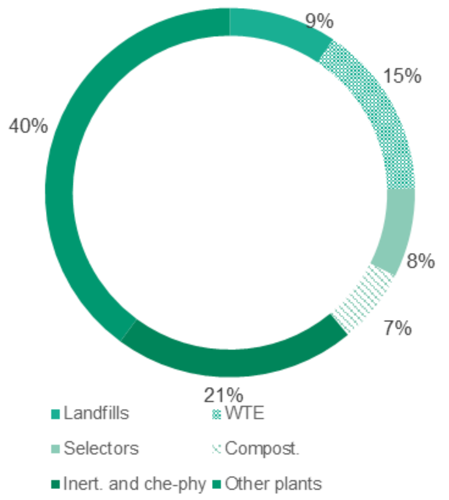
As mentioned above, municipal sorted waste collection stood at 70.4%, up +4.0 percentage points over the previous year, thanks to the development of projects in the areas managed by the Group.

The Hera Group operates in the entire waste cycle, with 101 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 2023



WASTE TREATED BY TYPE OF PLANT 2022



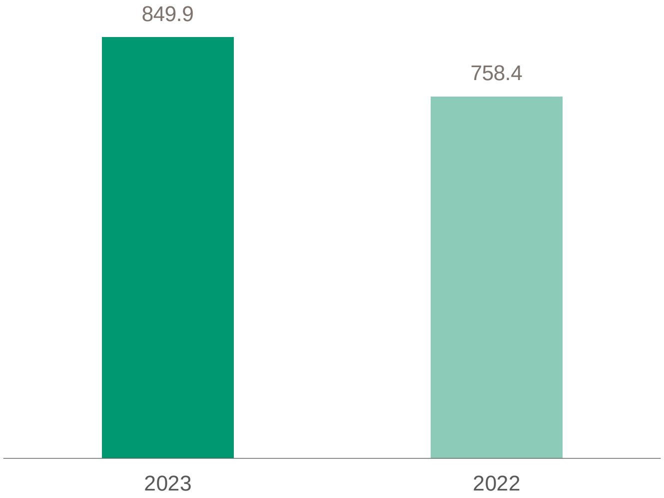
Quantity (k tons)	June 23	June 22	Abs. change	% change
Landfills	299.7	346.0	(46.3)	(13.4)%
WTE	621.1	558.5	62.6	+11.2%
Selecting plants and other	308.7	287.1	21.6	+7.5%
Composting and stabilisation plants	246.9	240.4	6.5	+2.7%
Inertisation and chemical-physical plants	919.2	775.0	144.2	+18.6%
Other plants	1,655.1	1,465.6	189.5	+12.9%
Waste treated by plant	**4,050.6**	**3,672.7**	**377.9**	**+10.3%**
Plastic recycled by Aliplast	**43.3**	**39.2**	**4.1**	**+10.5%**

Waste treatment showed a 10.3% overall increase compared to the first six months of 2022. Analysing the individual supply chains, there was a decrease in quantities disposed of in landfills while, as regards waste-to-energy plants, the upward trend was mainly due to higher volumes in the Modena and Trieste plants, which underwent routine maintenance and revamping, respectively, in the same period of 2022. The increased quantity in sorting plants was due to the larger quantities treated in all plants thanks to a rise in sorted waste collection and recent acquisitions. In composting and stabilisation plants, the volumes were up mainly due to changes in the scope of operations, while in inertisation and chemical-physical plants, the increased quantities were mainly due to higher volumes of liquid waste treated. Finally, an increase was also seen in the other plants sector, mainly due to recent acquisitions, storage plants used to manage flooding waste, and third-party plants.

The table below summarises the area's operating results:

Income statement (mn€)	June 23	% inc.	June 22	% inc.	Abs. change	% change
Revenues	849.9		758.4		91.5	+12.1%
Operating costs	(571.8)	(67.3)%	(513.1)	(67.7)%	58.7	+11.4%
Personnel costs	(124.4)	(14.6)%	(110.4)	(14.6)%	14.0	+12.7%
Capitalised costs	9.2	1.1%	15.8	2.1%	(6.6)	(41.9)%
Ebitda	**162.9**	**19.2%**	**150.7**	**19.9%**	**12.2**	**+8.1%**

REVENUES (mn€)

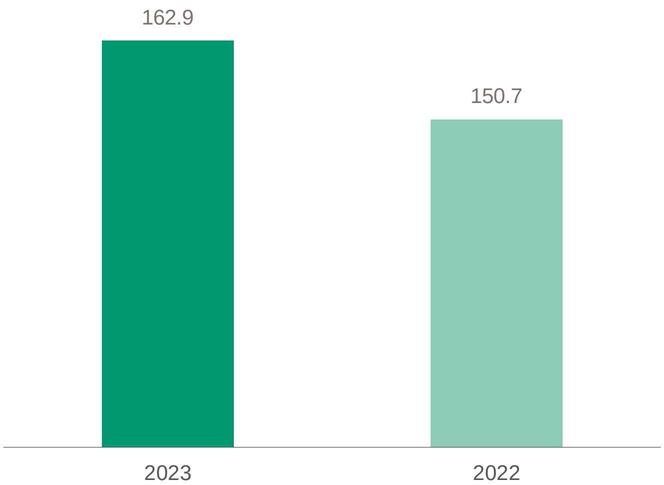


849.9
million euro
revenues
(+12.1%)

In the first half of 2023, revenues increased by 12.1% compared to the previous year. Note the 79.3 million euro increase in revenues related to recent acquisitions in the industry market, and higher revenues from disposal due to increased commercial activities in the utilities market amounting to roughly 7 million euro.

Operating expenses rose by 11.4% in 2023. Decreased costs were seen for purchasing raw materials due to the drop in commodity prices, while in the treatment market the increase involved maintenance costs and consumables, particularly chemicals. Higher costs were also due to changes in the scope of consolidation compared to the same period of the previous year, and to transport and treatment services for managing by-products, owing to increased supplier prices. With regard to municipal waste collection, increased activities were seen in connection with the development of new sorted waste collection projects.

EBITDA (mn€)



162.9
million euro
Ebitda
(+8.1%)

The increase in Ebitda was mainly due to recent acquisitions, amounting to roughly 11.9 million euro, and an increase in margins coming from energy management, totalling 14.6 million euro. These positive effects were partially offset by increased purchase prices for consumables and costs for treatment and transport.

Net investments in the waste management area were related to the maintenance and expansion of waste treatment plants, and amounted to 48.5 million euro, down 10.9 million euro compared to the previous year.

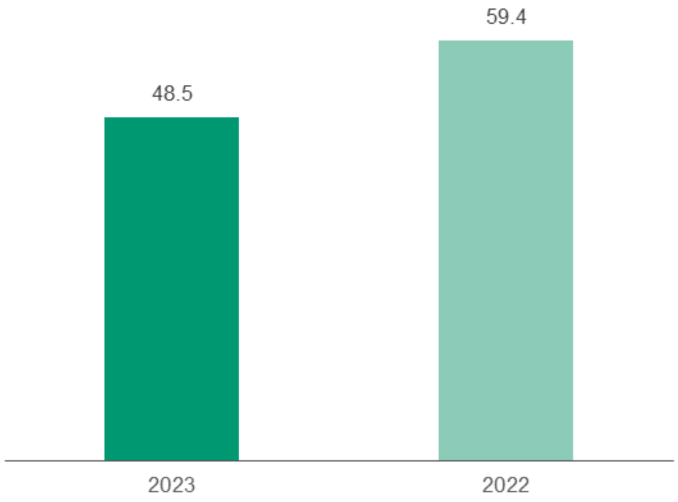
The composting/digestors sector showed a 3.9 million euro decrease in investments compared to 2022. This drop is due to the construction in the first half of 2022 of a plant for biomethane production in Spilamberto, an activity which generated a non-permanent increase in Capex in 2022.

Investments in landfills increased by 6.3 million euro, due to the work carried out on the Cordenons, Galliera and Gaggio Montano plants, in addition to the work done by Marche Multiservizi Spa on the fourth lot of the Cà Asprete plant.

The WTE sector showed a 7.6 million euro decrease in investments, due to the significant work carried out in the first half of the previous year for revamping line two of the Trieste plant and extraordinary maintenance scheduled on the Rimini, Modena and Bologna plants. In the industrial waste plants sector, the 8.6 million drop was mainly due to revamping on the Ravenna F3 plant, also carried out in the first half of 2022.

The collection area and equipment sector saw a 2.0 million euro increase in investments compared to the previous year, while the sorting and recovery plants sector recorded an overall increase coming to 1.3 million euro, due to the delta perimeter involving the acquisition of the company A.C.R. Spa and other interventions, which more than offset the reduction recorded by the company Aliplast Spa, the latter due to higher investments made during the previous year for purchasing buildings for the company's operating headquarters.

NET INVESTMENTS WASTE MANAGEMENT (mn€)



48.5

million euro

net investments waste management

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

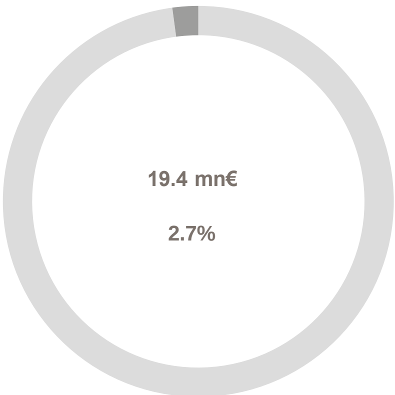
Waste management (mn€)	June 23	June 22	Abs. change	% change
Composters/digesters	4.1	8.0	(3.9)	(48.8)%
Landfills	10.4	4.1	6.3	+153.7%
WTE	7.0	14.6	(7.6)	(52.1)%
RS plants	5.4	14.0	(8.6)	(61.4)%
Collection areas and equipment	7.8	5.8	2.0	+34.5%
Transshipment, selecting and other plants	14.2	12.9	1.3	+10.1%
Total waste management gross	**48.8**	**59.4**	**(10.6)**	**(17.8)%**
Capital grants	0.3	-	0.3	+100.0%
Total waste management net	**48.5**	**59.4**	**(10.9)**	**(18.4)%**

1.05.05 Other services

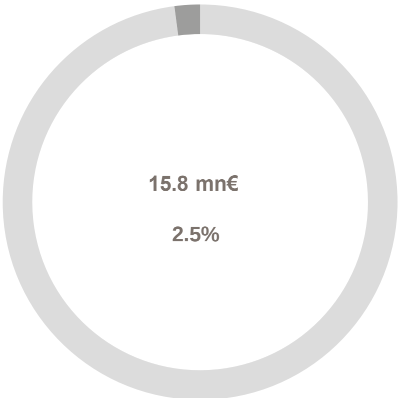
Ebitda rises

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 cemetery services. At June 2023, results in this area stood at 19.4 million euro, up 3.6 million euro over the previous year.

EBITDA OTHER SERVICES 2023



EBITDA OTHER SERVICES 2022



The changes occurred in terms of Ebitda are as follows:

(mn€)	June 23	June 22	Abs. change	% change
Area Ebitda	**19.4**	**15.8**	**3.6**	**+22.7%**
Group Ebitda*	718.3	631.2	87.1	+13.8%
Percentage weight	2.7%	2.5%	+0.2 p.p.	

* refers to adjusted results, as described in chapter 1.03

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

Quantity	June 23	June 22	Abs. change	% change
Public lighting				
Lighting points (k)	626.0	585.8	+40.2	+6.9%
of which LED	39.8%	37.7%	+2.1 p.p.	
Municipalities served	207.0	195.0	+12.0	+6.2%

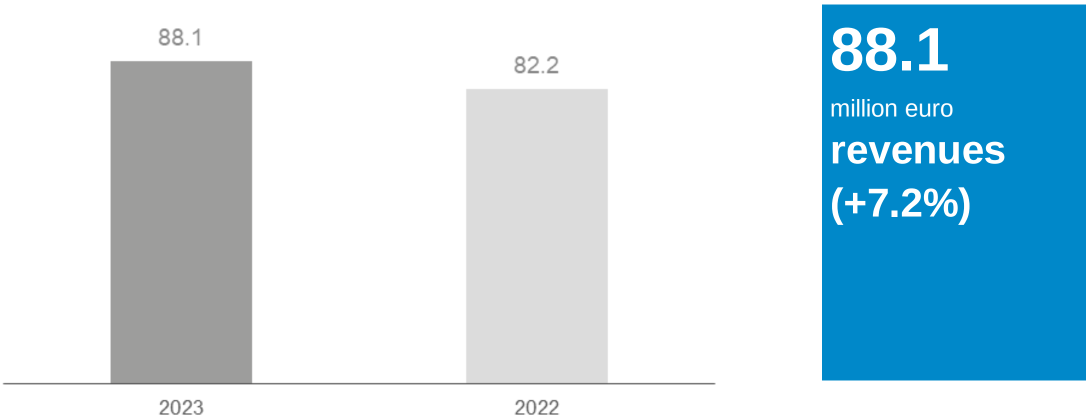
In the first half of 2023, the Hera Group acquired approximately 62.1 thousand lighting points in 31 new municipalities. From a geographical point of view, the most significant acquisitions included: approximately 16.7 thousand lighting points in the Triveneto area, approximately 11.5 thousand in Emilia Romagna, approximately 11.5 thousand lighting points in Tuscany, approximately 9.7 thousand in Umbria, approximately 5.2 thousand in Lombardy. Also note the approximately 7.5 thousand lighting points in other regions, mainly in central Italy. The period's increases fully offset the loss of about 21.9 thousand lighting points and 19 municipalities, mainly in the Triveneto area.

The percentage of lighting points managed using LED lamps also grew, now standing at 39.8%, up 2.1 percentage points. This trend highlights the Group's ongoing focus on an increasingly efficient and sustainable management of public lighting.
The quantitative indicators in the other services area also include the 4,550 km of ultra-wideband fibre optic network owned by the Hera Group through its digital company, Acantho Spa. This network serves the main cities in Emilia-Romagna, as well as 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€)	June 23	% inc.	June 22	% inc.	Abs. change	% change
Revenues	88.1		82.2		5.9	+7.2%
Operating costs	(58.7)	(66.6)%	(56.6)	(68.9)%	2.1	+3.7%
Personnel costs	(11.3)	(12.8)%	(11.0)	(13.4)%	0.3	+2.7%
Capitalised costs	1.2	1.4%	1.2	1.5%	-	+0.0%
Ebitda	**19.4**	**22.0%**	**15.8**	**19.3%**	**3.6**	**+22.7%**

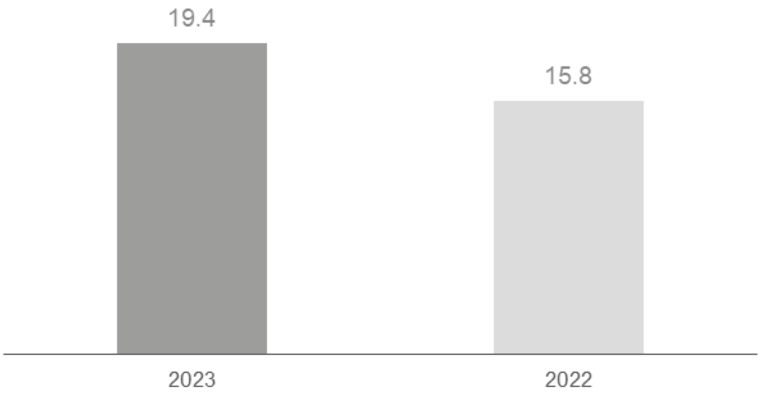
REVENUES (mn€)



The rise in revenues was mainly due to public lighting, where the increase came to 2.9 million euro, primarily as a result of the progress made in new worksites for energy requalification. Other contributions to this area's growth came from telecommunications, which accounted for a total of 2.5 million euro, due to increased activities in telephone and connectivity services.

The increased costs in the public lighting business were related to the upgrading activities mentioned above among revenues, partially offset by lower costs for the energy component of the raw material, which the previous year was affected by a significant increase in the prices of energy vectors. Operating costs related to trends in telecommunication services also increased.

EBITDA (mn€)



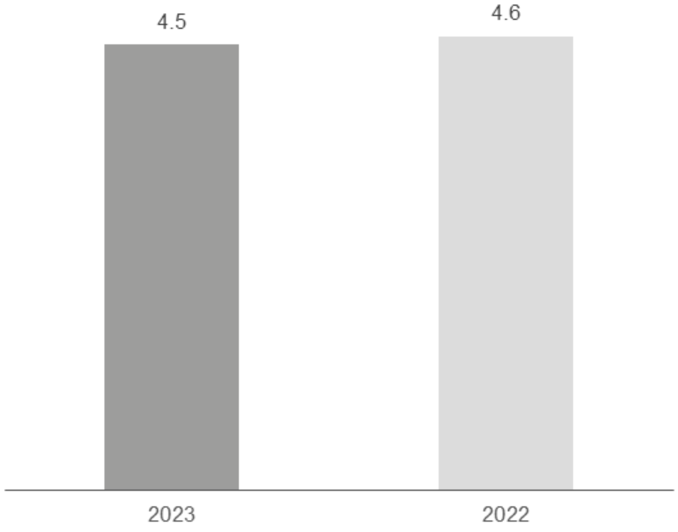
19.4
million euro
Ebitda
(+22.7%)

Ebitda for the other services area increased by 22.7%, or 3.6 million euro, thanks to the contribution coming from public lighting and telecommunications.

In the first half of 2023, net investments in the other services area amounted to 4.5 million euro, essentially in line with the same period in the previous year.

In telecommunications, investments totalling 3.7 million euro went toward network and TLC services. In the public lighting service, investments related to maintenance, upgrading and modernisation of lighting systems in the areas served amounted to 0.8 million euro, in line with the previous year.

NET INVESTMENTS OTHER SERVICES (mn€)

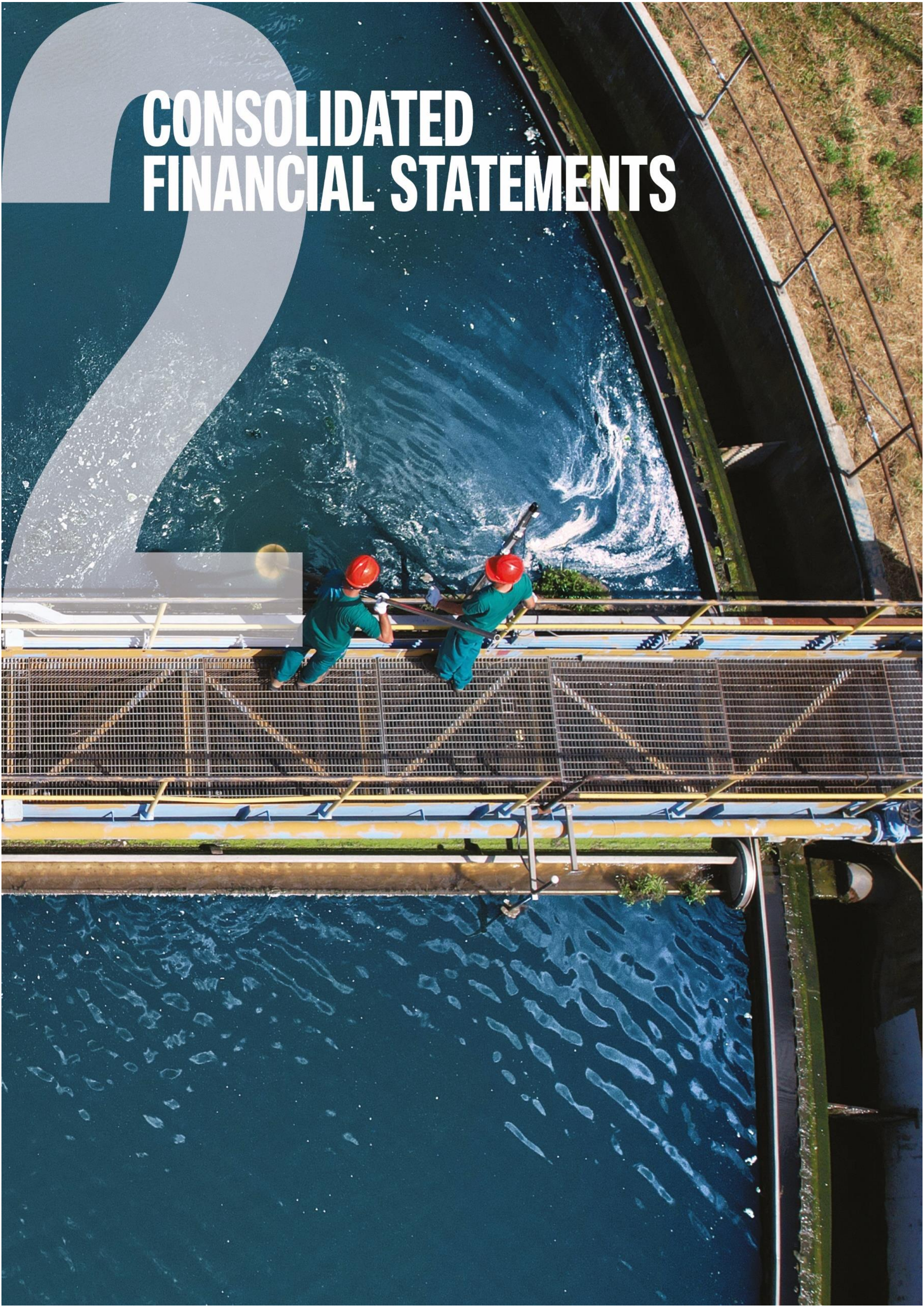


4.5
million euro
net investments other services

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

Other services (mn€)	June 23	June 22	Abs. change	% change
TLC	3.7	3.8	(0.1)	(2.6)%
Public lighting and traffic lights	0.8	0.8	-	+0.0%
Total other services gross	**4.5**	**4.6**	**(0.1)**	**(2.2)%**
Capital grants	-	-	-	+0.0%
Total other services net	**4.5**	**4.6**	**(0.1)**	**(2.2)%**

