

1.02 RISK FACTORS: ACTORS, METHODOLOGY AND AREAS OF MANAGEMENT

1.02.01 Risk governance

The Hera Group's organizational structure is designed to uphold management effectiveness and profitability across the entire value chain while at the same time managing any risk exposure arising from its businesses.



Hera's corporate governance system enables strategies to be handled uniformly and consistently. The Risks Committee is the principal policy-making, monitoring and reporting organ for risk management strategies. Additionally, under article seven of the Self-Governance Code, the Controls and Risks Committee oversees the internal auditing system, the efficiency of corporate operations, the reliability of financial reporting and compliance with laws and regulations, as well as the protection of company assets. In order to maximise the consistency of the management strategy, these bodies meet periodically. During 2022, the Risks Committee met four times and the Controls and Risks Committee met seven times.

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

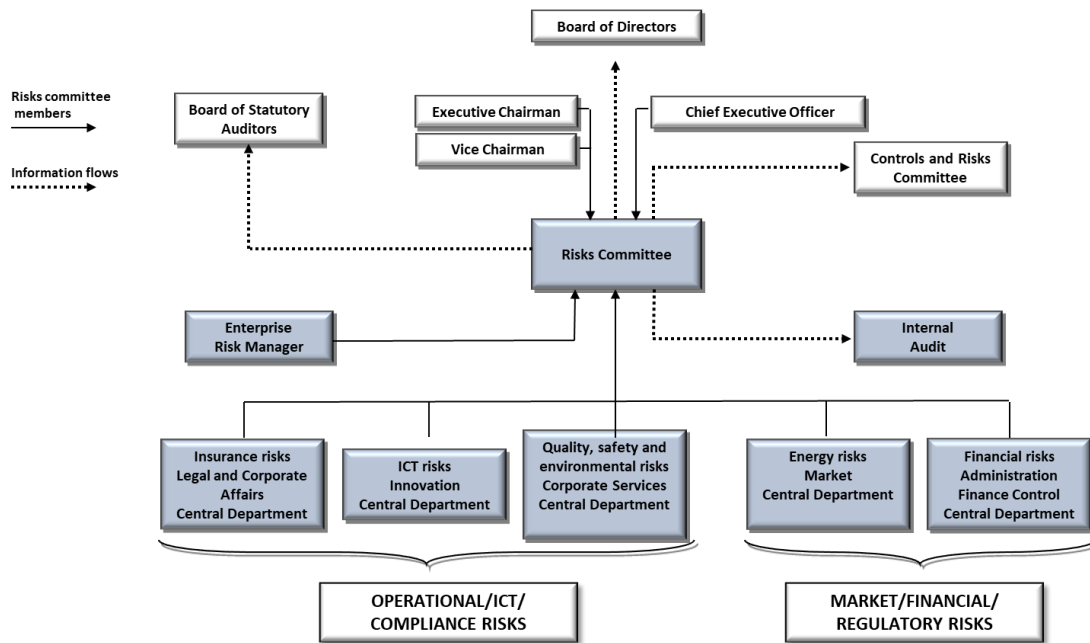
- the role of risk management, entrusted to the risk owners in charge of the various organizational sections;
- the role of risk guidance and control, entrusted to the Risks Committee, which relies on risk specialists who carry out second-level controls, i.e. who are responsible for defining, applying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

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

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

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

The risk governance structure is outlined here below:



1.02.02 Management methodology

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

The risk management framework is formulated through three key elements:

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

On 8 February 2023, the seventh Enterprise Risk Management report on the 2023-2026 Business Plan was presented to the Board of Directors.

Over the course of 2022, the ERM analysis made further methodological improvements and refinements, while at the same time not revealing any critical risks, either in terms of reputation or operating-financial impact.