2
CONSOLIDATED FINANCIAL STATEMENTS



2.01 FINANCIAL STATEMENT FORMATS

2.01.01 Income statement

mm €	notes	first six months of 2023	first six months of 2022
Revenues	1	8,297.5	8,896.0
Other operating revenues	2	299.3	219.4
Raw materials and materials	3	(5,868.0)	(7,150.5)
Service costs	4	(1,576.2)	(1,105.2)
Personnel costs	5	(330.4)	(308.7)
Other operating costs	6	(41.5)	(39.3)
Capitalised costs	7	30.6	31.2
Amortisation, provisions and depreciation	8	(343.6)	(296.3)
Operating revenues		**467.7**	**246.6**
Share of profits (losses) pertaining to joint ventures and associated companies	9	5.9	6.1
Financial income	10	68.9	41.1
Financial expenses	11	(165.3)	(98.1)
Financial management		**(90.5)**	**(50.9)**
Earnings before taxes		**377.2**	**195.7**
Taxes	12	(103.0)	(56.7)
Net revenues for the period		**274.2**	**139.0**
Attributable to:			
parent company shareholders		253.9	120.6
minority shareholders		20.3	18.4
Earnings per share			
basic	17	0.175	0.083
diluted	17	0.175	0.083

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

mm €	notes	first six months of 2023	first six months of 2022
Profit (loss) for the period		**274.2**	**139.0**
Items reclassifiable to the income statement			
Fair value of derivatives, change for the period	27	(191.8)	(36.8)
Tax effect related to reclassifiable items		55.1	10.9
Items not reclassifiable to the income statement			
Actuarial income (losses) employee and post-employment benefits	30	1.8	11.0
Shareholdings valued at fair value	26	(0.5)	(6.5)
Tax effect related to non-reclassifiable items		-	(2.3)
Total comprehensive profit (loss) for the period		**138.8**	**115.3**
Attributable to:			
parent company shareholders		114.3	99.7
minority shareholders		24.5	15.6

2.01.03 Statement of financial position

mm €	notes	30 Jun 23	31 Dec 22
ASSETS			
Non-current assets			
Tangible assets	21	1,989.8	1,984.4
Rights of use	22	78.6	84.2
Intangible assets	23	4,560.9	4,417.4
Goodwill	24	870.5	848.1
Shareholdings	25	212.6	190.3
Non-current financial assets	18	146.6	151.8
Deferred tax assets	14	274.8	240.4
Derivative instruments	27	2.0	1.0
Total non-current assets		**8,135.8**	**7,917.6**
Current assets			
Inventories	30	1,107.9	995.1
Trade receivables	31	2,345.9	3,875.0
Current financial assets	18	65.8	77.7
Attività per imposte correnti	13	45.6	46.0
Other current assets	33	645.3	642.5
Derivative instruments	27	664.6	1,622.2
Cash and cash equivalents	18	1,254.8	1,942.4
Total current assets		**6,129.9**	**9,200.9**
TOTAL ASSETS		**14,265.7**	**17,118.5**

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.

mm €	notes	30 Jun 23	31 Dec 22
NET EQUITY AND LIABILITIES			
Share capital and reserves			
Share capital	15	1,446.6	1,450.3
Reserves	15	1,622.3	1,692.9
Profit (loss) for the period	15	253.9	255.2
Group net equity		**3,322.8**	**3,398.4**
Non-controlling interests	16	266.8	246.3
Total net equity		**3,589.6**	**3,644.7**
Non-current liabilities			
Non-current financial liabilities	19	5,142.3	5,689.9
Non-current lease liabilities	22	50.0	55.1
Post-employment and other benefits	28	85.7	92.0
Provisions for risks and charges	29	582.4	565.6
Deferred tax liabilities	14	196.1	215.7
Derivative instruments	27	23.9	6,3
Total non-current liabilities		**6,080.4**	**6,624.6**
Current liabilities			
Current financial liabilities	19	378.6	650.1
Current lease liabilities	22	20.1	21.3
Trade payables	32	1,795.5	3,093.1
Current tax liabilities	13	104.5	17.1
Other current liabilities	34	1,787.9	1,720.0
Derivative instruments	27	509.1	1,347.6
Total current liabilities		**4,595.7**	**6,849.2**
TOTAL LIABILITIES		**10,676.1**	**13,473.8**
TOTAL NET EQUITY AND LIABILITIES		**14,265.7**	**17,118.5**

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

mm €	notes	30 Jun 23	30 Jun 22
Earnings before taxes		**377.2**	**195.7**
Adjustments to reconcile net profit to the cashflow from operating activities			
Amortisation and impairment of assets	8	246.2	229.9
Allocation to provisions	8	97.4	66.4
Effects from valuation using the net equity method	9	(5.9)	(6.1)
Financial (income) expenses	10	96.4	57.1
(Capital gains) losses and other non-monetary elements		(49.4)	(25.8)
Change in provision for risks and charges	29	(17.6)	(18.2)
Change in provision for employee benefits	28	(5.4)	(6.1)
Total cash flow before changes in net working capital		**738.9**	**492.9**
(Increase) decrease in inventories	35	(126.7)	(398.1)
(Increase) decrease in trade receivables	35	1,309.7	193.5
Increase (decrease) in trade payables	35	(1,333.8)	(316.6)
Increase/decrease in other current assets/liabilities	35	208.0	243.0
Changes in working capital		**57.2**	**(278.2)**
Dividends collected	35	6.6	6.4
Interest income and other financial income collected	35	31.2	13.8
Interest expenses, net charges on derivatives and other paid financial charges	35	(124.4)	(66.5)
Taxes paid	35	(31.7)	(39.6)
Cash flow from operating activities (a)		**677.8**	**128.8**
Investments in tangible assets	21	(79.0)	(80.5)
Investments in intangible assets	23	(239.4)	(206.5)
Investments in subsidiary companies and business units net of cash holdings	26	(56.1)	(37.8)
Other equity investments	26	(24.0)	(11.1)
Sale price of tangible and intangible assets	26	1.5	1.1
(Increase) decrease in other investment activities	26	54.2	10.5
Cash flow from (for) investing activities (b)		**(342.8)**	**(324.3)**
New issue of long-term binds	20	614.9	500.0
Repayments of non-current financial liabilities	20	(600.0)	-
Repayments and other net changes in financial liabilities	20	(804.0)	(59.6)
Total lease liabilities	20	(10.5)	(32.0)
Dividends paid out to Hera shareholders and non-controlling interests	20	(213.2)	(199.5)
Changes in treasury share	15	(9.8)	(15.8)
Cash flow from (for) financing activities (c)		**(1,022.6)**	**182.5**
Increase (decrease) in cash holdings (a+b+c)		**(687.6)**	**(13.0)**
Cash and cash equivalents at the beginning of the period	18	1,942.4	885.6
Cash and cash equivalents at the end of the period	18	1,254.8	872.6

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

mm €	Share capital	Reserves	Reserves derivatives valued at fairvalue	Reserves actuarial income (losses) employee and post-employment benefits	Reserves shareholdings valued at fair value	Revenues for the period	Net equity	Non-controlling interests	Total
Balance at 31 December 2021	**1,459.6**	**1,352.8**	**93.6**	**(33.7)**	**(5.6)**	**333.5**	**3,200.2**	**216.6**	**3,416.8**
Revenues for the period						120.6	120.6	18.4	139.0
Other components of comprehensive income:									
fair value of derivatives, change for the period			(22.4)				(22.4)	(3.5)	(25.9)
actuarial income (losses) employee benefits				8.0			8.0	0.7	8.7
fair value of shareholdings, change for the period					(6.5)		(6.5)		(6.5)
Overall revenues for the period	**-**	**-**	**(22.4)**	**8.0**	**(6.5)**	**120.6**	**99.7**	**15.6**	**115.3**
change in treasury shares	(4.7)	(11.1)					(15.8)		(15.8)
change in equity investments		(8.1)	1.2				(6.9)	(3.7)	(10.6)
other movements		0.1					0.1		0.1
Allocation of revenues:									
dividends paid out						(174.7)	(174.7)	(19.1)	(193.8)
allocation to reserves		158.8				(158.8)	-		-
Balance at 30 June 2022	**1,454.9**	**1.492.5**	**72.4**	**(25.7)**	**(12.1)**	**120.6**	**3,102.6**	**209.4**	**3,312.0**
Balance at 31 December 2021	**1,450.3**	**1,485.8**	**256.6**	**(31.8)**	**(17.7)**	**255.2**	**3,398.4**	**246.3**	**3,644.7**
Revenues for the period						253.9	253.9	20.3	274.2
Other components of comprehensive income:									
fair value of derivatives, change for the period			(140.6)				(140.6)	3.9	(136.7)
actuarial income (losses) employee benefits				1.5			1.5	0.3	1.8
fair value of shareholdings, change for the period					(0.5)		(0.5)		(0.5)
Overall revenues for the period	**-**	**-**	**(140.6)**	**1.5**	**(0.5)**	**253.9**	**114.3**	**24.5**	**138.8**
change in treasury shares	(3.7)	(6.1)					(9.8)		(9.8)
change in equity investments		0.9					0.9	(0.9)	-
changes in the scope of consolidation							-	32.7	32.7
other movements		(0.1)					(0.1)		(0.1)
Allocation of revenues:									
dividends paid out						(180.9)	(180.9)	(35.8)	(216.7)
allocation to reserves		74.3				(74.3)	-		-
Balance at 30 June 2023	**1,446.6**	**1,554.8**	**116.0**	**(30.3)**	**(18.2)**	**253.9**	**3,322.8**	**266.8**	**3,589.6**

2.02 EXPLANATORY NOTES

2.02.01 Introduction

The consolidated financial statement at 30 June 2023 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).

In preparing the consolidated half-year financial statements, prepared in accordance with IAS 34 Interim Financial Reporting, the same accounting principles were adopted as those utilized in drafting the consolidated financial statements at 31 December 2022, which should be consulted for more detailed information.

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.

The general principle adopted in preparing this half-year consolidated financial statement is the cost principle, except for the assets and liabilities (including the derivative instruments), which were measured at fair value.

The figures in this consolidated half-year financial statement are comparable with the same balances of the previous financial year, unless indicated otherwise in the notes commenting on the individual items. In comparing the single items of the income statement and statement of financial position any change in the scope of consolidation outlined in the specific paragraph must also be taken into account.

Information on the Group's operations and significant events occurred after the end of the six-month period is provided in the Directors' report.

This abbreviated consolidated biannual financial statement as at 30 June 2023 was drawn up by the Board of Directors and approved by the same at the meeting held on 26 July 2023. This financial statement underwent limited auditing by Deloitte & Touche Spa.

Financial statement content and format

This consolidated half-year financial statement comprises:

- primary reporting formats; they are the same as those used for the consolidated financial statements for the year ended 31 December 2022 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 financial position makes the distinction between current and non-current assets and liabilities;
  - the cash-flow statement has been prepared using the indirect method;
  - the statement of changes in net equity reports separately the other items of the comprehensive income statement;
- explanatory notes; compared with the information presented in the consolidated financial statements at 31 December 2022, the explanatory notes have been reorganized by aggregating them by topic covered, in order to increase the effectiveness and organisation of the report. In each 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, unless otherwise indicated.

Scope of consolidation

The consolidated financial statements at 30 June 2023 include the financial statements of the Parent Company Hera Spa and those of its subsidiaries. Control is obtained when the parent company has the power to influence the performance of the subsidiary, i.e. when, by means of currently valid rights, it has the power to direct the relevant activities of the subsidiary. 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 25, in the item “Other shareholdings”.

The main exchange rates used to translate the value of foreign companies are as follows:

	30 Jun 23	30 Jun 23	31 Dec 22	31 Dec 22	30 Jun 22	30 Jun 22
	Average	Specific	Average	Specific	Average	Specific
Bulgarian Lev	1.9558	1.9558	1.9558	1.9558	1.9558	1.9558
Polish Zloty	4.5601	4.4388	4.6861	4.6808	4.6350	4.6900

Changes in the scope of consolidation

The table below shows changes in the scope of consolidation introduced during the first half of the 2023 financial year as compared to the consolidated financial statement at 31 December 2022:

Acquisition of control	Company/business unit
	A.C.R. di Reggiani Albertino Spa (A.C.R. Spa)
	F.lli Franchini Srl*

* Acquisition of control over the company F.lli Franchini Srl took place on 29 June 2023. Given the insignificant economic and financial values in relation to the size of the Group and the fact that an interim statement is not yet available, the shareholding has been temporarily excluded from the scope of consolidation and recorded as acquisition under investments in other equity investments.

For further details regarding the acquisitions carried out during the period, reference should be made to chapter 1.02 “Main significant events” in the Directors’ report.

Other corporate operations

With effect from 1 January 2023, Vallortigara Angelo Srl e Hydro Mud Srl were merged by incorporation into the parent company Vallortigara Servizi Ambientali Spa.

With effect from 1 January 2023 Hera Servizi Energia Srl, 67,61% owned, was merged by incorporation into the parent company AcegasApsAmga Servizi Energetici Spa (ASE Spa). As a consequence of the merger, the merging company changed its name to Hera Servizi Energia Spa. Moreover, as a result of the exchange rate, AcegasApsAmga Spa’s shareholding in Hera Servizi Energia Spa decreased from 100% to 84.5%.

With effect from 1 March 2023 and accounting effects backdated to 1 January 2023, Alibardi Fiorenzo Srl was merged by incorporation into Aliplast Spa.

On 14 March 2023 Acantho Spa acquired 36.8% of Asco Tlc Spa, a company active in the provision of ICT services mainly to corporate customers and public administrations. The company is recorded under other equity investments.

On 11 May 2023 Hera Spa and Orogel Società agricultural cooperative established the company Horowatt Srl. The newco, 50% owned by both partners, will produce renewable energy through the construction of an agri-voltaic plant. At 30 June 2023, the company is valued at cost as it is not yet operational.

On 23 May 2023, exercising its call option related to a corresponding put option held by minority shareholders, Hera Comm Spa acquired the residual stake in Eco Gas Srl, equal to 10% of the share capital, thus becoming the sole shareholder. This operation had 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 incurred to acquire them is already exposed.

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 an operational 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.

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 within the following 12 months.
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 still not 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 corporate Management at the time the asset is recognised 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.

Deferred tax assets
Accounting for prepaid tax assets takes place on the basis of expectations of taxable income in future financial periods. 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 counterparties.

It is also noted that certain valuation processes, specifically the more complex ones such as establishing any impairment of non-current assets, are generally carried out fully only for the preparation of the annual financial statements, except in cases where there are impairment indicators that require an immediate impairment test.

2.02.02 Operational and financial performance

Please note that paragraphs 1.03 and 1.05 of the Directors' report provide an analysis of the business management performance of the period for each business area that may contribute to a better understanding of the changes occurred in the main items of operating expenses and revenues, as well as the overall financial management.

A breakdown of the most important economic items by business segment is provided in the section "Reporting by operational sectors" in section 2.02.10 "Additional Information".

1 Revenues

	first six months of 2023	first six months of 2022	Change
Revenues from sales and services	7,899.7	8,792.8	(893.1)
Changes in work in progress and semi-finished products	397.8	103.2	294.6
Total	**8,297.5**	**8,896.0**	**(598.5)**

Revenues are mainly generated domestically, with the exception of the natural gas wholesale business which has an international scope. It should be noted, in particular, that of the total value of revenues, 1,575 million euro refer to counterparties operating in the Dutch Ttf market (1,569 million in the first half of 2022).

"Revenues from sales and services," the decrease over the same period in the previous period is mainly attributable to lower energy commodity prices and the decrease in gas volumes sold, partially offset by higher volumes achieved in the electricity sales and waste treatment businesses. In terms of prices, after the sudden rise in the previous financial period, there was a steady decrease in the first six months of 2023, a trend that is bringing commodity prices back to values, although still high, more in line with pre-2022 financial periods. The change in gas volumes was influenced by the weather in the winter of 2022-2023, which was milder than the winter of the previous year, by the lower consumption patterns of customers due to the high commodity prices in the course of 2022, and by energy-saving initiatives in line with climate-altering emission reduction targets.

"Changes in work in progress and semi-finished products", the increase compared to the previous financial period 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 first six months of 2023 as well.
Revenues from related parties are illustrated in section 2.03.01 "Income statement as per Consob resolution 15519/ 2006".

2 Other operating revenues

	first six months of 2023	first six months of 2022	Change
Long-term contracts	171.8	164.1	7.7
Operating grants	41.9	7.9	34.0
Grants related to plants	6.4	5.9	0.5
Gains from asset disposals	0.7	0.4	0.3
Other revenues	78.5	41.1	37.4
Total	299.3	219.4	79.9

"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 39.9 million euro, that the government recognised in the form of tax credits through various decrees issued beginning in 2022 to address the high energy price emergency. In the first half of 2022 all the necessary elements to proceed with recognising them were not present, as these elements only manifested beginning in the second half of the previous financial year. In relation to the previous financial period, grants mainly included 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, which turned out to be significantly lower in the first six months of 2023.

"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 16.9 million euro (9.2 million euro at 30 June 2022). While waiting for the authorities to establish the reimbursement methods, this item includes the reimbursement of costs incurred for managing the flood emergency that struck Emilia-Romagna and some neighbouring regions in May, affecting part of the areas in which the Group operates public utilities, for approximately 19.5 million euro.

3 Raw materials and materials

	first six months of 2023	first six months of 2022	Change
Raw materials earmarked for sale	5,813.7	7,186.3	(1,372.6)
Environmental certificates	54.9	26.2	28.7
Plastic materials	40.3	54.6	(14.3)
Materials for industrial use	31.4	24.1	7.3
Charges and revenues from derivatives	(185.3)	(223.5)	38.2
Maintenance and other materials	113.0	82.8	30.2
Total	**5,868.0**	**7,150.5**	**(1,282.5)**

“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 Ttf market generated costs amounting to 1,452 million euro in the first half of 2023 (1,788.2 million euro in the first half of 2022). The decrease for the period is driven by the lower volumes of gas sold and the decrease in energy commodity supply prices, partially offset by the higher volumes sold to electricity end customers.

“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 the trading book, mainly comprising 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 trading contracts for greenhouse gas emission allowances. The increase in the period mainly related to higher costs incurred for purchases of grey certificates from the trading book, in line with the increase in the respective sales revenue in the first half of the year, and higher charges due to purchase commitments for renewable energy certificates, in line with increases in respective unit prices.

“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 decrease in sales revenue due to the performance of the plastics market that, following the significant price increase throughout 2022, displayed a downward trend due to falling unit prices in the first half of 2023.

“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.

“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 the increased operations carried out for the distribution network business and the urban sanitation service. The grant from the acquisition of control, in the first half of 2023, of the company A.C.R di Reggiani Albertino Spa, amounting to 13.5 million euro, is also worth mentioning.

“Charges and revenues from derivatives”, please see note 27 “Derivative instruments” for an analysis concerning its nature and performance.

4 Service costs

	first six months of 2023	first six months of 2022	Change
Work and maintenance expenses	567.6	363.7	203.9
Transport and storage	452.4	305.4	147.0
Waste transportation, disposal and collection	288.4	222.7	65.7
Technical services	54.0	36.4	17.6
IT and data processing services	40.4	30.1	10.3
Fees paid to local authorities	31.7	33.7	(2.0)
Professional services	24.8	18.3	6.5
Other service costs	116.9	94.9	22.0
Total	**1,576.2**	**1,105.2**	**471.0**

"Charges for works and maintenance" refer to costs for the implementation of energy efficiency measures, costs incurred for the construction or improvement of infrastructure held under concession in application of the intangible asset accounting model to be used for public services under concession, and costs for maintaining the plants managed by the Group. The change from the same period in the previous year is mainly due to the significant development of the business related to energy efficiency improvement work on apartment buildings.

"Transport and storage" include the costs of transporting and storing gas as well as distributing gas and electricity including system charges. These latter, specifically, represent charges rebilled to end customers and therefore substantially unchanged in the Group's results. The changes as compared to the same period in the previous year is due primarily to:

- higher storage and transportation costs of the methane gas commodity mainly related to the higher volumes managed by the Group without resorting to procurement contracts directly on the Remi cabins;
- higher distribution costs of the electricity commodity in relation to increased volumes sold.

These effects are only partially offset by the decrease in system charges and lower distribution costs of the natural gas commodity, which are related to lower volumes sold compared to the same period in the previous year.

"Waste transportation, disposal and collection" mainly include the operating costs of urban sanitation and waste management and disposal activities. The changes as compared to the same period in the previous year is due primarily to:

- the effect of the acquisitions carried out in the second half of 2022 and the first half of 2023, for 19.8 million euro, specifically in relation to the company A.C.R. di Reggiani Albertino Spa;
- higher transport, processing and intermediation costs due to the increased volumes handled on the utility market and the management of by-products;
- the flood emergency that struck Emilia-Romagna and some neighbouring regions in May, affecting part of the areas in which the Group operates public utilities.

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

"IT and data processing services" include costs for maintaining and managing the Group's IT and telecommunications infrastructure, corporate applications and cybersecurity systems. The increase compared to the first half of 2022 is related to the increase in project activities and the increase in the cyber security and data analytics activities.

The item "Fees paid to local entities" 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.

"Costs for other services" include all other costs for services not specified in the above categories. This item also includes fees and contributions to agents for 19.6 million euro (10.5 million euro at 30 June 2022) banking fees of 11.8 million euro (7.2 million euro at 30 June 2022). 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 value of which is not significant for the first six months of 2023.

5 Personnel costs

	first six months of 2023	first six months of 2022	Change
Salaries and wages	236.7	219.7	17.0
Social security costs	75.3	68.1	7.2
Other costs	18.4	20.9	(2.5)
Total	330.4	308.7	21.7

The increase as compared to the same period in the previous year is due primarily to:
- the increase in the number of employees, particularly as a result of new acquisitions during the first half of 2023 and the second half of the previous year;
- salary increases provided for in national collective labour agreements;
- to higher average employee attendance.

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

	Average			Specific		
	first six months of 2023	first six months of 2022	Change	first six months of 2023	first six months of 2022	Change
Managers	157	152	5	155	152	3
Middle managers	592	581	11	588	578	10
Clerks	5,559	5,092	467	5,582	5,106	476
Blue-collar workers	3,613	3,267	346	3,613	3,258	355
Total	**9,921**	**9,092**	**829**	**9,938**	**9,094**	**844**

The average cost of labour per capita for the first six months of 2023 as compared to the same period in 2022 is as follows:

Thousand euro	first six months of 2023	first six months of 2022	Change
The average cost of labour per capita	33.0	34.0	(1.0)

6 Other operating costs

	first six months of 2023	first six months of 2022	Change
Taxation other than income taxes	11.3	11.8	(0.5)
Fees paid to institutional bodies	7.5	8.0	(0.5)
Losses on the sale and disposal of assets	0.8	1.5	(0.7)
Minor charges	21.9	18.0	3.9
Total	**41.5**	**39.3**	**2.2**

"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 bodies" mainly paid to 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 and fees paid to Atersir.

"Losses on sale and disposal of assets" mainly arise from the disposal of certain components of WTE plants and waste treatment plants.
"Minor charges" comprise numerous charges including membership fees, indemnities, sanctions and fines.

7 Capitalised costs

	first six months of 2023	first six months of 2022	Change
Increases in tangible assets for internal work	30.6	31.2	(0.6)

This item includes mainly the labour costs and other charges (such as storage materials and costs for use of equipment) directly attributable to the projects carried out internally by the Group.

8 Depreciation amortisation and provisions

	first six months of 2023	first six months of 2022	Change
Depreciation and amortisation	246.2	229.9	16.3
Net provisions	97.4	66.4	31.0
Total	**343.6**	**296.3**	**47.3**

Below is a breakdown of the item Depreciation and amortisation:

	notes	first six months of 2023	first six months of 2022	Change
Depreciation	21, 22, 23	246.1	229.9	16.2
Write-downs	21, 22, 23	0.1	-	0.1
Total		**246.2**	**229.9**	**16.3**

Below is a breakdown of the item Net provisions:

	notes	first six months of 2023	first six months of 2022	Change
Allowance for bad debts	31	69.3	47.4	21.9
Provision for risks and charges	29	29.1	19.5	9.6
De-provisioning		(1.0)	(0.5)	(0.5)
Total		**97.4**	**66.4**	**31.0**

"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

	first six months of 2023	first six months of 2022	Change
Joint venture share of net profits	0.9	1.8	(0.9)
Associated companies share of net profits	5.0	4.3	0.7
Total	**5.9**	**6.1**	**(0.2)**

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 25 "Shareholdings".

10 Financial income

	first six months of 2023	first six months of 2022	Change
Customers	23.0	11.0	12.0
Income from valuation at fair value of financial liabilities	16.3	11.2	5.1
Income from derivatives	3.2	9.8	(6.6)
Other financial income	26.4	9.1	17.3
Total	**68.9**	**41.1**	**27.8**

"Customers" mainly include the interest on payments in arrears billing system related to the gas and electricity business. The increase for the period is mainly due to higher charges to protected market customers.

"Income from valuation at fair value of financial assets and liabilities" mainly include valuation adjustments, in application of fair value hedging, of a bond in the amount of 16.3 million euro, as reported in note 27 "Derivative instruments".

"Income from derivatives" include the effects of both the valuation and realisation of interest and exchange rate derivatives, as appropriately detailed in note 27 "Derivative instruments".

The item “Other financial income” includes:

	notes	first six months of 2023	first six months of 2022	Change
Interest income on deposits	18	15.2	-	15.2
Dividends		3.8	3.7	0.1
Discounting of non-current financial receivables	18	2.1	2.2	(0.1)
Loans	18	0.9	1.1	(0.2)
Other		4.4	2.1	2.3
Total		26.4	9.1	17.3

- Interest income on deposits, mainly representing interest recognised on an accruals basis towards the banking system. The change from the previous period is due to the increase of interest rates beginning in the second half of 2022 and the higher average balance on the Group’s current accounts;
- Dividends represent the portion of profits distributed by minor non-consolidated shareholdings, specifically referring to the shareholding in the companies Ascopiave Spa and Veneta Sanitaria Spa;
- Discounting of non-current financial receivables, relating to the effect of measuring at depreciated cost receivables arising mainly from construction and asset improvements recognised in application of the financial asset model for public services concession arrangements;
- Loans represent the interest earnings on loans granted to companies valued at equity or to minor subsidiaries.

11 Financial expenses

	first six months of 2023	first six months of 2022	Change
Expenses from bonds and loans	70.7	33.5	37.2
Factoring charges and transfer of tax credits	24.6	15.6	9.0
Expenses from derivatives	21.6	15.5	6.1
Valuation at depreciated cost of financial liabilities	17.2	14.2	3.0
Expenses from valuation at fair value of financial assets and liabilities	13.5	(2.4)	15.9
Discounting of options and consideration on shareholdings	8.8	10.2	(1.4)
Discounting of provisions	5.7	8.8	(3.1)
Other financial expenses	3.2	2.7	0.5
Total	**165.3**	**98.1**	**67.2**

“Expenses from bonds and loans” include interest accrued for the period on bonds issued by the parent company Hera Spa and interest on loans granted by the banking system and other financing institutions, in addition to fees for non-utilisation of available credit lines. The increase as compared to the same period in the previous year is due to higher level of indebtedness; please refer to note 19 “Financial Liabilities” for further details on this change. In addition, the operations to subscribe to new debt instruments, partly at a floating rate and partly at a fixed rate, were characterised by higher interest rates than the Group’s previous average cost of debt, resulting in an additional increase in financial expenses for the period.

“Factoring charges and transfer of tax credits”, the item includes the following:

	notes	first six months of 2023	first six months of 2022	Change
Sales of trade and other operating receivables		23.4	3.5	19.9
Transfer of tax credits	33	1.2	12.1	(10.9)
Total		**24.6**	**15.6**	**9.0**

The sale of trade and other operating receivables increased significantly as a result of both the increase in the volume of receivables sold during the six-month period (a trend already seen in the second half of the previous year due to the increase in the raw material component of energy sales) and the higher discount rates applied by financial institutions.
The transfer of tax credits includes charges incurred in connection with the transfer of credits recorded as a result of the application of the invoice discount to customers for energy efficiency measures. The decrease is due to the lower volume of transfers carried out in the first half of 2023 compared to the previous period, in which credits not related to the 110% super-bonus rebate, which were characterised by a significant discount rate and more protracted offsetting time, were transferred.

“Expenses from derivatives” include the effects of both the valuation and realisation of interest and exchange rate derivatives, as appropriately detailed in note 27 “Derivative instruments”.

“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, accounted for as a loan (with a nominal value of 54 million euro) as described in note 19 “Financial liabilities”.

“Expenses from valuation at fair value of financial assets and liabilities” mainly includes:

	notes	first six months of 2023	first six months of 2022	Change
Energy efficiency receivables	33	13.5	(9.8)	23.3
Bonds	27	-	7.4	(7.4)
Total		**13.5**	**(2.4)**	**15.9**

Energy efficiency receivables include the measurement at current market value of receivables related to the application of the so-called invoice discount to end customers for energy efficiency measures destined to be sold to financial institutions once the procedure for granting the related tax credit has been completed. 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 sale of tax receivables,” proceeding at the same time to terminate the valuation position opened, thereby generating a substantially offsetting effect. The increase compared to the previous period is mainly due to the higher volume of receivables in the portfolio, especially as a result of the energy efficiency works falling under the 110% rebate regulations.
Bonds during the first half of 2022 refer to valuation adjustments, in application of the fair value hedge, of a bond for 7.4 million euro, as reported in Note 27 “Derivative instruments”.

“Discounting of options and consideration on shareholdings” mainly include 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	first six months of 2023	first six months of 2022	Change
Post-closure landfills	29	2.7	5.6	(2.9)
Restoration of third-party assets	29	2.8	2.8	-
Post-employment and other employee benefits	28	0.1	0.3	(0.2)
Plant dismantling	29	0.1	0.1	-
Total		**5.7**	**8.8**	**(3.1)**

For a more detailed analysis of the change in charges from discounting funds compared to the reference period, if significant, please refer to the notes to the respective balance sheet items.

The "Other financial expenses", of a residual nature, include:

	notes	first six months of 2023	first six months of 2022	Change
Leases	22	1.3	1.4	(0.1)
Other expenses		1.9	1.3	0.6
Total		**3.2**	**2.7**	**0.5**

Other charges mainly comprise interest for financial intermediation and interest relating to payment deferrals.

2.02.03 Taxation

12 Taxes

This item is made up as follows:

	first six months of 2023	first six months of 2022	Change
IRES	75.7	40.2	35.5
IRAP	23.6	14.2	9.4
Substitute tax	3.7	-	3.7
Nonrecurring subsidies	-	2.3	(2.3)
Total	**103.0**	**56.7**	**46.3**
Earnings before taxes	**377.2**	**195.7**	
Tax rate	**27.3%**	**29.0%**	

The decrease of the tax rate compared to previous period is mainly due to:

- over the course of the first half of 2022 the "extraordinary contribution to offset high utility bills" was recorded under the income taxes, a benefit established for the year 2022 only by Law 51/2022, which converted Article 37 of Legislative Decree 21/2022, for an amount of 2.3 million euro;
- during June 2023 the exemption was carried out, pursuant to Legislative Decree no. 185/2008 (converted into Law 2/2009) of higher values arising from the acquisition of Con Energia Spa, which resulted in the payment of a substitute tax of 3.7 million euro and the recognising of tax assets of 6.7 million euro;
- as reported in Note 2 "Other operating income", tax credits for the purchase of electricity and gas were booked in the first half of 2023, pursuant to Decree-Law 4/2022 and subsequent measures, which are not relevant for tax purposes.

For a more detailed analysis of the tax rate trend, reference should be made to paragraph 1.03.01 "Income statement and investments" of the Directors' Report, in which both the pre-tax earnings and the tax charge for these comparison periods have been adjusted for special items for the period, in order to determine a fully comparable adjusted tax rate.

13 Current tax assets and liabilities

	30 Jun 23	31 Dec 22	Change
Income tax receivables	44.5	44.8	(0.3)
IRES refund receivables	1.1	1.2	(0.1)
Total current tax assets	**45.6**	**46.0**	**(0.4)**
Income tax payables	104.5	17.1	87.4
Total current tax liabilities	**104.5**	**17.1**	**87.4**

"Income tax receivables" refer to the excess of the previous period's IRES and IRAP direct tax balances that have not yet been used and advance payments made in the period for direct taxes over the amount due.
"IRES refund receivables" include taxes for which the Group has filed for a refund and is awaiting the corresponding amount to be collected from Inland Revenue.

"Income tax payables" includes the IRES and IRAP amounts allocated in relation to the profit produced in the first half of this fiscal year plus any debit balances from the previous period that will be paid in the second half of 2023. The change as compared with the previous financial period reflects the significant increase in taxable income already observed in the first half of 2023.

14 Deferred tax assets and liabilities

	30 Jun 23	31 Dec 22	Change
Deferred tax assets	399.3	429.8	(30.5)
Offsetting of deferred tax liabilities	(124.8)	(189.6)	64.8
Substitute tax credit	0.3	0.2	0.1
Total net deferred tax assets	**274.8**	**240.4**	**34.4**
Deferred tax liabilities	320.9	405.3	(84.4)
Offsetting of deferred tax liabilities	(124.8)	(189.6)	64.8
Total net deferred tax liabilities	**196.1**	**215.7**	**(19.6)**

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.

"Deferred tax assets" are generated by the provisional differences between the value attributed to assets and liabilities according to accounting criteria and their corresponding values for tax purposes. The decrease for the period is mainly due to the following opposing effects:

- change of the fair value of commodity derivatives classified as cash flow hedge, resulting in an overall asset decrease of 46.9 million euro;
- based on the accounting policy adopted by the Group, recording deferred tax assets, in the amount of 6.7 million euro, relative to the tax benefit arising from the franking of the controlling interest in Con Energia Spa, acquired in the previous year, for which the Group paid the relative substitute tax to the Treasury in June 2023.

"Deferred tax liabilities" arise from the provisional 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 decrease compared to 31 December 2022 is mainly due to the following opposing effects:

- change of the fair value of commodity derivatives classified as cash flow hedge, resulting in an overall liability decrease of 101.9 million euro with a balancing entry in the statement of comprehensive income;
- recording of deferred taxes on the customer list acquired following the acquisition of control of the company A.C.R. Spa, for 15.8 million euro, as illustrated in the section "Business combinations (additional information)" of section 2.02.10 "Other information".

Reporting on tax litigations

IRES, IRAP and VAT section

Company Tax	Description of litigation	Status of litigation	Disputed amount*	Amounts paid (including provisionally)**	Provisions recorded
EstEnergy Spa IRES, IRAP and VAT	Notice of assessment for the years between 2013 and 2017 of the company Ascotrade Spa, merged into EstEnergy Spa, 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, the Tax Court of Second Instance rejected the appeal lodged by the Inland Revenue Agency and ordered it to pay the relevant expenses. The proceedings for the year 2015 resulted in first instance verdicts in favour of the company, but the Inland Revenue Agency appealed and the proceedings are pending before the Tax Court of the Second Instance. For the years 2016 and 2018, on 19 June 2023, the Tax Court of First Instance accepted the appeal lodged by the company ordering the Inland Revenue Agency to pay the relevant expenses.	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 net financial income related to commodity derivatives and environmental certificates.	Proceedings relating to the 2011 and 2013 tax years, against unfavourable first instance rulings, are still pending in second instance before the relevant Tax Courts. For the tax year 2011, an accounting technical expertise was requested from the Second Instance Tax Court of Emilia-Romagna. For the tax year 2012, an unfavourable ruling for the company was issued by the Second Instance Tax Court of Friuli-Venezia Giulia. The Company filed appeals to the Court of Cassation.	6.6	2.9	-
Herambiente Spa IRAP	Notices of assessment for the years from 2009 to 2013, in relation to the IRAP subsidy "tax wedge" in favour of the company.	In relation to the tax periods audited, following appeals filed by the losing party (there are both favourable and unfavourable rulings for the company) proceedings are pending before the Court of Cassation.	4.1	4.1	-
Herambiente Spa Dividend witholdings	Notices of assessments for the non-application of the withholding tax on dividends paid out to Ambiente Arancione U.A. and European Waste Holding Ltd in 2016 and 2017.	An appeal was lodged to the competent Tax Court for both years.	5.1		
Marche Multiservizi Spa IRES and IRAP	Notices of assessment for the years between 2009 and 2016 to objection to the deduction of provision to lanfill post management allowance.	In relation to the years between 2009 and 2014, following appeals filed by the losing party (there are both favourable and unfavourable rulings for the company), proceedings are pending before the Second Instance Tax Court of Ancona. The proceedings for the year 2015 resulted in a favourable ruling for the company, but the Inland Revenue Agency appealed and the company filed an appearance before the Second Instance Tax Court. For the year 2016, the company contested the notice of 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 and the erroneous determination of the maxi depreciation allowance, with regard to accessory charges related to smart meters, as well as the undue deduction of personnel-related expenses for IRAP purposes.	The company entered into negotiations with the Inland Revenue Office and settled the IRAP claim by paying the (minor) amount due. In relation to the two IRES assessments, both appealed, in June 2022 the Tax Court ruled in favour of the company ordering the Inland Revenue Agency to pay the relevant expenses. Consequently, the Inland Revenue Agency appealed. The proceeding is currently pending in first instance. Provisional amounts paid 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 filed an appeal with the Second Instance Tax Court of Emilia-Romagna against the first instance ruling, which cancelled the penalties, but confirmed higher taxes. As of the current moment, the final hearing has yet to be scheduled.	0.6	0.3	-

* "disputed 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 penalties and interest, if due.

Other taxes

Company Tax	Description of litigation	Status of litigation	Disputed amount*	Amounts paid (including provisionally)**	Provisions recorded
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. The company filed an appeal with the Second Instance Tax Court of Emilia-Romagna and is waiting for the scheduling of the hearing.	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 favourable ruling for the Company, and are still pending before the First Instance Tax Court for the remaining years.	3.0	-	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 ruling was partially favourable to the company; the deadline for the appeal to the Court of Cassation is pending. For the years 2016-2020, the first instance ruling was unfavourable for the company, and the proceeding is pending before the Second Instance Tax Court. In the course of 2022, the company finished paying the amount due in respect of the 2018 conciliation.	2.0	-	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.	The proceedings for the years 2013-2015 are currently pending partly before the First Instance Tax Court of Rimini (2013) and partly before the Second Instance Tax Court of Emilia-Romagna (2014 and 2015). The notices of assessment for the years 2016-2019 are pending with the relevant Second Instance Tax Court.	0.8	0.1	1.2
AcegasApsAmga Spa **Excise on self-consumption**	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 relation to the installation of measuring instruments for detecting electricity produced and used for self-consumption and associated payment of the excise.	The Court of Cassation upheld the appeal filed by the company for the year 2012 concerning the WTE plant in Padua. The proceeding for the years between 2013 and 2015 is pending before the Court of Cassation following the appeals lodged by the company against the unfavourable ruling on appeal. With reference to the WTE plant in Trieste, proceedings are pending with the Court of Cassation following the appeal by the Customs Agency against the ruling of the Tax Court in favour of the company.	2.1	1.0	-
EstEnergy Spa **Extra-profit contribution**	Refund claim not fulfilled in relation to the payment of the "extraordinary contribution to offset high utility bills" established for the year 2022 only by Law 51/2022	The company filed an appeal with the First Instance Tax Court whose ruling is still pending.		9.6	-
Hera Spa **Extra-profit contribution**	Refund claim in relation to the payment of the "extraordinary contribution to offset high utility bills" established for the year 2022 only by Law 51/2022 no longer due as a result of the change in scope introduced by the subsequent Law 197/2022	awaiting refund		13.0	-
	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 Tax Court of Emilia-Romagna, while the COSAP proceedings for the year 2017 are pending before the Court of Appeal of Bologna. The first instance ruling was partially favourable to the company	1.2	1.2	2.2

Hera Spa **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	-
	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 years 2014-2018 are pending with the relevant Second Instance Tax Court of Emilia-Romagna.	0.9	-

* "disputed 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 penalties and interest, if 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 Statement of financial position

Net equity

15 Group net equity

	30 Jun 23	31 Dec 22	Change
Share capital (nominal value)	1,489.5	1,489.5	-
Treasury shares	(42.2)	(38.5)	(3.7)
Share capital increase expenses	(0.7)	(0.7)	-
Share capital	**1,446.6**	**1,450.3**	**(3.7)**
Legal reserve	133.9	120.3	13.6
Other reserves	1,470.5	1,409.1	61.4
Other comprehensive income	67.6	207.1	(139.5)
Reserve for transactions on treasury shares	(49.7)	(43.6)	(6.1)
Reserves	**1,622.3**	**1,692.9**	**(70.6)**
Profit (loss) for the period	**253.9**	**255.2**	**(1.3)**
Total	**3,322.8**	**3,398.4**	**(75.6)**

The share capital at 30 June 2023 comprised 1,489,538,745 ordinary shares with a nominal value of 1 euro each and is fully paid-up. The number of treasury shares in the Group portfolio at 30 June 2023 was 42,231,208 (38,541,380 at 31 December 2022).

The items Legal reserve and Other reserves of the parent company Hera Spa increased as a result of the undistributed portion of the previous year's profit allocation approved by the Shareholders' Meeting when approving the financial statements at 31 December 2022.
Compared to 31 December 2022, the Group's shareholders' equity showed a decrease mainly due to the negative change in other comprehensive income, mainly determined by the change in cash flow hedge reserves related to hedges of planned gas and electricity commodity operations.

16 Non-controlling interests

	30 Jun 23	31 Dec 22	Change
Share capital and reserves	243.5	197.4	46.1
Other comprehensive income	3.0	(1.2)	4.2
Profit (loss) for the period	20.3	50.1	(29.8)
Total	**266.8**	**246.3**	**20.5**

In particular, it mainly includes minority equity interests in the Herambiente Group and the Marche Multiservizi Group.

With reference to the acquisition of non-controlling shares carried out in previous years, the contractual agreements entered into by the Group provided, in most cases, for the granting of irrevocable put options to minority shareholders, to be exercised within specific time frames. According to the provisions of IAS 32, the existence of such rights held by the minority shareholders led to the need to classify the options on the shares held by minority shareholders of the acquired companies in the consolidated financial statements as a financial liability, thus considering the respective shareholdings to be fully owned.

The increase of the item “Share capital and reserves” is mainly due to the acquisition of A.C.R. Spa, which resulted in the recording of the interest in the fair value of the net assets acquired for 32.7 million euro. Please see paragraph 2.02.10 “Other information” for further details on the business combination operation.

Reconciliation statement

The following is a reconciliation statement between the Parent Company’s separate financial statements and the consolidated financial statements.

	Net Profit	Net equity
Balances as per parent company’s financial statements	228.6	2,567.3
Excess of net shareholders’ equity (including the performance for the period) over the carrying amounts of shareholdings in consolidated companies	40.6	765.4
Consolidation adjustments:		
net equity valuation of companies recognised in the separate financial statements at cost	(1.4)	43.1
difference between purchase price and corresponding net book equity	(11.8)	(27.0)
elimination of intra-group transaction effects	(2.1)	(26.0)
Total	**253.9**	**3,322.8**
Allocation of third-party interests	20.3	266.8
Balances as per six-month consolidated financial statements	**274.2**	**3,589.6**

17 Earnings per share

	first six months of 2023	first six months of 2022
Profit or loss for the period attributable to holders of ordinary shares of the parent entity (A)	253.9	120.6
Weighted average number of shares outstanding for the purposes of calculation of earnings (loss) per share		
basic (B)	1,447,851,952	1,457,008,620
diluted (C)	1,447,851,952	1,457,008,620
Earnings (loss) per share (in euro)		
basic (A/B)	**0.175**	**0.083**
diluted (A/C)	**0.175**	**0.083**

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 2022, which were used in determining basic and diluted earnings per share.

Net financial indebtedness

Below is the financial indebtedness prepared in accordance with Guideline 39, issued on 4 March 2021 by ESMA, as implemented by CONSOB in its 5/2021 Communication of 29 April 2021. The Group also monitors its financial performance through the Net Financial Indebtedness alternative performance indicator, which adds non-current financial receivables to the regulatory framework.

			30 Jun 23	31 Dec 22
A	Cash holdings	18	1,254.8	1,942.4
B	Cash holdings and equivalents	18	-	-
C	Other current financial assets	18	65.8	77.7
D	**Liquidity (A+B+C)**		**1,320.6**	**2,020.1**
E	Current financial debt	19	(315.7)	(563.0)
F	Current part of non-current financial debt	19, 22	(83.0)	(108.4)
G	**Current financial indebtedness (E+F)**		**(398.7)**	**(671.4)**
H	**Current net financial indebtedness (G+D)**		**921.9**	**1,348.7**
I	Non-current financial debt	19, 22, 27	(1,426.0)	(2,553.0)
J	Debt instruments	19	(3,788.2)	(3,197.3)
K	Commercial and other non-current payables		-	-
L	**Non-current financial indebtedness (I+J+K)**		**(5,214.2)**	**(5,750.3)**
M	**Total financial indebtedness (H+L) ESMA Guidelines 32 - 382 -1138**		**(4,292.3)**	**(4,401.6)**
	Non-current financial receivables	18	146.6	151.8
	Net financial indebtedness (NetDebt)		**(4,145.7)**	**(4,249.8)**

To better understand the dynamics relating to financial exposure taking place during the first six months of 2023, see the financial statements and the comments shown in the Directors' report in paragraph 1.03.02 "Equity structure and reclassified net financial debt".

For the outline of financial debt with related parties, please see paragraph 2.03.04.

Here below is an analysis of the balance sheet items that are included in determining net financial debt, with the exception of financial assets and liabilities related to interest rate derivatives which are disclosed in details in Note 27 "Derivative instruments" and lease liabilities which are disclosed in Note 22 "Rights of use and lease liabilities".

18 Financial assets, cash and cash equivalents

	30 Jun 23	31 Dec 22	Change
Loan receivables	23.1	27.0	(3.9)
Receivables for construction services	78.9	80.4	(1.5)
Portfolio securities	2.0	2.0	-
Other financial receivables	42.6	42.4	0.2
Total non-current financial assets	**146.6**	**151.8**	**(5.2)**
Loan receivables	5.6	7.2	(1.6)
Portfolio securities	1.0	-	1.0
Other financial receivables	59.2	70.5	(11.3)
Total current financial assets	**65.8**	**77.7**	**(11.9)**
Total cash holdings	**1,254.8**	**1,942.4**	**(687.6)**
Total financial assets and cash holdings	**1,467.2**	**2,171.9**	**(704.7)**

"Loan receivables" comprises loans, regulated at market rate, made to the following companies:

	30 Jun 23			31 Dec 22		
	Non-current portion	Current portion	Total	Non-current portion	Current portion	Total
Aloe SpA	5.0	0.8	5,8	5,4	0.8	6.2
Calenia Energia Spa	1.5	-	1.5	3.3	-	3.3
Set Spa	10.6	5.1	15.7	12.2	3.2	15.4
Other minor companies	6.0	(0.3)	5.7	6.1	3.2	9.3
Total	**23.1**	**5.6**	**28.7**	**27.0**	**7.2**	**34.2**

The loan to Set Spa, a vehicle through which the Group holds shares in the production of electric generation plants, in the absence of a trigger event (the latter having occurred with reference to the first half of 2023), is subject to impairment testing at the end of the year.

"Receivables for construction services", are recorded in relation to municipalities for construction services for public lighting systems in compliance with the financial activity model provided for by the IFRIC 12 interpretation.

"Portfolio securities" include, for the non-current part, 3 million euro in bonds, funds and insurance policies to guarantee post-closure management of the landfill managed by the subsidiary Asa Scpa, the book value of which is substantially in line with the fair value at the end of the financial period.

"Other financial receivables" includes the following counterparties:

	30 Jun 23			31 Dec 22		
	Non-current portion	Current portion	Total	Non-current portion	Current portion	Total
Municipality of Padua	12.2	1.5	13.7	12.1	1.5	13.6
Consorzio Collinare	13.1	-	13.1	13.0	-	13.0
Acosea Impianti Srl	12.7	-	12.7	12.7	-	12.7
Cato and Veneto Region	-	6.1	6.1	-	7.0	7.0
ex CMV Municipalities	3.9	-	3.9	3.9	-	3.9
Other financial receivables	0.7	51.6	52.3	0.7	62.0	62.7
Total	**42.6**	**59.2**	**101.8**	**42.4**	**70.5**	**112.9**

- Municipality of Padua mainly concerns the construction of photovoltaic systems. The receivable, regulated at market value, will be reimbursed at the end of 2030;
- The Consorzio Collinare represents the compensation owed to AcegasApsAmga Spa as the outgoing provider at the end of the management contract of gas distribution services;
- Acosea Impianti Srl, regarding a security deposit made by the parent company Hera Spa;
- Cato and Veneto Region is public money to be collected;
- The Consorzio Collinare represents the compensation owed to Hera Spa as the outgoing provider at the end of the management contract of gas distribution services in the municipalities of Vigarano, Goro and Castello d'Argile;
- Other financial receivables include the transfer of energy efficiency tax credits completed at the end of the first half of 2023, formally validated and accepted by the bank counterparties, that were collected in July 2023, for 21.7 million euro (46.3 million euro at 31 December 2022, collected in January 2023). They also include 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, in line with 31 December 2022.

"Cash and cash equivalents" include almost exclusively bank and postal deposits (1,254.7 million euro at 30 June 2023). To better understand the change in the amount of cash and cash equivalents, see the financial statements.

19 Financial liabilities

	30-Jun-23	31-Dec-22	Change
Bonds and loans	4,649.8	5,171.5	(521.7)
Minority shareholders' put option	473.7	499.5	(25.8)
Payables to acquire controlling shareholdings and potential payments	17.4	17.4	-
Other financial liabilities	1.4	1.5	(0.1)
Total non-current financial liabilities	**5,142.3**	**5,689.9**	**(547.6)**
Overdrafts and interest liabilities	71.8	316.6	(244.8)
Bonds and loans	68.9	87.1	(18.2)
Payables to acquire controlling shareholdings and potential payments	13.5	13.3	0.2
Minority shareholders' put option	14.2	1.7	12.5
Other financial liabilities	210.2	231.4	(21.2)
Total current financial liabilities	**378.6**	**650.1**	**(271.5)**
Total financial liabilities	**5,520.9**	**6,340.0**	**(819.1)**

"Bonds and loans" for the non-current part, change mainly due to the overall net effect of the following operations:

- issuance of the second "sustainability-linked bond" with a face value of 600 million euro, 10-year term and annual coupon of 4.25%. For further details regarding the new issuance, reference should be made to chapter 1.02 "Main significant events" in the Directors' report;
- early repayment of the bridging loan that a pool of banks had granted in October 2022, pending the issuance of the bond referenced in the previous item, in the amount of 500 million euro;
- early repayment of the medium-long term credit line, in the form of a Term Loan Bullet, granted in 2022 in a pool by the main banks operating with the Company, in the amount of 450 million euro and backed by a guarantee issued by Sace Spa (on the basis of Article 15 Legislative Decree 17 May 2022, no. 50, subsequently converted into law);
- early repayment of financial debts underwritten during the 2022 fiscal year totalling 150 million euro.

The item also includes the value of the put option, in the amount of 53.7 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 valuation component and decreased due to dividends paid:

	Opening value	Financial expenses	Flows paid out	Closing value
first six months of 2022	55.0	1.6	(3.4)	53.2
first six months of 2023	54.8	1.6	(2.7)	53.7

The current portion of "Bonds and loans" includes the portions of medium- and long-term debt due within the next 12 months. The change from the same period of the previous year is mainly due to the repayment of the bond loan, with a remaining face value of 22 million euro, maturing in May 2023.

The main conditions of the bonds outstanding at 30 June 2023 are as follows:

Bonds	Duration (years)	Maturity	Nominal value (mm)	Coupon	Annual rate
Sustainability linked bond	12.5	25-Apr-2034	500 euro	Fixed, annual	1.00%
Sustainability linked bond	10	20-Apr-2033	600 euro	Fixed, annual	4.25%
Green Bond	10	04-Jul-2024	288.3 euro	Fixed, annual	2.375%
Bond*	15	05-Aug-2024	20,000 JPY	Fixed, six-monthly	2.93%
Bond	12	22-May-2025	15 euro	Fixed, annual	3.5%
Green Bond	7	25-May-2029	500 euro	Fixed, annual	2.5%
Bond	10	14-Oct-2026	325.44 euro	Fixed, annual	0.875%
Bond	10	03-Dec-2030	500 euro	Fixed, annual	0.25%
Bond*	15/20	14-May-2027/2032	102.5 euro	Fixed, annual	5.25%
Green Bond	8	05-Jul-2027	357.2 euro	Fixed, annual	0.875%
Bond	15	29-Jan-2028	599.02 euro	Fixed, annual	5.20%

* Unlisted instrument

At 30 June 2023, the outstanding bonds had a nominal value of 3,937.2 million euro (3,359.2 million euro at 31 December 2022), an amortised cost carrying value of 3,789.4 million euro (3,221.4 million euro at 31 December 2022), and a fair value of 3,573.9 million euro (2,986.8 at 31 December 2022) as determined by market quotations, where available.
There are covenants on a few loans that require compliance with the corporate rating limit, namely that not a single rating agency lowers its corporate rating below Investment Grade (BBB-). As of the balance sheet date this covenant has been complied with.

"Minority shareholders' put option", which 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 put 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 is to not record the holdings of minority shareholders in the result component for the period, therefore, the value of the option liabilities (payable on the date of exercise of the options according to the contractual mechanism approved by both parties) is increased by the dividends expected to be distributed by the subsidiaries over the hypothetical life of the options. 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 six-month period, compared with the previous period:

	Opening value	Acquisitions	Financial expenses	Changes assumptions	Flows paid out	Closing value
30-Jun-22						
Put option (equity value)	442.9	-	7.7	-	-	450.6
Put option (future dividends)	142.3	-	2.5	-	(21.9)	122.9
Total	**585.2**	**-**	**10.2**	**-**	**(21.9)**	**573.5**
30-Jun-23						
Put option (equity value)	421.2	-	7.4	-	(1.6)	427.0
Put option (future dividends)	80.0	-	1.2	-	(20.3)	60.9
Total	**501.2**	**-**	**8.6**	**-**	**(21.9)**	**487.9**

Regarding the movement occurring during the six-month period:
- financial charges include the notional effects of discounting the debt recorded at the previous balance sheet date;
- 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 pertaining to them. During the first half of 2023, Hera Comm Spa exercised the purchase option in its possession, correlated to a corresponding sale option of the minority shareholders, equal to 10% of the company's shares for a counter value of 1.6 million euro.

“Payables for the acquisition of controlling interests and potential payments” 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 foreseen by the agreements signed at the time of the acquisition, as of the balance sheet date.

The following is a breakdown of this item at 30 June 2023 by individual acquisition, compared with the previous period:

	30-Jun-23			31-Dec-22		
	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	-	1.1	1.1
Payables for the acquisition of controlling interests	**17.4**	**1.1**	**18.5**	**17.4**	**1.1**	**18.5**
Pistoia Ambiente Srl	-	11.7	11.7	-	11.5	11.5
Aliplast Spa	-	0.5	0.5	-	0.5	0.5
Recycla Spa	-	0.2	0.2	-	0.2	0.2
Potential payments	**-**	**12.4**	**12.4**	**-**	**12.2**	**12.2**
Total	**17.4**	**13.5**	**30.9**	**17.4**	**13.3**	**30.7**

In “Overdrafts and interest liabilities”, the significant change compared with the same period of the previous financial year is due to the underwriting of short-term monetary loans in the form of hot money totalling 230 million euro in the last quarter of 2022, in light of the high volatility of energy markets. These loans were repaid in early 2023 and, concurrently, the Group did not take out additional short-term loans given its satisfactory cash position.

“Other financial liabilities” mainly refer to:

	30-Jun-23			31-Dec-22		
	Non-current portion	Current portion	Total	Non-current portion	Current portion	Total
European energy exchange	-	77.3	77.3	-	145.1	145.1
Factoring	-	74.7	74.7	-	61.0	61.0
Electricity and waste management services fund	-	48.2	48.2	-	20.4	20.4
Other minor	1.4	10.0	11.4	1.5	4.9	6.4
Total	**1.4**	**210.2**	**211.6**	**1.5**	**231.4**	**232.9**

- European Energy Exchange includes down payments related to power exchange contracts completed on the EEX platform, which provides daily adjustment of differentials. The change can be attributed to the dynamics of energy commodity prices, which has steered the Group to prioritize settling expiring contractual positions while reducing the underwriting of new positions, turning instead to other negotiated forms of exchange contracts;
- Factoring mainly comprises collections yet to be transferred at the end of the period to financial institutions, in relation to receivables subject to non-recourse assignments for which the Group has maintained collection activities on behalf of factoring companies;
- Electricity and waste management services fund includes collections to be retroceded since they have already been advanced by CSEA in relation to the reporting carried out by the Group for the activities in the gas and electricity sales markets subject to tenders, as detailed in Note 34 “Other current liabilities”; see this note for further details.

The following table shows the financial liabilities broken down by nature as of 30 June 2023, indicating the respective maturity date time band:

Type	30-Jun-23	Portion due within 12 months	Portion due within 2nd year	Portion due within 5th year	Portion due beyond 5th year
Bonds	3,789.4	-	410.7	1,264.9	2,113.8
Loans	929.3	68.9	60.9	732.2	67.3
Minority shareholders' put option	487.9	14.2	1.5	465.9	6.3
Payables to acquire controlling shareholdings and potential payments	30.9	13.5	-	17.4	-
Other financial liabilities	211.6	210.2	0.8	0.6	-
Overdrafts and interest liabilities	71.8	71.8	-	-	-
Total	**5,520.9**	**378.6**	**473.9**	**2,481.0**	**2,187.4**

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. As of 30 June 2023, the Group has undrawn credit arrangements of approximately 732 million euro and 1,030 million euro of fully available committed credit lines. The credit lines are distributed among leading Italian and international banks and allow for adequate diversification of counterparty risk and competitive conditions.

20 Cash flows from financing activities

Changes in financial liabilities

The table below shows the changes in financial liabilities that occurred in the first half of 2023, broken down into cash and non-cash flows.

Type	30-Jun-23	31-Dec-22	Change (a)	Non-cash flows				Cash flows (f)=(a)-[(b)+(c)+(d)+(e)]
				Acquisitions divestitures (b)	Economic valuation components (c)	Changes in fair value (d)	Other changes (e)	
Non-current financial liabilities	5,142.3	5,689.9	(547.6)		25.6	(16.3)	(571.8)	14.9
Current financial liabilities	378.6	650.1	(271.5)	11.8	0.4		520.3	(804.0)
Cash flows related to financial liabilities	**5,520.9**	**6,340.0**	**(819.1)**	**11.8**	**26.0**	**(16.3)**	**(51.5)**	**(789.1)**
of which								
New issues of long-term bonds								614.9
Repayments of non-current financial liabilities								(600.0)
Repayments and other net changes in financial liabilities								(804.0)
Lease liabilities	**70.1**	**76.4**	**(6.3)**				**4.2**	**(10.5)**
Financial liabilities generated by financing activities	**5,591.0**	**6,416.4**	**(825.4)**	**11.8**	**26.0**	**(16.3)**	**(47.3)**	**(799.6)**

"Acquisitions and divestitures" include the effects arising from the control acquisition transaction carried out during the first half of 2023, as explained in the "Business combinations (additional information)" section of Section 2.02.10 "Other information".

"Economic valuation components" refer to:
- charges from the amortised cost valuation of bonds and loans in the amount of 17.2 million euro, as reported in Note 11 "Financial expenses";
- discounting charges related to minority interest put options and earn-outs contracted in connection with the acquisition of control of companies and business units, amounting to 8.8 million euro, as reported in Note 11 "Financial expenses".

"Changes in fair value" include the adjustment made to the carrying value of a foreign currency bond as a result of the fair value hedge relationship, which resulted in income of 16.3 million euro, as reported in Note 27 "Derivative Instruments".

"Other changes", in addition to reflecting any reclassifications between current and noncurrent liabilities, also show the effects due mainly to:
- accruals for interest expenses paid between the balance sheet date and 31 December of the previous year, amounting to 21.4 million euro. the cash flow of interest expenses is shown in a specific line item in the cash flow statement;
- payment of dividends to minority shareholders with whom the Group contracted put options at the time of acquiring control, amounting to 20.3 million euro. In the statement of cash flows, the related cash flow is represented in dividends paid, although it is classified for accounting purposes as a change in the financial liability already recorded (this mechanism is explained in Note 19 "Financial liabilities");
- recognition, in application of amortised cost, of initial costs related to the bond issued in the first half of the 2023 financial year, totalling 7.1 million euro;
- recognition of payables related to leases signed in the first half of the 2023 financial year and remeasurement of payables of outstanding leases 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";

Dividends paid out to Hera shareholders and non-controlling interests
The value refers to dividends paid out during the first six months of the 2023 financial year to:
- parent company's shareholders in the amount of 180.6 million euro;
- minority shareholders in the amount of 32.6 million euro, of which 20.3 million euro were paid to minority shareholders to whom the Group had recognized payables for put options in previous years, as noted above.

Finally, it should be noted that there were no non-monetary flows due to exchange rate differences in the first six months of 2023.

2.02.05 Investment activities

21 Tangible assets

	30-Jun-23	31-Dec-22	Change
Land and buildings	616.1	620.4	(4.3)
Plants and machinery	1,052.2	1,089.5	(37.3)
Other movable assets	93.6	89.5	4.1
Assets under construction	225.9	183.0	42.9
Total operating assets	**1,987.8**	**1,982.4**	**5.4**
Investment property	2.0	2.0	-
Total	**1,989.8**	**1,984.4**	**5.4**

Tangible assets are reported net of accumulated depreciation. Their composition and changes in the period are as follows:

30-Jun-22	Net opening value	Investments	Disinvestments	Depreciation and amortisation	Changes in the scope of consolidation	Other changes	Net closing value	of which gross closing value	of which depreciation provision
Land and buildings	585.3	2.3	-	(9.1)	-	15.2	593.7	871.4	(277.7)
Plants and machinery	1,107.8	10.0	(1.5)	(56.5)	0.1	(8.4)	1,051.5	2,984.1	(1,932.6)
Other movable assets	123.7	2.4	(0.2)	(10.1)	-	(29.7)	86.1	420.7	(334.6)
Assets under construction	122.1	65.8	(0.4)	-	-	(15.7)	171.8	171.8	-
Total	**1,938.9**	**80.5**	**(2.1)**	**(75.7)**	**0.1**	**(38.6)**	**1,903.1**	**4,448.0**	**(2,544.9)**
30-Jun-23									
Land and buildings	620.4	0.9	-	(9.9)	0.6	4.1	616.1	913.8	(297.7)
Plants and machinery	1,089.5	9.1	(0.6)	(59.4)	5.1	8.5	1,052.2	3,092.7	(2,040.5)
Other movable assets	89.5	4.6	(0.3)	(11.6)	5.3	6.1	93.6	458.3	(364.7)
Assets under construction	183.0	64.4	-	-	-	(21.5)	225.9	225.9	-
Total	**1,982.4**	**79.0**	**(0.9)**	**(80.9)**	**11.0**	**(2.8)**	**1,987.8**	**4,690.7**	**(2,702.9)**

The breakdown and main changes within each category are commented on below, while for a detailed description of the investments made during the period, please refer to paragraph 1.05 “Analysis by strategic business areas” of the Directors’ report.

“Land and buildings” consist of 129.3 million euro in land and 486.8 million euro in buildings. These are mainly company-owned properties on which the majority of the sites and production plants stand.

“Plants 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 during the period related to waste treatment, for a total of 8.4 million euro. Concurrently, there were disinvestments for demolitions and the decommissioning of obsolete plants.

“Other movable assets”, mainly includes the equipment, waste disposal bins in the amount of 54.9 million euro, and vehicles in the amount of 38.7 million euro.

“Assets under construction” increased mainly as a result of investments being made in waste treatment plants, in the amount of 27.8 million euro, and in the electricity distribution network, in the amount of 13 million euro, as well as expansions and extraordinary maintenance of the Group’s operating sites, in the amount of 9.1 million euro.

“Other changes” covers the in-progress reclassification of fixed assets to the specific categories for assets brought into operation during the period, as well as any cases of reclassification from tangible assets to intangible assets, especially when goods used in activities under concession are involved.

Regarding the “Changes in the scope of consolidation” column, please refer to the “Business combinations (additional information)” section contained in Section 2.02.10 “Other information”.

22 Rights of use and leasing 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".

	30-Jun-23	31-Dec-22	Change
Rights of use land and buildings	49.2	50.7	(1.5)
Rights of use plants and machinery	7.1	7.1	(0.0)
Rights of use other movable assets	22.3	26.4	(4.1)
Total	**78.6**	**84.2**	**(5.6)**

	Net opening value	New contracts and contractual changes	Decreases	Depreciation and amortisation	Changes in the scope of consolidation	Other changes	Net closing value	of which gross closing value	of which depreciation provision
30-Jun-22									
Rights of use land and buildings	65.7	8.5	-	(3.7)	0.2	(17.8)	52.9	93.3	(40.4)
Rights of use plants and machinery	7.8	-	-	(0.5)	-	(0.9)	6.4	10.7	(4.3)
Rights of use other assets	28.1	2.4	-	(5.0)	0.1	(0.5)	25.1	45.1	(20.0)
Total	**101.6**	**10.9**	**-**	**(9.2)**	**0.3**	**(19.2)**	**84.4**	**149.1**	**(64.7)**
30-Jun-23									
Rights of use land and buildings	50.7	2.4	-	(3.9)	-	-	49.2	95.6	(46.4)
Rights of use plants and machinery	7.1	0.6	-	(0.6)	-	-	7.1	12.7	(5.6)
Rights of use other movable assets	26.4	1.2	-	(5.0)	-	(0.3)	22.3	46.0	(23.7)
Total	**84.2**	**4.2**	**-**	**(9.5)**	**-**	**(0.3)**	**78.6**	**154.3**	**(75.7)**

"Rights of use land and buildings" consist of 43.8 million euro in rights of use for buildings and the remaining 5.9 million euro in rights of use for land. The rights of use for buildings refer mainly to contracts concerning the real estate structures used for headquarters, offices and customer service desks.

"Rights of use of plant and machinery" refer mainly to contracts regarding purification and composting plants.

"Rights of use of other movable assets" refer mainly to contracts signed for the use of IT infrastructures (especially data centres), operational vehicles and cars.

The column "New contracts and contractual changes" shows the leases signed during the period, as well as the change in past assumptions regarding their duration, and renewal or termination options for 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.

Financial liabilities present the following composition and change, as compared with the same period of the previous year:

	Net opening value	New contracts and contractual changes	Decreases	Financial expenses	Changes in the scope of consolidation	Other changes	Net closing value
30-Jun-22							
Lease liabilities	**96.6**	**10.9**	**(32.0)**	**1.4**	**0.3**	**-**	**77.2**
of which							
non-current liabilities	53.2						54.9
current liabilities	43.4						22.3
30-Jun-23							
Lease liabilities	**76.4**	**4.2**	**(11.7)**	**1.2**	**-**	**-**	**70.1**
of which							
non-current liabilities	55.1						50.0
current liabilities	21.3						20.1

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 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 over the course of the financial period and redemption options exercised.

In accordance with its procurement policies, the Group signed 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 signing of new contracts with different counterparties.
The following table shows lease liabilities broken down by maturity date time band:

Type	Total	Portion due within 12 months	Portion due within 2nd year	Portion due within 5th year	Portion due beyond 5th year
first six months of 2023	70.1	20.1	16.2	22.3	11.5

23 Intangible assets

	30-Jun-23	31-Dec-22	Change
IT applications	83.3	82.5	0.8
Concessions and other rights of use	105.5	110.8	(5.3)
Public services under concession	3,112.5	3,184.5	(72.0)
Customer lists	617.3	581.1	36.2
Other intangible assets	111.1	92.9	18.2
Intangible assets under construction, public services under concession	429.9	273.9	156.0
Intangible assets under construction	101.3	91.7	9.6
Total	**4,560.9**	**4,417.4**	**143.5**

Intangible assets are stated net of their accumulated amortisation and are broken down below with details of the changes during the year:

	Net opening value	Investments	Disinvestments	Depreciation and amortisation	Changes in the scope of consolidation	Other changes	Net closing value	of which gross closing value	of which depreciation provision
30-Jun-22									
IT applications	84.6	0.2	-	(18.4)	0.1	12.0	78.5	537.2	(458.7)
Concessions and other rights of use	113.8	-	-	(7.8)	12.0	-	118.0	483.6	(365.6)
Public services under concession	2,963.4	4.1	(0.2)	(85.4)	-	68.6	2,950.5	5,297.1	(2,346.6)
Customer lists	576.2	-	-	(19.4)	34.6	0.1	591.5	732.1	(140.6)
Other intangible assets	79.4	13.8	-	(14.0)	-	1.6	80.8	237.6	(156.8)
Intangible assets under construction, public services under concession	237.4	159.0	-	-	-	(9.9)	386.5	386.5	-
Intangible assets under construction	71.9	29.4	-	-	-	(14.8)	86.5	86.5	-
Total	**4,126.7**	**206.5**	**(0.2)**	**(145.0)**	**46.7**	**57.6**	**4,292.3**	**7,760.6**	**(3,468.3)**
30-Jun-23									
IT applications	82.5	0.7	-	(18.5)	-	18.6	83.3	584.9	(501.6)
Concessions and other rights of use	110.8	0.3	-	(7.2)	-	1.6	105.5	485.4	(379.9)
Public services under concession	3,184.5	3.2	(0.1)	(89.5)	-	14.4	3,112.5	5,609.7	(2,497.2)
Customer lists	581.1	-	-	(20.9)	57.1	-	617.3	798.9	(181.6)
Other intangible assets	92.9	36.5	-	(19.6)	0.1	1.2	111.1	307.5	(196.4)
Intangible assets under construction, public services under concession	273.9	168.6	(0.1)	-	-	(12.5)	429.9	429.9	-
Intangible assets under construction	91.7	30.1	-	-	-	(20.5)	101.3	101.3	-
Total	**4,417.4**	**239.4**	**(0.2)**	**(155.7)**	**57.2**	**2.8**	**4,560.9**	**8,317.6**	**(3,756.7)**

The breakdown and main changes within each category are commented on below,
while for a detailed description of the investments made during the period, please refer to paragraph 1.05 “Analysis by strategic business areas” of the Directors’ report.

"IT applications" refers to costs incurred in purchasing licenses and implementing corporate information systems.
"Concessions and other rights of use" mainly include:

- concessions, amounting to 35.8 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, in the amount of 51.2 million euro, an asset recorded as part of a business combination operation carried out in the previous period 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 and non-current financial assets") provided through contracts awarded 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.

"Intangible assets under construction and public services under concession" include investments related to these concessions that are still to be completed at the end of the period and mainly refer to the water networks, in the amount of 87.9 million euro, and gas distribution networks, in the amount of 58.6 million euro.

"Intangible assets in progress" refer mainly to 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. During the first half of 2023, the item increased due to the acquisition of control over A.C.R. Spa, the value of which is shown in the "Changes in the scope of consolidation" column.

"Other intangible assets" refer 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. Specifically, commissions recognised as assets for the first half of 2023 amounted to 34.8 million euro (36 million euro for the same period in the 2022 financial year).

"Other changes" include reclassifications of fixed assets under construction to their specific categories for assets that came into operation during the six-month period, and reclassifications from/to tangible assets, especially where assets are the subject of concession activities, as mentioned in the note "Public services under concession".

"Changes in the scope of consolidation" reflects the control acquisitions made during the six-month period, for details of which please refer to the "Business combinations (additional information)" section contained in section 2.02.10 "Other information".

24 Goodwill

	30-Jun-23	31-Dec-22	Change
Goodwill	870.5	848.1	22.4

The value of goodwill at 30 June 2023 mainly reflects the following operations:

- Acquisition of control of "Ascopiave commercial 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, amounting to 81.3 million euro;
- acquisition of control through the merger of Agea Spa taking place in 2004, amounting to 41.7 million euro:

- acquisition of control over Gruppo Meta which took place at the end of the 2005 financial year, as a result of the merger of Meta Spa into Hera Spa, amounting to 117.7 million euro;
- acquisition of control over Sat Spa through the merger into Hera Spa taking place in 2008, amounting to 54.9 million euro;
- acquisition of control over the Gruppo Aliplast in 2017, amounting to 25 million euro;
- acquisition of control over the Marche Multiservizi Spa Group, amounting to 20.8 million euro;
- Acquisition of control over A.C.R. Spa, amounting to 22.4 million euro, taking place in the first half of 2023.

In accordance with the provisions of IAS 36 and having found that there were no trigger events as reported in the “Risk Management” section of Section 2.02.01 “Accounting policies and evaluation principles,” no impairment test was prepared on the goodwill recorded as of 30 June 2023.s

2.02.06 Investments in shareholdings

25 Shareholdings

	30-Jun-23	31-Dec-22	Change
Shareholdings valued using the equity method	150.3	151.4	(1.1)
Other shareholdings	62.3	38.9	23.4
Total	**212.6**	**190.3**	**22.3**

The changes in joint ventures and associated companies as compared to 31 December 2022 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.

Changes in consolidated shareholdings using the net equity method are as follows:

30-Jun-22	Opening value	Investments and disinvestments	Profit for the period	Dividends paid out	Changes in the scope of consolidation	Write-downs and other changes	Closing value
Joint ventures							
Enomondo Srl	17.6	-	1.8	(2.2)	-	-	17.2
Total joint ventures	**17.6**	**-**	**1.8**	**(2.2)**	**-**	**-**	**17.2**
Associated companies							
Aimag Spa	51.7	-	1.8	(2.8)	-	-	50.7
Set Spa	28.5	-	-	-	-	-	28.5
Sgr Servizi Spa	25.2	-	1.1	(2.0)	-	-	24.3
ASM SET Srl	18.9	-	0.7	(1.4)	-	-	18.2
SEA - Servizi Ecologici Ambientali Srl	8.7	-	0.7	(1.0)	-	-	8.4
Total associated companies	**133.0**	**-**	**4.3**	**(7.2)**	**-**	**-**	**130.1**
Total	**150.6**	**-**	**6.1**	**(9.4)**	**-**	**-**	**147.3**
30-Jun-23							

Joint ventures							
Enomondo Srl	18.8	-	0.9	(2.2)	-	-	17.5
Total joint ventures	**18.8**	**-**	**0.9**	**(2.2)**	**-**	**-**	**17.5**
Associated companies							
Aimag Spa	51.2	-	1.0	-	-	-	52.2
Set Spa	27.9	-	0.5	-	-	-	28.4
Sgr Servizi Spa	25.5	-	2.3	(2.1)	-	-	25.7
ASM SET Srl	18.9	-	0.5	(1.3)	-	-	18.1
SEA - Servizi Ecologici Ambientali Srl	9.1	-	0.7	(1.4)	-	-	8.4
Total associated companies	**132.6**	**-**	**5.0**	**(4.8)**	**-**	**-**	**132.8**
Total	**151.4**	**-**	**5.9**	**(7.0)**	**-**	**-**	**150.3**

There are no impairments or reversals of impairments to report for companies within the scope of consolidation.

Shareholdings in companies not included in the scope of consolidation underwent the following changes:

30-Jun-22	**Fair value hierarchy**	**Opening value**	**Investments and disinvestments**	**Fair value valuations**	**Other changes**	**Closing value**
Ascopiave Spa	1	39.9	-	(6.6)	-	33.3
Veneta Sanitaria Finanza di Progetto Spa	3	3.6	-	-	-	3.6
Other minor companies	3	4.4	11.1	-	0.1	15.6
Total		**47.9**	**11.1**	**(6.6)**	**0.1**	**52.5**
30-Jun-23						
Ascopiave Spa	1	27.6	-	(0.5)	-	27.1
Asco Tlc Spa	3	-	14.9	-	-	14.9
F.lli Franchini Srl	3	-	9.0	-	-	9.0
Veneta Sanitaria Finanza di Progetto Spa	3	3.6	-	-	-	3.6
Other minor companies	3	7.7	-	-	-	7.7
Total		38.9	23.9	(0.5)	-	62.3

In the case of shareholdings with a fair value hierarchy 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 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 refer to the purchase of 36.8% of Asco Tlc Spa, which took place on 14 March 2023, and the purchase of 60% of F.lli Franchini Srl, which took place on 29 June 2023. For both companies, in light of the insignificant value of assets and liabilities, inclusion in the scope of consolidation will take place by 31 December 2023, once evaluation activities and integration into Group processes have been completed.

26 Cash flows from investment activities

Investments in subsidiary companies and business units net of cash holdings

For more details on the acquisition transaction carried out during the first half of 2023, please refer to Section 1.02 “Main significant events” of the management report and section “Business combinations (additional information)” in Section 2.02.10 “Other information” of the explanatory notes.

Investments in other shareholdings

For more details on the investment operations carried out in the first half of 2023, please refer to Section 1.02 “Main significant Events” of the Directors’ report.

The table below details the main cash disbursements and cash holdings acquired, when present, associated with shareholdings in companies and business units.

30-Jun-23	A.C.R. di Reggiani Albertino Spa	Asco Tlc Spa	Other operations	Total investments
Cash outlays leading to the acquisition of control	71.5			71.5
Considerations to pay out				-
Cash holdings acquired	(15.4)			(15.4)
Investments in subsidiary companies and business units net of cash holdings	**56.1**	**-**	**-**	**56.1**
Cash outlays in other shareholdings		14.9	9.0	23.9
Investments in subsidiary companies, business units and other shareholdings	**56.1**	**14.9**	**9.0**	**80.0**

Increase/decrease in other investment activities

The following is a breakdown of information on changes in the other investment activities during the first half of 2023, differentiating between cash flows and non-cash flows.

Type	30-Jun-23	31-Dec-22	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)	
Current and non-current financial assets	212.4	229.5	(17.1)		2.1		35.0	54.2

“Economic valuation components” mainly include income from discounting non-current financial receivables, as reported in Note 10 “Financial income”.

“Other changes” mainly include:

- the amount of tax credit transfers carried out at the end of June 2023, the collection of which took place in July 2023 in the amount of 21.7 million euro. For further details, please see note 18 “Financial assets, cash and cash equivalents”;
- accrued interest income not yet collected between the balance sheet date and 31 December of the previous year, amounting to 11.3 million euro. the cash flow from interest income is shown in a specific line item in the statement of cash flows.

2.02.07 Derivatives and analogous instruments

27 Derivative instruments

	30-Jun-23			31-Dec-22			Change
Interest/exchange rate derivatives	Fair value assets	Fair value liabilities	Net effect	Fair value assets	Fair value liabilities	Net effect	Net effect
Loans	0.5	-	0.5	0.5	-	0.5	-
Foreign currency loans	1.5	23.9	(22.4)	0.5	6.3	(5.8)	(16.6)
Total interest/exchange rate derivatives	**2.0**	**23.9**	**(21.9)**	**1.0**	**6.3**	**(5.3)**	**(16.6)**
Commodity derivatives							
Commercial portfolio	595.1	425.6	169.5	1,531.0	1,244.2	286.8	(117.2)
Trading portfolio	69.5	83.5	(14.0)	91.2	103.4	(12.2)	(1.8)
Total commodity derivatives	**664.6**	**509.1**	**155.5**	**1,622.2**	**1,347.6**	**274.6**	**(119.1)**
Total derivatives	**666.6**	**533.0**	**133.6**	**1,623.2**	**1,353.9**	**269.3**	**(135.7)**
of which non-current	2.0	23.9		1.0	6.3		
of which current	664.6	509.1		1,622.2	1,347.6		

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.

The financial management policy envisages the use of hedging instruments to effectively offset changes in the fair value, or cash flows, of the hedged instrument, more specifically, changes in interest and exchange rate fluctuations that affect the sources of funds used. At 30 June 2023, net exposure in terms of fair value with respect 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, and the change from last period is due mainly to the substantial depreciation of the yen against the euro and the concomitant increase in interest rates.

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 and trading portfolios according to the purpose of each contract. 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.
At 30 June 2023, commodity derivatives showed a significantly lower net positive exposure than at the end of the previous year, mainly connected to the decrease in energy commodity prices, which were also reflected in lower commodity costs (for gas and electricity).

Interest rate derivatives

Interest rate and foreign exchange derivative instruments held as at 30 June 2023, subscribed in order to hedge loans, can be classed into the following categories:

		30-Jun-23			31-Dec-22		
Type	Fair value hierarchy	Notional	Fair value assets	Fair value liabilities	Notional	Fair value assets	Fair value liabilities
Cash flow hedges	2	8.3 mm	0.5	-	8.3 mm	0.5	-
Fair value hedges	2	149.8 mm	1.5	23.9	149.8 mm	0.5	6.3
Total fair value			**2.0**	**23.9**		**1.0**	**6.3**

		30-Jun-23			30-Jun-22		
Type	Fair value hierarchy	Income	Expenses	Net effect	Income	Expenses	Net effect
Cash flow hedges	2	0.1	-	0.1	0.1	-	0.1
Fair value hedges	2	3.1	(21.6)	(18.5)	9.7	(15.4)	(5.7)
Total income (expenses)		**3.2**	**(21.6)**	**(18.4)**	**9.8**	**(15.4)**	**(5.6)**

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 is equal to 0.1 million euro in the first six months of 2023.

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 net fair value is mainly due to the exchange rate effect, the Japanese yen having depreciated significantly against the euro in the first half of 2023, partially offset by higher interest rates and the realisation of cash flows in the period.

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	30-Jun-23			30-Jun-22		
	Income	Expenses	Net effect	Income	Expenses	Net effect
Assessment of derivatives	0.8	(17.1)	(16.3)	7.4	(11.2)	(3.8)
Accrued interest	0.3	(0.4)	(0.1)	0.1	(0.2)	(0.1)
Realised cash flows	2.0	(4.1)	(2.1)	2.3	(4.1)	(1.8)
Economic effect of derivatives Fair value hedges	**3.1**	**(21.6)**	**(18.5)**	**9.8**	**(15.4)**	**(5.6)**

Underlying amounts hedged	30-Jun-23			30-Jun-22		
	Income	Expenses	Net effect	Income	Expenses	Net effect
Assessment of financial liabilities	16.3	-	16.3	11.2	(7.4)	3.9

Commodity derivatives

Commercial portfolio

The commercial portfolio includes commodity derivative and comparable instruments, of a financial and physical nature, entered into to hedge mismatches between purchase and sale formulas, which are classed into the following categories:

Type	Fair value hierarchy	30-Jun-23 Notional	30-Jun-23 Fair value assets	30-Jun-23 Fair value liabilities	31-Dec-22 Notional	31-Dec-22 Fair value assets	31-Dec-22 Fair value liabilities
Electricity formulas	2	4,374,575 MWh	386.5		5,293,822 MWh	556.3	
Gas formulas	3	2,247,345 MWh	208.6		2,863,802 MWh	974.7	
Exchanges	2	4,855,000 USD	-		-	-	
Electricity formulas	2	2,508,933 MWh		255.4	3,165,429 MWh		341.1
Gas formulas	3	2,221,041 MWh		169.7	4,084,098 MWh		901.6
Other commodities	3	11,814 Tons		0.4	-		-
Exchanges	2	11,239,000 USD		0.1	62,353,000 USD		1.5
Total fair value			**595.1**	**425.6**		**1,531.0**	**1,244.2**

Net effect on the income statement	30-Jun-23 Phyisical contracts treated as derivatives	30-Jun-23 Financial derivative contracts	30-Jun-23 Overall effect	30-Jun-22 Phyisical contracts treated as derivatives	30-Jun-22 Financial derivative contracts	30-Jun-22 Overall effect	Change in net effect
Assessment of derivatives					1.2	1.2	(1.2)
Realised cash flows	122.9	134.9	257.8	(219.2)	215.5	(3.7)	261.5
Economic effect of derivatives	**122.9**	**134.9**	**257.8**	**(219.2)**	**216.7**	**(2.5)**	**260.3**

The main objectives of such contracts are to replicate the cash flows of formulas for sale to the market and to hedge any spreads between the benchmark markets (typically TTF and PSV). 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 significant decrease in the net fair value of commodity derivatives related to the trading portfolio is due to the reduction in the price of natural gas during the reporting period and the same trend for the PUN in this period, the latter being closely correlated with gas price fluctuations, in addition to the decrease in the notional amount outstanding at the end of the period due to the termination in the first half of 2023 of part of the contracts valued at 31 December of the previous year.

The overall effect of these instruments on the statement of comprehensive income is broken down as follows:

Commodity derivatives - Commercial portfolio	30-Jun-23			31-Dec-22		
	Positive components	Negative components	Net effect	Positive components	Negative components	Net effect
Changes to expected cash flows	66.1	-	66.1	214.7	-	214.7
Reserve transferred to the income statement	1,465.9	(1,723.7)	(257.8)	4,579.5	(4,564.8)	14.6
Derivatives' effect on statement of comprehensive income Cash flow hedges	**1,532.0**	**(1,723.7)**	**(191.7)**	**4,794.2**	**(4,565.8)**	**229.3**

The period value of the reserve transferred to the income statement also includes the effects related to derivatives for which the hedging relationship had been discontinued in relation to hedged positions that had not yet reached their maturity date.

The effect on the income statement for the first half of 2023 of the realization of derivative or analogous contracts of a physical or financial nature can be broken down as follows:

Physical contracts treated as derivatives		Financial derivative contracts		Overall effect
Sales revenues	1,575.4	Income	148.3	1,723.7
Purchasing costs	(1,452.5)	Expenses	(13.4)	(1,465.9)
Effect of realising derivative cash flow hedges	**122.9**		**134.9**	**257.8**

Trading portfolio

All other derivatives or analogous instruments that are not intended to hedge the Group's requirements and are underwritten for speculative purposes are classified in the trading portfolio. These instruments can be divided into the following cases:

Operations management

Type		30-Jun-23			31-Dec-22		
	Fair value hierarchy	Notional	Fair value assets	Fair value liabilities	Notional	Fair value assets	Fair value liabilities
Electricity formulas	2	671,236 MWh	69.5		663,755 MWh	82.7	
Gas formulas	3	147 MWh	-		204,228 MWh	8.5	
Electricity formulas	2	942,103 MWh		83.3	1,274,824 MWh		96.9
Gas formulas	3	-		-	67,292 MWh		5.7
Raw oil	2	864 BBL		0.1	3,839 BBL		0.1
Other commodities	2	812 Tons		0.1	3,404 Tons		0.6
Total fair value			**69.5**	**83.5**		**91.2**	**103.4**

Net effect on the income statement	30-Jun-23			30-Jun-22		
	Phyisical contracts treated as derivatives	Financial derivative contracts	Overall effect	Phyisical contracts treated as derivatives	Financial derivative contracts	Overall effect
Assessment of derivatives		(1.7)	(1.7)		(13.1)	(13.1)
Realised cash flows	(21.8)	52.1	30.3	(4.4)	20.0	15.6
Economic effect of derivatives	**(21.8)**	**50.4**	**28.6**	**(4.4)**	**6.9**	**2.5**

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 financial instruments within pre-established probability hypotheses as a result of an unfavourable shift in market indexes.

The effect of the realization of these instruments on the income statement for the first half of 2023 can be broken down as follows:

Contracts treated as derivatives		Financial derivative contracts		Overall effect
Sales revenues	7.0	Income	52.8	59.8
Purchasing costs	(28.8)	Expenses	(0.7)	(29.5)
Effect of realising trading derivatives	**(21.8)**		**52.1**	**30.3**

2.02.08 Provisions and potential liabilities

28 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 by 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 value	Service costs	Financial expenses	Actuarial profit (losses)	Uses	Other movements	Changes in the scope of consolidation	Closing value
30-Jun-22								
Post-employment benefits	93.7	0.7	0.2	(9.1)	(5.5)	0.2	0.1	80.3
Other benefits	11.7	-	-	(1.9)	(0.6)	-	-	9.2
Total	**105.4**	**0.7**	**0.2**	**(11.0)**	**(6.1)**	**0.2**	**0.1**	**89.5**
30-Jun-23								
Post-employment benefits	79.4	0.5	0.1	(2.4)	(4.7)	-	0.3	73.2
Other benefits	12.6	-	-	0.6	(0.7)	-	-	12.5
Total	**92.0**	**0.5**	**0.1**	**(1.8)**	**(5.4)**	**-**	**0.3**	**85.7**

“Other benefits” comprise the following:

- the gas discount represents an annual allowance granted to Federgasacqua employees hired before January 1980 and which can be passed on to their heirs;

- Premungas, a supplementary pension fund for Federgasacqua employees hired prior to January 1980. This fund, closed with effect from January 1997, changes quarterly solely to settle payments made to eligible retirees.
- Tariff reduction was provided to cover the charges deriving from granting retired staff of the electricity business unit tariff discounts on their electricity consumption.

The item “Service Costs” 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)” reflect the re-measurement of the liabilities for employee benefits arising from changes in actuarial assumptions. These effects are accounted for in the other components of the comprehensive income statement.

“Changes in the scope of consolidation” includes the post-employment provision acquired following the business combinations carried out after the end of the period.

29 Provisions for risks and charges

	Opening value	Provisions	Financial expenses	Uses	Other movements	Changes in the scope of consolidation	Closing value
30-Jun-22							
Provision third-party asset restoration	207.5	3.2	2.8	-	-	-	213.5
Provision for closure and post-closure landfill expenses	182.6	0.7	5.6	(7.6)	-	-	181.3
Provision for personnel legal cases and disputes	10.7	0.9	-	(0.7)	(0.1)	-	10.8
Provisions for waste disposal	8.1	7.2	-	(6.8)	-	-	8.5
Provision for plant dismantling	6.0	-	0.1	-	-	-	6.1
Other provisions for risks and charges	113.1	7.5	-	(3.1)	(0.6)	-	116.9
Total	**528.0**	**19.5**	**8.5**	**(18.2)**	**(0.7)**	**-**	**537.1**
30-Jun-23							
Provision third-party asset restoration	217.9	3.2	2.8	-	-	-	223.9
Provision for closure and post-closure landfill expenses	186.3	1.4	2.7	(6.7)	-	-	183.7
Provision for personnel legal cases and disputes	10.9	1.9	-	(0.8)	(0.7)	-	11.3
Provisions for waste disposal	9.7	7.1	-	(8.9)	-	-	7.9
Provision for plant dismantling	6.1	-	0.1	-	-	-	6.2
Other provisions for risks and charges	134.7	15.5	-	(1.2)	0.3	0.1	149.4
Total	**565.6**	**29.1**	**5.6**	**(17.6)**	**(0.4)**	**0.1**	**582.4**

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 period, including those discounted to present value, and the financial expenses reflecting the component arising from the discounting of cash flows.

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 with the same period of the previous year as a result of the different effects of the annual updating of the parameters used to reflect current market conditions (WACC), and due to a revision of assumptions about the timing breakdown of future outlays. Uses represent the actual outlays that took place in the period.

The "Provision for legal cases and disputes brought by personnel" reflects the outcomes of lawsuits and disputes brought by employees.

"Provision for plant dismantling" includes the amounts allocated for the future dismantling of plants in the cases such dismantling is required.

"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 deliveries of waste for the first half of 2023 not yet processed at the end of the financial period, while uses represent the costs incurred over the six monthly period for processing residual waste still stored at 31 December 2022.

"Other provisions for risks and charges" comprises provisions made against sundry risks. Of these provisions, one of the most significant is the provision relating to the risk that the energy efficiency work carried out on behalf of customers will not be completely implemented as per the contract, in the amount of 5.5 million euro.

Below is a description of the main items:

Liabilities	Type	Amount (mm €)
Non-recognition of the higher cost of electricity used in providing water service, due to the volatility of the energy market which resulted in price values for the 2022 year higher than the upper limit allowable under the tariff system	Likely	18.5
Risks arising from the activity of energy efficiency upgrading of buildings carried out on behalf of end customers, mainly apartment blocks	Likely	16.8
Non-recognition of 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	Likely	14.0
Outstanding bonds (guarantee on financial exposure provided by AcegasApsAmga S.p.A.) in case of abandonment of the operations run by the foreign subsidiary AresGas (Bulgaria).	Possible	11.3
Higher expenses that may be incurred in connection with extraordinary maintenance on the Ponte San Nicolò (Padua) landfill	Possible	5.2
Reimbursement of a portion of the sewerage and purification tariffs for the water service	Likely	4.7
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 possible were recognised as part of the business combinations in the year in which they occurred.

For detailed information on risk provisions for tax litigations, see note 12 "Taxes".

2.02.09 Operating working capital

30 Inventories

	30-Jun-23	31-Dec-22	Change
Contract work in progress	885.8	449.4	436.4
Gas stocks	142.7	468.6	(325.9)
Raw materials and stocks	65.6	57.6	8.0
Materials earmarked for sale and final products	13.8	19.5	(5.7)
Total	**1,107.9**	**995.1**	**112.8**

"Contract work in progress" includes multi-year contracts for plant construction work, mainly in relation to the following businesses:

	30-Jun-23	31-Dec-22	Change
Energy services	769.1	384.9	384.2
Treatment and disposal	38.4	4.4	34.0
Public lighting	36.0	23.7	12.3
Water services	31.3	27.3	4.0
Other minor grants	11.0	9.1	1.9
Total	885.8	449.4	436.4

The change in the period is mainly related to energy efficiency upgrading activities on buildings, particularly apartment blocks; this business exhibited a further sustained increase during the first half of 2023. The significant increase in treatment and disposal activities can be traced to the company A.C.R di Reggiani Albertino Spa, which entered the scope of consolidation in the first half of 2023.

"Gas stocks", already shown net of the related allowance for depreciation, represent methane gas inventories held for sale. Change as compared to the end of the previous period is due to:

- the decrease in wholesale prices during the first half of 2023, especially during the fuel storage injection period;
- the smaller amounts held in storage at the end of the period as a result of lower storage capacities purchased on an auction basis for the 2023-2024 fall-winter season.

As explained in the Directors' Report in section 1.03 "Overview of operating and financial trends and definition of alternative performance measures," all natural gas purchases made during the storage injection period are taken into account in determining the average cost of inventories without any distinction as to the purpose of these purchases, unlike the way these operations are recorded in the management process in order to more accurately monitor this business area. Sharply declining prices and the mass valuation criterion of contracts have resulted in a valuation of inventories in excess of what can be identified as net realizable value in light of the forward sales contracts already signed by the Group at the balance sheet date. For these reasons, the value of stocks was reduced by allocating an impairment allowance of 47.5 million euro.

“Raw materials and stocks”, already presented net of an associated obsolescence provision, mainly include:

	30-Jun-23	31-Dec-22	Change
Replacement materials and equipment	60.8	49.8	11.0
Plastic materials	4.6	7.4	(2.8)
Other combustibles	0.2	0.4	(0.2)
Total	**65.6**	**57.6**	**8.0**

“Materials earmarked for sale and final products”, already shown net of the relevant allowance for impairment, consist mainly of the following:

	30-Jun-23	31-Dec-22	Change
Plastic products	8.2	12.2	(4.0)
Materials for photovoltaic systems	3.8	6.7	(2.9)
Telecommunications equipment	1.6	0.6	1.0
Other	0.2	-	0.2
Total	13.8	19.5	(5.7)

31 Trade receivables

	30-Jun-23	31-Dec-22	Change
Receivables from customers	2,021.6	2,051.1	(29.5)
Receivables from customers for bills and invoices not yet issued	924.4	2,375.9	(1,451.5)
Provision for bad debts	(600.1)	(552.0)	(48.1)
Total	**2,345.9**	**3,875.0**	**(1,529.1)**

Trade receivables include estimated bills not yet issued in relation to estimated consumption, for the portion covered by the period, relating to bills and invoices which will be issued after 30 June 2023, as well as receivables for revenues coming due during the period pertaining to the water sector, which will be billed in the following months in accordance with the billing methods for final customers established by the Authority.
The decrease in the stock of managed receivables compared to the previous year is mainly due to the seasonal nature of energy businesses and the decrease in the market prices of gas and electricity commodities. Specifically, the effects noted above caused a significant reduction in the value of wholesale market brokerage transactions carried out at the end of June 2023, transactions that are financially settled in the months immediately following the ending period.

The value of trade receivables reported in the financial statements at 30 June 2023 represents the Group’s theoretical 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
first six months of 2022	444.6	47.4	2.1	(8.9)	485.2
first six months of 2023	552.0	69.3	-	(21.2)	600.1

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). The change in the provision compared to the six-month comparison period is mainly attributable to customers in the electricity safeguarded market, in addition

to customers in traditional energy markets, due to a 2022 scenario characterised by high prices that further increased the nominal value of the receivables managed.
The higher uses and other movements in the period are mainly due to the negative outcome of the recovery procedures for past receivables related to the environmental sanitation tariff, which had already been appropriately written down in previous years.

32 Trade payables

	30-Jun-23	31-Dec-22	Change
Payables to suppliers	1,065.4	890.3	175.1
Payables to suppliers for invoices not yet received	730.1	2,202.8	(1,472.7)
Total	**1,795.5**	**3,093.1**	**(1,297.6)**

The change in trade payables from the previous year is mainly due to the seasonality of gas and electricity sales and distribution businesses, as well as the reduction in energy commodity prices that occurred in the first half of 2023 as compared to the values reached in 2022.

33 Other current assets

	30-Jun-23	31-Dec-22	Change
Tax receivables and tax breaks	260.3	79.8	180.5
Fund for energy and waste management services for equalisation and continuity income	82.6	119.6	(37.0)
Energy efficiency bonds and emissions trading	65.8	40.9	24.9
Pre-paid costs	58.1	29.5	28.6
Security deposits	38.1	59.8	(21.7)
VAT, excise and additional taxes	24.0	86.6	(62.6)
Receivables from electricity and gas sector companies	18.2	76.1	(57.9)
Other receivables	98.2	150.2	(52.0)
Total	645.3	642.5	2.8

“Tax receivables and tax breaks” mainly include:

- receivables arising from applying the upfront discount to end customers, shown at their market value, in connection with subsidised energy efficiency upgrades amounting to 212.7 million euro (44.1 million euro at 31 December 2022), mainly related to renovation activities on apartment buildings. The increase in these receivables reflects upfront discounts recorded at 31 December 2022 under trade receivables, which were almost entirely transferred to the tax box of Group companies during the first half of 2023;
- credits recognised in relation to electricity and gas costs for energy, gas and non-gas-consuming companies, which will be used as offsets in the continuation of the 2023 financial year in accordance with current tax regulations, amounting to approximately 31 million euro (23 million euro at 31 December 2022);
- credits for investments in capital goods, including those related to Industry 4.0, in the amount of 6 million euro (6.1 million euro at 31 December 2022), which will be used to offset taxes and contributions in subsequent periods according to the annual limits stipulated.

“Fund for energy and waste management services for equalisation and continuity income” consist of continuity income amounting to 22.6 million euro (83.3 million euro at 31 December 2022) and equalisation credits amounting to 60 million euro (36.3 million euro at 31 December 2022). Continuity income decreased from the previous year by 60.7 million euro, mainly due to:

- the receipt of 34.5 million euro in relation to the recognition of costs incurred for operating in the default and last resort gas supply markets, based on ARERA Resolution 44/2022 and subsequent amendments and additions;
- a decrease in credits from applying tariff reduction measures to end users, including gas and electricity social bonuses. The trend is driven by both the seasonality of the energy commodity sales business and the reduced collection timelines granted by the Energy and Environmental Services Fund, as well as regulatory changes introduced by the government that reduced user rebates introduced in previous years to address "high energy bills".

Equalisation credit increased by 23.7 million euro compared to the previous year. Given that the financial settlement of previous years' items takes place in the second half of the calendar year, this change is mainly due to the accrual belonging to the first half of 2023 from the distribution of the gas business.

"Energy efficiency bonds and emissions trading" includes the following:

	30-Jun-23	31-Dec-22	Change
Grey certificates	36.2	20.8	15.4
White certificates	24.5	15.0	9.5
Green certificates	5.1	5.1	-
Total	65.8	40.9	24.9

- Gray certificates represent both securities held by the Group amounting to 31.8 million euro (10.1 million euro at 31 December 2022) and exposure linked to forward contracts to buy and sell greenhouse gas emission allowances amounting to 4.4 million euro (10.7 million euro at 31 December 2022). The overall increase from the previous year is related to both a higher volume of securities held and an increase in the benchmark market price.
- White certificates include the valorisation of energy efficiency targets set by the GSE for gas and electricity distribution companies, net of divestments during the period, in the amount of 22.6 million euro (13.1 million euro at 31 December 2022), as well as securities arising from energy efficiency measures carried out by the Group in the amount of 1.9 million euro (in line with the previous year). The increase, substantially in line with the value of the previous year's contribution, is due to the half-yearly accrual of the targets assigned to the Group for the 2023 obligation year, which was only partially offset by the net working capital optimisation operations carried out during the first half of the year.
- At 30 June 2023, the portfolio related to green certificates includes certificates recorded on an accrual basis prior to the 2016 financial year in relation to electricity production from the Ferrara waste-to-energy plant. These certificates, which are the object of a dispute with GSE regarding the method for calculating the self-consumption of ancillary services, are fully covered by a provision for risks already set aside in previous years, as explained in Note 29 "Provisions for risks and charges".

"Prepaid costs" mainly include future accruals for services and external processing, costs incurred for insurance coverage, surety bonds and bank fees, as well as costs for licenses, fees payable and concession fees for network services, and personnel costs for the unaccrued portion of the bonus paid in June.

"Security deposits" mainly include deposits provided as security so as to be able to participate 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 27.5 million euro. The decrease from the previous year is due to lower energy commodity prices, to which the amount of the deposits required for operating in these markets is directly related.

"VAT, excise and additional taxes" consist of receivables from the Inland Revenue Office for value-added tax amounting to 23.9 million euro (18 million euro at 31 December 2022) and for excise and additional taxes amounting to 0.1 million euro (68.6 million euro at 31 December 2022). With regard to excise and surcharges, it is necessary to keep in mind how financial relations with the Inland Revenue Office are regulated: advances paid during the period are in fact 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

billed in the period. These methods can generate credit or debit positions with differences that may be significant even between one period and another.
The decrease in excise and surtax receivables, amounting to 68.5 million euro, is mainly caused by the seasonal nature of the business, which historically has a liability exposure in June due to the full billing of the previous winter season, although this is partially offset in the current half year period by a reduction in the volumes of the methane gas commodity being sold.

"Receivables from electricity and gas sector companies" include receivable positions due from the distributing companies. These positions are generated as a result of the distribution companies' crediting to end customers, carried out through sales companies, of the social bonuses stipulated in the measures introduced by the government starting in the fall, as well as the negative Ug2c component introduced beginning 1 April 2022. For these reasons, the value of the credited components was higher than the charges for distribution fees, resulting in a reversal of the typical commercial equilibrium. The decrease compared to the previous year is mainly due to the seasonality of the business, the reduction beginning in April 2023 of the subsidies covering the Ug2c component for users with consumption up to 5,000 cubic meters per year, and the reintroduction of electricity sector system charges.

"Other receivables" mainly comprise the following:

- extraordinary subsidies in the amount of 22.6 million euro (in line with the previous year) include the amount paid, but deemed not due, by some Group companies in the year 2022 in relation to the "Extraordinary extra-profits subsidy" introduced for 2022 by Article 37 of Legislative Decree no. 21/2022. Despite significant doubts about application, these amounts were paid to the Inland Revenue Office on the set deadlines in order to avoid incurring penalties and interest. The subsequent 2023 Budget Law, which in paragraphs 120 and 121 of Article 1 changed the subjective scope and taxable base of the subsidy for the year 2022, allowed one Group company to be excluded from the scope, but did not resolve application doubts in relation to a second company affected by the law. In both cases, the Group has already initiated proceedings against the Inland Revenue Office to recover the amounts, hence recording the amount paid under other current assets, as explained in Chapter 2.02.03 "Taxation";
- advance payments for commissions to agents in the amount of 16.4 million euro (12 million euro at 31 December 2022), the increase of which is related to increased commercial activities aimed at acquiring new customers on free energy markets;
- dividend receivables from investee companies in the amount of 5.2 million euro (1 million euro at 31 December 2022), which will be collected in the second half of 2023.

34 Other current liabilities

	30-Jun-23	31-Dec-22	Change
Payables for advances to the fund for energy and waste management services	423.2	441.8	(18.6)
Security deposits from customers	265.4	383.3	(117.9)
Advances for works	262.6	106.7	155.9
Plant investment grants	243.5	239.5	4.0
Fund for energy and waste management service components and equalisation	121.6	99.5	22.1
VAT, excise and additional taxes payables	96.8	83.0	13.8
Personnel and employee withholdings	91.7	82.8	8.9
Payables to social security institutions	74.7	69.4	5.3
Energy efficiency bonds and emissions trading	49.9	51.6	(1.7)
Anticipated revenues and other expenses	22.6	32.4	(9.8)
Payables to electricity and gas sector companies	-	34.7	(34.7)
Other payables	135.9	95.3	40.6
Total	**1,787.9**	**1,720.0**	**67.9**

“Payables for advances to the Fund for energy and waste management services” comprise non-interest-bearing advances granted by the Fund for energy and waste management services, as follows:

- 228.4 million euro (243.3 million euro at 31 December 2022) in compliance with the integration mechanism provided for in ARERA Resolutions 370/2012/R/Eel and 456/2013/R/Eel against overdue and uncollected receivables owed by customers managed under the safeguarded regime; The latest statements cover charges incurred through the end of 2020;
- 167.8 million euro (182.2 million at 31 December 2022) in compliance with the replenishment mechanisms stipulated by 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) incurred until the 2020-2021 thermic year;
- 12.8 million euro (12.9 million euro at 31 December 2022) 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 the years 2016-2022. The scope is restricted to the sale of electricity on the free market, the safeguarded market (disconnectable) and the gradual protection service (disconnectable);
- 11 million euro in compliance with Resolution 44/2022, supplemented by the subsequent Resolution 372/2022, which established an equalisation of revenues, subject to reporting carried out by the Group in January 2023, aimed at offsetting part of the unforeseeable costs incurred in supplying the default and FUI markets, especially as a result of more customers entering than were expected.

“Security deposits from customers” reflect the amount paid by customers, primarily in relation to gas, water and electricity provision contracts. The decrease in the period is due to the repayment of part of the security deposits related to the 2022-2023 winter season, as well as lower prices in the period for energy commodities, which caused a reduction in the nominal value of deposits required for new supply contracts.

“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 periods. The significant increase is in line with the increase in energy efficiency work carried out by the Group, as reported in Note 1 “Revenues”.

"Plant investment grants" decrease in proportion to the depreciation rates calculated on the applicable fixed assets and increases as a result of new investments subject to grants. The item includes, in particular, the following grants received by the Group:

	30-Jun-23	31-Dec-22	Change
New Water System Investment Fund	91.9	87.1	4.8
Servola Water Treatment Plant (Trieste)	31.8	33.0	(1.2)
Water treatment and sewerage networks	24.5	32.0	(7.5)
Construction of lamination tanks and underwater pipelines in Rimini	20.2	20.6	(0.4)
Other minor grants	75.1	66.8	8.3
Total	**243.5**	**239.5**	**4.0**

"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 in the amount of 104.4 million euro (84.1 million at 31 December 2022) and for electricity service equalisation in the amount of 17.2 million euro (15.4 million euro at 31 December 2022). The change from the previous year is due mainly to the termination, as of the second half of 2023, of the effects of the regulatory provisions that, to address high utility bills, had introduced beginning in October 2021 the cancellation of electricity sector system charges related to specific utilities.

"VAT, excise and additional taxes" include payables for VAT in the amount of 0.2 million euro (0.9 million euro at 31 December 2022), and excise and additional taxes in the amount of 96.6 million euro (82.1 million euro at 31 December 2022). As outlined in note 33, "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 excise and additional taxes, payment on account during the first half of financial year 2023 was made, as required by current regulations, based on the volumes invoiced in the previous year. The accrued liability was instead generated based on the volumes billed in the first half of 2023.

"Personnel and employee withholdings" include for the most part the vacation time accrued and not used, as well as the productivity bonuses and additional monthly payments accounted for in the period, plus withholding taxes to be paid to the Inland Revenue Office as tax substitute for employees.

"Payables to social security institutions" relate to contributions owed to these institutions for the june salaries, performance bonuses and additional monthly payments under national collective agreements.

"Energy efficiency bonds and emissions trading" includes the following:

	30-Jun-23	31-Dec-22	Change
White certificates	21.2	17.9	3.3
Guarantee of origin certificates	18.5	11.2	7.3
Grey certificates	10.2	22.5	(12.3)
Total	**49.9**	**51.6**	**(1.7)**

White certificates include the valuation of exposure with respect to obligations to return energy efficiency certificates not yet in the portfolio to the relevant authorities. The change from 31 December 2022 is mainly due to the higher number of certificates yet to be cancelled in reference to the years for which the Group has not yet fully met its assigned accrual obligation.
Guarantee of Origin (GO) certificates relate to obligations to certify electricity produced from renewable energy sources in relation to sales made to customers with that type of supply. The increase in liability is a result of the increase in reference prices during the first half of 2023.
Gray certificates reflect the valuation of both the redelivery obligation of certificates calculated according to current regulations in the amount of 7.9 million euro (10.7 million euro at 31 December 2022) and

forward contracts for the purchase and sale of greenhouse gas emission allowances in the amount of 2.3 million euro (11.8 million at 31 December 2022). The decrease from the previous year, against a backdrop of rising benchmark market prices, is mainly due to lower volumes of forward contracts and the lower redelivery obligation of the six-month period 2023, compared with the fulfilment of the previous year's obligation.

"Anticipated revenues and other expenses" represent portions of revenues that have already been invoiced but are accrued in subsequent years. The decrease from the previous year is mainly attributable to the completion of energy efficiency works in the first half of 2023 that were still in progress as of 31 December 2022, amounting to 8.9 million euro.

"Receivables from electricity and gas sector companies" included as of 31 December 2022 the accounts payable recorded by the Group's distribution companies towards third-party sales companies. These debt positions were completely reabsorbed during the first half of 2023 due to the seasonality of the businesses and the reduction in the concessions introduced by the government in previous years to address "high utility bills" (e.g. the cancellation of electricity sector system charges for certain types of utilities).

The item "other payables" mainly comprises the following:

- dividend payables of 25.5 million euro (1.7 million euro at 31 December 2022) not yet paid at 30 June 2023 to shareholders of the Parent Company in the amount of 2 million euro and to minority shareholders in the amount of 23.5 million euro;
- electricity, gas and other sector arrears fees in the amount of 22.8 million euro (9.5 million euro at 31 December 2022). They mainly represent amounts, charged to end users, to be retroceded as compensation to previous suppliers who, prior to transitioning to the Hera Group, were in arrears on the last three monthly payments. This compensation is applied only to certain specific categories of utilities identified by ARERA Resolution No. 593/2017/R and its subsequent amendments and additions. The substantial change from the previous year is impacted in particular by higher energy commodity prices in the 2022 financial year, as the timing of CMOR billing involves a time lag of between 6 and 12 months from the termination date of supply contracts;
- payments on account and specific tariff subsidies payable to customers amounting to 10.1 million euro (11.5 million euro at 31 December 2022) mainly referring to waste disposal and treatment service in the amount of 5.7 million euro and water cycle service in the amount of 2.6 million euro;
- insurance deductibles of 9.7 million euro (9.8 million euro at 31 December 2022). These represent amounts that the Group must reimburse directly to injured third parties or insurance companies.

35 Cash flows from operating activities

Changes in net working capital

The following is a breakdown of information on changes in net working capital during the first six months of 2023, differentiating between cash flows and non-cash flows.

Type	30-Jun-23	31-Dec-22	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	1,107.9	995.1	112.8	33.6	(47.5)			(126.7)
Trade receivables	2,345.9	3,875.0	(1,529.1)	31.6	(69.3)	(14.2)	(167.5)	1,309.7
Trade payables	(1,795.5)	(3,093.1)	1,297.6	(36.1)			(0.1)	(1,333.8)
Other current assets/liabilities	(1,142.6)	(1,077.5)	(65.1)	(0.8)	6.4	11.1	126.2	208.0
Changes in working capital	**515.7**	**699.5**	**(183.8)**	**28.3**	**(110.4)**	**(3.1)**	**(41.4)**	**57.2**

"Acquisitions and divestitures" include the effects arising from the control acquisition transaction carried out during the first half of 2023, as explained in the "Business combinations (additional information)" section of Section 2.02.10 "Other information".

"Economic valuation components" include:

- the provision for inventory write-down in the amount of 47.5 million euro, as reported in Note 30 "Inventories";
- the provision for bad debts in the amount of 69.3 million euro, as reported in Note 31 "Trade receivables";
- the portions of plant grants for the period, the total amount of which was collected in previous years, amounting to 6.4 million euro, as reported in Note 2 "Other operating revenues".

The item "Changes in fair value" mainly includes:

- the valuation at current market value of receivables related to the application of upfront discounts in connection with energy efficiency measures, amounting to 14.2 million euro. For more details on the accounting policy adopted by the Group, please refer to 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 emission allowances, totalling a positive amount of 10.4 million euro, as reported in Notes 33 "Other current assets" and 34 "Other current liabilities".

"Other changes" mainly comprise offsets within net working capital of transactions involving the gross recognition of assets and liabilities. It should be noted, as reported in Note 26 "Cash flows from investing activities," that the value of tax credits arising from the application of the upfront discount for energy efficiency measures, in the amount of 21.7 million euro already formally transferred, for which collection is pending, has been reclassified outside of net working capital.

Dividends collected

In the first half of 2023, dividends were received from companies consolidated under the equity method in the amount of 4.8 million euro and from investments held in other companies in the amount of 1.8 million euro. For more details, see notes 10 "Financial income" and 25 "Equity investments".

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 six-month period.

Type	30-Jun-2023 (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	68.9	2.1	17.4	18.2	31.2
Financial expenses	(165.3)	(31.7)	(31.1)	21.9	(124.4)
Total	**(96.4)**	**(29.6)**	**(13.7)**	**40.1**	**(93.2)**

""Economic valuation components" include charges and income arising from both the measurement at amortised cost and the discounting process of assets and liabilities characterised by monetary flows that will be realised in the medium to long term, as reported in Notes 10 "Financial income" and 11 "Financial expenses".

"Changes in fair value" represent current market value valuations of financial assets and liabilities, mainly referable to:

- an adjustment made to the carrying value of a foreign currency bond due to the fair value hedge relationship, which resulted in the recognition of income in the amount of 16.3 million euro;
- hedging derivatives on the aforementioned bond issue that resulted in the recognition of valuation charges of 16.3 million euro during the period;
- receivables related to the application of the upfront discount in connection with eligible energy efficiency upgrading work carried out on behalf of end customers in the amount of negative 13.5 million euro. For more details on the accounting policy adopted by the Group, please refer to Note 11 "Financial expenses".

"Other changes" mainly include:

- the adjustment of interest income and expense recorded on an accrual basis to show the actual cash flows realised in the first half of 2023, totalling 32.8 million euro;
- dividends paid from other minor investments, the cash flow of which for the period is shown in a specific line item in the cash flow statement.

Taxes paid

The breakdown of flows by tax type is as follows:

	30-Jun-23	30-Jun-22
Income taxes	27.9	29.7
Non-recurring subsidies	-	9.9
Substitute tax	3.8	-
Taxes paid	31.7	39.6

Income taxes include the amount paid by the Group during the first half of 2023 in relation to IRES and IRAP balances for the year 2022 and advances on direct taxes due for 2023.

The substitute tax includes the amount paid as of 30 June 2023 in connection with the redemption of the controlling interest in Con Energia Spa.

2.02.10 Other information

Business combinations (additional information)

Business combination operations were accounted for in accordance with the international accounting standard IFRS3. Specifically, the management initiated analyses of the fair value of potential assets, liabilities and contingent liabilities on the basis of information concerning existing facts and events available at the date of acquisition. The assessment is still ongoing at the date of these half-year financial statements, especially with regard to the identification and valuation of any unspecified intangible assets.

The following table shows the fair value of the assets and liabilities acquired in the business combinations carried out during the first half of the year:

	A.C.R . di Reggiani Albertino Spa	Total business combinations
Non-current assets		
Tangible assets	11.0	11.0
Intangible assets	57.2	57.2
Current assets		
Inventory and work in progress	33.6	33.6
Trade receivables	31.6	31.6
Other current assets	6.7	6.7
Cash holdings	15.4	15.4
Non-current liabilities		
Post-employment benefits	(0.3)	(0.3)
Provisions for risks and charges	(0.1)	(0.1)
Deferred tax liabilities	(16.0)	(16.0)
Current liabilities		
Financial liabilities	(11.8)	(11.8)
Trade payables	(36.1)	(36.1)
Current tax liabilities	(1.9)	(1.9)
Other current liabilities	(7.5)	(7.5)
Total net assets acquired	**81.8**	**81.8**
Equivalent fair value	71.5	71.5
Non-controlling interests acquired	32.7	32.7
Total value of business combinations	**104.2**	**104.2**
(Goodwill) / Profit	**(22.4)**	**(22.4)**

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:

	A.C.R. di Reggiani Albertino Spa	Total business combinations
Book value of net assets acquired	**40.5**	**40.5**
Adjustments for fair value evaluation		
Intangible assets	57.1	57.1
Deferred tax assets (liabilities)	(15.8)	(15.8)
Fair value of net assets acquired	**81.8**	**81.8**
Cash outlay	71.5	71.5
Equivalent fair value	**71.5**	**71.5**

The valuations made in relation to the fair value of the identifiable assets acquired and liabilities assumed, which also took into account the recoverable value of the assets, led to identifying a customer list worth 57.1 million euro, calculated on the basis of the characteristics of the context of reference, using the incremental cash flow method (Multi Period Excess Earnings Method, MEEM). The amortisation period of 23 years was determined based on the churn rate defined by analysing the historical trends of customer billing.

The above-noted effect resulted in recording deferred tax liabilities determined on the basis of the applicable nominal tax rate.

Please see note 26 “Cash flows from investment activities” for an analysis of the cash flows associated with the combination operations outlined here.

Finally, it should be noted that the evaluation process for the acquisition of the company F.lli Franchini Srl, which was carried out at the end of the first half of 2023, is still ongoing.

Changes to the accounting standards

Accounting standards, amendments and interpretations applicable from 1 January 2023

With reference to the areas that are significant for the Group, beginning 1 January 2023, the following accounting standards and associated amendments as issued by the IASB and endorsed by the European Union apply:

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 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 or contradictory statements or formulations in the text of the relevant standards.

With reference to the application of these amendments and new interpretations, there were no observable effects on the Group’s financial statements.

Accounting standards, amendments and interpretations that have not yet been endorsed by the European Union

The following standards, updates and amendments to IFRS standards (already approved by the IASB) relevant to the Group are in the process of being adopted by the relevant European Union bodies:

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 – Liabilities for leases 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 require that, when valuing lease liabilities in a sale and leaseback transaction, the seller-lessee shall determine lease payments in a manner that does not record any amount of gain or loss related to the right of use retained by the same.

Amendments to IAS 1 – Presentation of financial statements: non-current liabilities subject to covenants. Document issued by IASB on 31 October 2022, applicable from 1 January 2024 with early application allowed. The amendments are intended to improve the information provided by an entity when the right to defer settlement of a liability is contingent on covenant compliance within 12 months of the reporting period.

Amendments to IAS 7 – Statement of Cash Flows and IFRS 7 - Financial Instruments: financing arrangements with suppliers and disclosures in explanatory notes. Document issued by IASB on 25 May 2023, applicable from 1 January 2024 with early application allowed. The amendments require an entity to provide additional information on reverse factoring arrangements that will enable financial statement users to assess how financial arrangements with suppliers may affect the entity’s liabilities and cash flows and to understand the effect of such arrangements on the entity’s exposure to liquidity risk.

Amendments to IAS 12 – Income Taxes: international taxation reform - rules related to the Pillar Two model. Document issued by IASB on 23 May 2023, immediate application of temporary exception and application of disclosure requirements from 1 January 2023, with exemption for interim financial statements for the 2023 calendar year. The document introduces a temporary exception to reporting and disclosure requirements for deferred tax assets and liabilities related to the Pillar Two model and provides specific disclosure requirements for entities affected by the related reform.

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.

Reporting by operational sector

Reporting by operational sector is based on the approach management uses to monitor the performance of the Group in terms of its homogeneous business areas. In keeping with the internal control model, the net costs and assets for the business support functions are associated entirely with operational businesses.

As of 30 June 2023, the Hera Group was organised in 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.

Assets and liabilities by business line at 20 June 2023 and for the comparison period are outlined below:

30-Jun-23	Gas	Electricity	Water cycle	Waste management	Other services	Total
Current year						
Assets (tangible and intangible)	2,043.4	699.3	2,364.1	1,405.2	117.3	6,629.3
Goodwill	493.5	73.5	42.7	255.9	4.9	870.5
Shareholdings	99.0	39.3	19.1	40.3	14.9	212.6
Not attributed fixed assets						78.8
Net fixed assets	**2,635.9**	**812.1**	**2,425.9**	**1,701.4**	**137.1**	**7,791.2**
Attributed net working capital	712.7	(201.8)	(101.9)	82.3	24.5	515.8
Non attributed net working capital						96.4
Net working capital	**712.7**	**(201.8)**	**(101.9)**	**82.3**	**24.5**	**612.2**
Other provisions	(197.5)	(35.6)	(153.5)	(277.7)	(3.8)	(668.1)
Net invested capital	**3,151.1**	**574.7**	**2,170.5**	**1,506.0**	**157.8**	**7,735.3**

31-Dec-22	Gas	Electricity	Water cycle	Waste management	Other services	Total
Comparison period						
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**

The most significant results by business line for the first half of 2023 and the same period of the previous year are outlined as follows:

first six months of 2023	Gas	Electricity	Water cycle	Waste management	Other services	Structure	Total
Current year							
Direct revenues	5,165.2	2,093.0	462.3	788.0	63.8	24.6	8,596.9
Infra-cycle revenues	71.4	130.2	2.5	47.8	24.2	30.0	306.1
Total direct revenues	**5,236.6**	**2,223.2**	**464.8**	**835.8**	**88.0**	**54.6**	**8,903.0**
Indirect revenues	9.2	2.6	28.5	14.0	0.2	(54.6)	-
Total revenues	**5,245.8**	**2,225.8**	**493.3**	**849.9**	**88.1**	**-**	**8,903.0**
EBITDA	**386.1**	**114.4**	**128.6**	**162.9**	**19.4**	**-**	**811.2**
Direct amortisations and provisions	100.7	51.9	58.1	82.6	10.4	39.8	343.6
Indirect amortisations and provisions	5.5	2.3	16.7	15.2	0.2	(39.8)	-
Total amortisations and provisions	**106.2**	**54.2**	**74.7**	**97.8**	**10.6**	**-**	**343.6**
Operating revenues	**279.9**	**60.2**	**53.8**	**65.0**	**8.7**	**-**	**467.7**

first six months of 2022	Gas	Electricity	Water cycle	Waste management	Other services	Structure	Total
Comparison period							
Direct revenues	6,040.7	1,837.2	466.7	693.4	59.3	18.2	9,115.5
Infra-cycle revenues	90.8	145.7	2.7	55.8	22.8	21.0	338.8
Total direct revenues	**6,131.5**	**1,982.9**	**469.4**	**749.2**	**82.1**	**39.3**	**9,454.3**
Indirect revenues	7.6	1.8	20.7	9.1	0.1	(39.3)	-
Total revenues	**6,139.0**	**1,984.6**	**490.1**	**758.4**	**82.2**	**-**	**9,454.3**
EBITDA	**211.0**	**40.1**	**125.3**	**150.7**	**15.8**	**-**	**542.9**
Direct amortisations and provisions	87.3	32.6	56.9	72.6	11.1	35.9	296.4
Indirect amortisations and provisions	4.6	1.3	15.2	14.5	0.2	(35.9)	-
Total amortisations and provisions	**91.9**	**33.9**	**72.1**	**87.1**	**11.3**	**-**	**296.3**
Operating revenues	**119.2**	**6.2**	**53.2**	**63.6**	**4.5**	**-**	**246.6**

As extensively described in the Directors' Report, the gas operating segment EBITDA was adjusted for management purposes in order to comment on its performance for the period. Chapter 1.05, "Analysis by Strategic Business Area," which can be referenced for an understanding of business dynamics, shows the value containing the adjustment made to the valuation of gas stocks.

2.03 FINANCIAL STATEMENT FORMATS AS PER CONSOB RESOLUTION 15519/2006

Consistent with the relative Group policies, the income statement, balance sheet, and financial transactions with related parties outstanding as of 30 June 2023 and the relative period of comparison are shown below.

The Procedure for Related Party Transactions can be found on the Hera Group website, at the link:

web

https://www.gruppohera.it/gruppo/governance/sistema-di-governance/politiche-e-procedure

It should be noted that no related party transactions were carried out during the first half of 2023 for which it was necessary to make the disclosures required by the regulations for this area as outlined in Consob resolution no. 17221 of 12 March 2010 and subsequent amendments and additions.

2.03.01 Income statement as per Consob resolution 15519/ 2006

	notes	first six months of 2023	of which related parties							of which related parties					
			A	B	C	D	Total	%		A	B	C	D	Total	%
Revenues	1	8,297.5	-	51.2	149.9	6.8	207.9	2.5%	8,896.0	-	62.3	136.3	8.6	207.2	2.3%
Other operating revenues	2	299.3	-	0.2	0.1	-	0.3	0.1%	219.4	-	0.3	0.3	-	0.6	0.3%
Raw and other materials	3	(5,868.0)	-	(32.5)	-	(21.1)	(53.6)	0.9%	(7,150.5)	-	(64.8)	-	(21.5)	(86.3)	1.2%
Service costs	4	(1,576.2)	-	(7.7)	(9.2)	(12.0)	(28.9)	1.8%	(1,105.2)	-	(4.4)	(5.5)	(11.1)	(21.0)	1.9%
Personnel costs	5	(330.4)	-	-	-	-	-		(308.7)	-	-	-	-	-	
Other operating costs	6	(41.5)	-	-	(0.6)	(0.4)	(1.0)	2.4%	(39.3)	-	-	(1.5)	(0.4)	(1.9)	4.8%
Capitalised costs	7	30.6	-	-	-	-	-		31.2	-	-	-	-	-	
Amortisation, provisions and depreciation	8	(343.6)	-	-	-	-	-		(296.3)	-	-	-	-	-	
Operating revenues		**467.7**	**-**	**11.2**	**140.2**	**(26.7)**	**124.7**		**246.6**	**-**	**(6.6)**	**129.6**	**(24.4)**	**98.6**	
Share of profits (losses) pertaining to joint ventures and associated companies	9	5.9	-	5.9	-	-	5.9	100.0%	6.1	-	6.1	-	-	6.1	100.0%
Financial income	10	68.9	-	2.1	0.3	0.2	2.6	3.8%	41.1	-	0.8	0.3	0.2	1.3	3.2%
Financial expenses	11	(165.3)	-	-	(0.1)	-	(0.1)	0.1%	(98.1)	-	-	(0.1)	-	(0.1)	0.1%
Financial management		**(90.5)**	**-**	**8.0**	**0.2**	**0.2**	**8.4**		**(50.9)**	**-**	**6.9**	**0.2**	**0.2**	**7.3**	
Earnings before taxes		**377.2**	**-**	**19.2**	**140.4**	**(26.5)**	**133.1**		**195.7**	**-**	**0.3**	**129.8**	**(24.2)**	**105.9**	
Taxes	12	(103.0)	-	-	-	-	-		(56.7)	-	-	-	-	-	
Net revenues for the period		**274.2**	**-**	**19.2**	**140.4**	**(26.5)**	**133.1**		**139.0**	**-**	**0.3**	**129.8**	**(24.2)**	**105.9**	
Attributable to:															
Parent company shareholders		253.9							120.6						
Minority shareholders		20.3							18.4						
Earnings per share															
basic	17	0.175							0.083						
diluted	17	0.175							0.083						

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	30-Jun-23	of which related parties						31-Dec-22	of which related parties					
			A	B	C	D	Total	%		A	B	C	D	Total	%
ASSETS															
Non-current assets															
Tangible assets	21	1,989.8	-	-	-	-	-		1,984.4	-	-	-	-	-	
Rights of use	22	78.6	-	-	-	-	-		84.2	-	-	-	-	-	
Intangible assets	23	4,560.9	-	-	-	-	-		4,417.4	-	-	-	-	-	
Goodwill	24	870.5	-	-	-	-	-		848.1	-	-	-	-	-	
Shareholdings	25	212.6	9.0	170.2	-	2.0	181.2	85.2%	190.3	-	156.3	-	2.0	158.3	83.2%
Non-current financial assets	18	146.6	-	12.7	12.1	23.1	47.9	32.7%	151.8	-	14.3	12.1	25.3	51.7	34.1%
Deferred tax assets	14	274.8	-	-	-	-	-		240.4	-	-	-	-	-	
Derivative financial instruments	27	2.0	-	-	-	-	-		1.0	-	-	-	-	-	
Total non-current assets		**8,135.8**	**9.0**	**183.8**	**12.1**	**25.1**	**230.0**		**7,917.6**	**-**	**170.6**	**12.1**	**27.3**	**210.0**	
Current assets															
Inventories	30	1,107.9	-	-	-	-	-		995.1	-	-	-	-	-	
Trade receivables	31	2,345.9	-	8.9	77.9	17.4	104.2	4.4%	3,875.0	-	24.9	85.3	24.8	135.0	3.5%
Current financial assets	18	65.8	-	10.6	4.0	1.4	16.0	24.3%	77.7	-	9.2	3.7	1.4	14.3	18.4%
Current tax assets	13	45.6	-	-	-	-	-		46.0	-	-	-	-	-	
Other current assets	33	645.3	-	4.5	(1.9)	4.4	7.0	1.1%	642.5	-	2.9	(2.3)	3.9	4.5	0.7%
Derivative financial instruments	27	664.6	-	-	-	-	-		1,622.2	-	-	-	-	-	
Cash and cash equivalents	18	1,254.8	-	-	-	-	-		1,942.4	-	-	-	-	-	
Total current assets		**6,129.9**	**-**	**24.0**	**80.0**	**23.2**	**127.2**		**9,200.9**	**-**	**37.0**	**86.7**	**30.1**	**153.8**	
TOTAL ASSETS		**14,265.7**	**9.0**	**207.8**	**92.1**	**48.3**	**357.2**		**17,118.5**	**-**	**207.6**	**98.8**	**57.4**	**363.8**	

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	30-Jun-23	of which related parties						31-Dec-22	of which related parties					
			A	B	C	D	Total	%		A	B	C	D	Total	%
NET EQUITY AND LIABILITIES															
Share capital and reserves															
Share capital	15	1,446.6	-	-	-	-	-		1,450.3	-	-	-	-	-	
Reserves	15	1,622.3	-	-	-	-	-		1,692.9	-	-	-	-	-	
Profit (loss) for the period	15	253.9	-	-	-	-	-		255.2	-	-	-	-	-	
Group net equity		**3,322.8**	**-**	**-**	**-**	**-**	**-**		**3,398.4**	**-**	**-**	**-**	**-**	**-**	
Non-controlling interests	16	266.8	-	-	-	-	-		246.3	-	-	-	-	-	
Total net equity		**3,589.6**	**-**	**-**	**-**	**-**	**-**		**3,644.7**	**-**	**-**	**-**	**-**	**-**	
Non-current liabilities															
Non-current financial liabilities	19	5,142.3	-	-	1.3	-	1.3	0.0%	5,689.9	-	-	1.5	-	1.5	0.0%
Non-current lease liabilities	22	50.0	-	-	3.3	0.3	3.6	7.2%	55.1	-	-	3.7	0.3	4.0	7.3%
Post-employment and other benefits	28	85.7	-	-	-	-	-		92.0	-	-	-	-	-	
Provisions for risks and charges	29	582.4	-	4.9	-	-	4.9	0.8%	565.6	-	3.8	-	-	3.8	0.7%
Deferred tax liabilities	14	196.1	-	-	-	-	-		215.7	-	-	-	-	-	
Derivative financial instruments	27	23.9	-	-	-	-	-		6.3	-	-	-	-	-	
Total non-current liabilities		**6,080.4**	**-**	**4.9**	**4.6**	**0.3**	**9.8**		**6,624.6**	**-**	**3.8**	**5.2**	**0.3**	**9.3**	
Current liabilities															
Current financial liabilities	19	378.6	-	6.0	0.7	-	6.7	1.8%	650.1	-	5.2	0.5	-	5.7	0.9%
Current lease liabilities	22	20.1	-	-	1.3	0.1	1.4	7.0%	21.3	-	0.0	1.4	0.1	1.5	7.2%
Trade payables	32	1,795.5	-	25.3	15.0	27.3	67.6	3.8%	3,093.1	-	33.8	22.8	33.3	89.9	2.9%
Current tax liabilities	13	104.5	-	-	-	-	-		17.1	-	-	-	-	-	
Other current liabilities	34	1,787.9	-	0.3	3.4	0.4	4.1	0.2%	1,720.0	-	1.5	6.5	0.1	8.1	0.5%
Derivative financial instruments	27	509.1	-	-	-	-	-		1,347.6	-	-	-	-	-	
Total current liabilities		**4,595.7**	**-**	**31.6**	**20.4**	**27.8**	**79.8**		**6,849.2**	**-**	**40.5**	**31.2**	**33.5**	**105.2**	
TOTAL LIABILITIES		**10,676.1**	**-**	**36.5**	**25.0**	**28.1**	**89.6**		**13,473.8**	**-**	**44.3**	**36.4**	**33.8**	**114.5**	
Liabilities associated with assets held for sale		**-**	**-**	**-**	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	
TOTAL NET EQUITY AND LIABILITIES		**14,265.7**	**-**	**36.5**	**25.0**	**28.1**	**89.6**		**17,118.5**	**-**	**44.3**	**36.4**	**33.8**	**114.5**	

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 Financial statement as per Consob resolution 15519/2006

	30-Jun-23	of which related parties
Earnings before taxes	**377.2**	
Adjustments to reconcile net profit to the cashflow from operating activities		
Amortisation and impairment of assets	246.2	
Allocation to provisions	97.4	
Effects from valuation using the net equity method	(5.9)	
Financial (income) expenses	96.4	
(Capital gains) losses and other non-monetary elements	(49.4)	
Change in provisions for risks and charges	(17.6)	
Change in provision for employee benefits	(5.4)	
Total cash flow before changes in net working capital	**738.9**	
(Increase) decrease in inventories	(126.7)	
(Increase) decrease in trade receivables	1,309.7	30.8
Increase (decrease) in trade payables	(1,333.8)	(22.3)
Increase/decrease in other current assets/liabilities	208.0	(4.1)
Changes in working capital	**57.2**	
Dividends collected	6.6	5.2
Interest income and other financial income collected	31.2	1.5
Interest expenses, net charges on derivatives and other paid financial charges	(124.4)	(0.1)
Taxes paid	(31.7)	
Cash flow from operating activities (a)	**677.8**	
Investments in tangible assets	(79.0)	
Investments in intangible assets	(239.4)	
Investments in subsidiary companies and business units net of cash holdings	(56.1)	
Investments in other shareholdings	(24.0)	(24.0)
Sale price of tangible and intangible assets	1.5	
(Increase) decrease in other investment activities	54.2	3.8
Cash flow from (for) investing activities (b)	**(342.8)**	
New issues of long-term bonds	614.9	
Repayments of non-current financial liabilities	(600.0)	
Repayments and other net changes in financial liabilities	(804.0)	0.8
Repayments of lease liabilities	(10.5)	(0.7)
Dividends paid out to Hera shareholders and non-controlling interests	(213.2)	(71.0)
Change in treasury shares	(9.8)	
Cash flow from (for) financing activities (c)	**(1,022.6)**	
Increase (decrease) in cash holdings (a+b+c)	**(687.6)**	
Cash and cash equivalents at the beginning of the period	1,942.4	
Cash and cash equivalents at the end of the period	1,254.8	

2.03.04 Net financial debt according to the Consob notice DEM/6064293 of 2006

		30-Jun-23					31-Dec-22				
			A	B	C	D		A	B	C	D
A	Cash holdings	1,254.8	-	-	-	-	1,942.4	-	-	-	-
B	Cash equivalents	-	-	-	-	-	-	-	-	-	-
C	Other current financial assets	65.8	-	10.6	4.0	1.4	77.7	-	9.2	3.7	1.4
D	**Liquidity (A+B+C)**	**1,320.6**					**2,020.1**				
	of which related parties		**-**	**10.6**	**4.0**	**1.4**		**-**	**9.2**	**3.7**	**1.4**
E	Current financial debt	(315.7)	-	(6.0)	(0.7)	-	(563.0)	-	-	(0.5)	-
F	Current part of non-current financial debt	(83.0)	-	-	(1.3)	(0.1)	(108.4)	-	(5.2)	(1.4)	(0.1)
G	**Current financial debt (E+F)**	**(398.7)**					**(671.4)**				
	of which related parties		**-**	**(6.0)**	**(2.0)**	**(0.1)**		**-**	**(5.2)**	**(1.9)**	**(0.1)**
H	**Net current financial debt (G+D)**	**921.9**					**1,348.7**				
	of which related parties		**-**	**4.6**	**2.0**	**1.3**		**-**	**4.0**	**1.8**	**1.3**
I	Non-current financial debt	(1,426.0)	-	-	(4.6)	(0.3)	(2,553.0)	-	-	(5.2)	(0.3)
J	Debt instruments	(3,788.2)	-	-	-	-	(3,197.3)	-	-	-	-
K	Commercial and other non-current payables	-	-	-	-	-	-	-	-	-	-
L	**Non-current financial debt (I+J+K)**	**(5,214.2)**					**(5,750.3)**				
	of which related parties		**-**	**-**	**(4.6)**	**(0.3)**		**-**	**-**	**(5.2)**	**(0.3)**
M	**Total financial debt (h+l) EMA orientations 32 - 382 -1138**	**(4,292.3)**					**(4,401.6)**				
	of which related parties		**-**	**4.6**	**(2.6)**	**1.0**		**-**	**4.0**	**(3.4)**	**1.0**
	Non-current financial receivables	**146.6**					**151.8**				
	of which related parties		**-**	**12.7**	**12.1**	**23.1**		**-**	**14.3**	**12.1**	**25.3**
	Net Debt	**(4,145.7)**					**(4,249.8)**				
	of which related parties		**-**	**17.3**	**9.5**	**24.1**		**-**	**18.3**	**8.7**	**26.3**

2.03.05 List of related parties

The figures in the table at 30 June 2023 refer to the related parties listed below:

Group A - Non-consolidated subsidiaries

F.lli Franchini Srl
Horowatt Srl

Group B- Affiliated and jointly controlled companies:

Adria Link Srl
Aimag Spa
ASM SET Srl
Asco tlc Spa
Aurora Srl
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
Ferrara Tua Spa
Ravenna Holding Spa
Rimini Holding Spa

Group D - Other related parties

Acosea Impianti Srl
Acquedotto del Dragone Impianti Spa
Aloe Spa
Amir Spa - Asset
Apa2 consulting Sas
Aspes Spa
BPI Learning Consulting Spain SL
Calenia Energia Spa
CIR Spa
Co.ra.b. Srl

Cora costr. Resid. Artig. Srl
Dental invest Srl
Deutsche Bank S.p.A.
Edenred SA
Executive Advocacy Srl
Fiorano Gestioni Patrimoniali Srl
Fonderia cab Srl
Fonderia fomar ghisa Srl
Formigine Patrimonio Srl
Ire immobiliare riqualificazione ed
Kos spa
Maranello Patrimonio Srl
Medeopart 2 Srl
Medeopart 3 Srl
Medeopart 4 Srl
Medeopart 5 Srl
Medeopart 6 Srl
Medeopart associates Srl
Medeor Capital Srl
Rabofin Srl
Romagna Acque Spa
Sassuolo Gestioni Patrimoniali Srl
Se.r.a. Srl servizio ristorazione
Serramazzoni Patrimonio Srl
Società Italiana Servizi Spa - Sis Spa asset
SOGEFI Spa
SPS Srl
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 and 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 already included in urban sanitation 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 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.

Responsibility for setting tariffs is entrusted to the national authority ARERA; the current 2020-2023 regulatory regime is the third tariff period, after an initial transitional two-year period of 2012-2013.

The adjustment for 2020-2023 is in continuity with the previous 2016-2019 period, with the introduction of several new elements related to incentivising energy and environmental sustainability as well as standard levels of contractual and technical quality. Each operator is granted a revenue (VRG) which is independent of the dynamics of volumes distributed and determined on the basis of operating costs (endogenous and exogenous) and capital costs based on the investments made as well as, for the Rimini area, the result of the tender procedure concluded with a new concession contract signed for the 2022 - 2039 period.

For the purpose of carrying out the service, the operator uses networks, facilities and other equipment owned by the company itself or by the municipalities or 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 so as 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 local area authorities regulate the economic aspects of the contractual relationship, but also determine how the service is organised and managed and set quantitative and qualitative standards for the services provided. Beginning in 2020, the compensation due to the provider for services rendered, including municipal waste disposal/treatment/recovery activities, has been defined annually on the basis of ARERA's new national rate regulation (Authority resolution 2019/433 and subsequent amendments and additions), as well as on the basis of the results of the tender processes that had already been concluded for the areas in which new contracts were to be awarded (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 cases where the punctual correspondent tariff is applied.

In operating municipal waste treatment plants, the Hera Group is required to obtain provincial authorizations; in addition, as of 2022, the subsidiary Herambiente Spa is also subject to the new national regulation concerning unsorted waste disposal plants and composting and digester plants, as these facilities are classified by the Regions as minimum plant, indispensable for the closure of the municipal waste management cycle, regardless of the outcome of pending administrative litigation proceedings. Specifically, these judgments concern, through two different appeals, the qualification of so-called minimum plants carried out by the applicable regions with regard to organic waste treatment plants and disposal plants.
In compliance with the principle of public service continuity, in accordance with the agreements in force, the provider is obliged to continue providing the service even in the areas where the date of expiration of the concession has already passed and until the new concessions enter into force.

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 the longer residual terms established for operators that have pursued 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 rate regulations in force at the time of the approval of these half-yearly financial statements are mainly represented by ARERA Resolution 736/2022/R/gas of 29 December 2022 (Update of rates for gas distribution and metering services, for the year 2023), which replaced the previous Resolution 620/2021/R/gas of 28 December 2021 and through which the mandatory rates for natural gas distribution, metering and marketing services were approved for the year 2022.

The rates in effect beginning 1 January 2023 are shown in Table 1 attached to the above resolution. The rates for the 2023 financial year fall within the so-called 2020-2025 rate period. Effective 1 January 2020, in fact, the Gas Distribution and Metering Services Tariff Regulation for the Regulatory Period 2020-2025 (Rtdg 2020-2025), approved by Resolution 570/2019/R/gas and updated by Resolution 737/2022/R/gas, came into force.

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: 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-southeastern 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.

For the first half of the year, from 1 January 2023, the values already valid in Q4 2021 - Resolution 735/2022/R/com and Table 8 annexed and Table 7 annexed to Resolution 396/2021/R/com were confirmed; the same from 1 April 2023 - Resolution 134/2023/R/com to Table 8 annexed to Resolution 735/20222/R/com as well as Table 7 annexed to Resolution 396/2021/R/com.
In fact, as of 1 October 2021, Table 7 annexed to Resolution 396/2021/R/com is applicable.

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 half-yearly consolidated financial statement are approved refers to 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 2023, the tariff update for the provision of electricity transmission, distribution and metering services was determined by Resolution 721/2022/R/eel of 27 December 2022.

For non-household customers, the update for the year 2023 of mandatory tariffs for electricity distribution and metering services and economic conditions for providing the connection service was set by Resolution 720/2022/R/eel of 27 December 2022.

2.04 LIST OF CONSOLIDATED COMPANIES

Subsidiaries

Registered name	Registered office	Share capital (euro) (*)	Consolidated percentage		Total equity held
			direct	indirect	
Acantho Spa	Imola (BO)	23,573,079	80.64%		80.64%
AcegasApsAmga Spa	Trieste	284,677,324	100.00%		100.00%
A.C.R. di Reggiani Albertino Spa	Mirandola (Mo)	390,000		60.00%	60.00%
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 Sp.zo.o	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	Bologna	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 Spa	Udine	13,216,899		84.50%	84.50%
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%
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%
Wolmann Spa	Bologna	400,000		100.00%	100.00%

(*) unless otherwise specified

Jointly controlled companies

Registered name	Registered office	Share capital (euro)	Percentage held		Total equity held
			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 equity held
			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.

2.05 DECLARATION ON THE CONSOLIDATED FINANCIAL STATEMENT PURSUANT TO ART. 154-BIS OF LEGISLATIVE DECREE 58/98

1 - The undersigned Orazio Iacono, in his capacity as Chief Executive Officer, and Massimo Vai, in his capacity as Manager responsible for drafting Hera Spa's financial reports, hereby certify, taking into account the provisions of Article 154-bis, paragraphs 3 and 4, of Legislative Decree 58 of 24 February 1998:

- the adequacy in relation to the company's characteristics and
- the effective application

of the administrative and accounting procedures used in preparing the abbreviated half-year financial statements for the first six months of 2023.

2 - It is also certified that:

2.1 - the abbreviated half-year financial statements:

a. are prepared in accordance with the applicable international accounting standards recognised in the European Community pursuant to Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of 19 July 2002;
b. correspond to the content of the accounting books and records;
c. provide a true and correct view of the equity, results of operations and financial position of the issuer and the group of consolidated companies as a whole.

2.2 - The interim report on operations includes a reliable analysis of references to important events that occurred in the first six months of the financial year and their impact on the abbreviated half-year financial statements, together with a description of the main risks and uncertainties as regards the remaining six months of the financial year. The interim report on operations also includes a reliable analysis of the foremost transactions with related parties.

The Chief Executive Officer

Orazio Iacono

The Manager responsible for drafting the company's financial reports

Massimo Vai

Bologna, 26 July 2023

2.06 REPORT BY THE INDEPENDENT AUDITOR

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REPORT ON REVIEW OF THE HALF-YEARLY CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

To the Shareholders of
HERA S.p.A.

Introduction

We have reviewed the accompanying half-yearly condensed consolidated financial statements of Hera S.p.A. and subsidiaries (the "Hera Group"), which comprise the statement of financial position as of June 30, 2023 and the income statement, statement of comprehensive income, statement of changes in equity and cash flow statement for the six-month period then ended, and a summary of significant accounting policies and other explanatory notes. The Directors are responsible for the preparation of the half-yearly condensed consolidated financial statements in accordance with the International Accounting Standard applicable to the interim financial reporting (IAS 34) as adopted by the European Union. Our responsibility is to express a conclusion on the half-yearly condensed consolidated financial statements based on our review.

Scope of Review

We conducted our review in accordance with the criteria recommended by the Italian Regulatory Commission for Companies and the Stock Exchange ("Consob") for the review of the half-yearly interim financial statements under Resolution n° 10867 of July 31, 1997. A review of half-yearly condensed consolidated financial statements consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (ISA Italia) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the accompanying half-yearly condensed consolidated financial statements of Hera Group as of June 30, 2023 are not prepared, in all material respects, in accordance with the International Accounting Standard applicable to the interim financial reporting (IAS 34) as adopted by the European Union.

DELOITTE & TOUCHE S.p.A.

Signed by
Francesco Masetti
Partner

Bologna, Italy
August 2, 2023

This 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.

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Gruppo Iva "Gruppo Hera" P. IVA 03819031208