The area of significant risks includes two additional ones with respect to those identified last year, concerning the possibility of a deterioration in net financial position due to the scenario of extreme commodity price volatility, or due to possible criticalities in the market for sales of receivables involved in

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

1.02.03 **Risk areas: identifying and managing risk factors**

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

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

RISK TREATMENT AND MANAGEMENT

AREA	TYPE	IDENTIFICATION
OPERATIONS AND FINANCE	DEBT MARKET	Fluctuation in interest rates, exchange rates credit spreads and liquidity crises.
	COMMODITY PRICE	Fluctuation in commodity prices.
	COUNTERPARTS	Counterparties unable to meet the obligations undertaken, both in respecting the economic conditions and in the execution of contractual provisions.
BUSINESS AND REGULATORY	COMPETITIVE AND MACROECONOMIC	<ul style="list-style-type: none"> Business activities involving increasing competition on the free market, carried out mainly in Italy, with an economic context of limited growth; Changes in energy consumption; Reduced production of volumes of waste treated at Hera's plants, affecting the achievement of pre-set targets.
	REGULATORY AND LEGISLATIVE	<ul style="list-style-type: none"> Interventions by the regulatory Authorities of the sectors in which Hera operates; Regulatory interventions with a possible impact on both network and free-market businesses and on municipal waste collection.
	STRATEGIC	<ul style="list-style-type: none"> Failure to achieve the strategic targets set in the long-term planning process; Loss of the necessary licenses, authorisations and permits for the regular performance of the company's activities.
CLIMATE AND THE ENVIRONMENT, TECHNOLOGY AND HUMAN CAPITAL	ENVIRONMENTAL-CATASTROPHIC AND CAUSED BY CLIMATE CHANGE	<ul style="list-style-type: none"> Failure to comply with environmental standards and related legal limits, with worsening of environmental conditions and exposure to possible sanctions; Climate change impacting both economically and in terms of service quality, arising from physical and transitional scenarios.
	OPERATIONAL SECURITY AND ICT	<ul style="list-style-type: none"> Negative externalities that compromise business continuity and may increase the financial requirements for the restoration of the Group's regular operations; Reduced operational security of distribution networks (fluids and electricity), reduced logical security of information, reduced security of communication networks and information systems, and reduced reliability of remote control systems.
	SAFETY AND PERSONAL DEVELOPMENT	<ul style="list-style-type: none"> Reduced occupational health and safety and limited social protection for workers; Skills mismatch; Reduced attractiveness of the workplace environment.

MANAGEMENT

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- Diversified funding source structure and balanced maturity profile;
 - Careful monitoring of the Group's financial indicators and use of derivative financial instruments.
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- Effective management of procurement and hedging activities, with strong focus on skills and a single interface for the constant monitoring of the market
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- Structured process of origination and selection of counterparties through credit checks;
 - Constant monitoring of positions towards counterparties;
 - Possible external transfer of risk through credit assignment.
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- Continuous innovation in and timely presentation of the commercial offer;
 - High degree of flexibility in the supply sources for energy commodities, alongside the timely management of hedging activities;
 - Diversified plant equipment with high-performance environmental technologies, and a strategy focused on the circular economy, specifically in the industrial waste cycle: entry in the process of recovering and recycling polymeric materials and in producing biogas.
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- Communication with national and local Authorities through an organizational structure designated for this purpose;
 - Timely alignment of commercial offers with guidelines specified by the Regulator;
 - Enhancement of technical capacity and management efficiency to meet customer expectations (in terms of service range and quality).
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- Structured approach to strategic risk analysis, aimed at evaluating the robustness of the Business Plan in handling multiple adverse risk scenarios following an enterprise-wide rationale;
 - Constant monitoring of authorization processes and the requirements for maintaining them.
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- Adequate environmental control system, both as regards the governance of environmental certification processes and related audits, and as regards the operational management of controls and assessments;
 - Reporting on company performance and engagement in the area of climate change;
 - Activating projects to promote the production and consumption of energy from renewable sources and reduce energy consumption;
 - Support for customers in reducing their own greenhouse gas emissions;
 - Incentivizing recovery strategies.
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- Centralized and constantly operating network monitoring systems, with real-time detection of potential critical factors;
 - Continuous technological assessment and improvement of the Security by Design process;
 - Governance and organisational structures intended for this purpose and training.
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- Precise identification of hazards and assessment of emerging needs;
 - Continuous and targeted initiatives to raise awareness about improving protection and prevention processes in terms of safety, and technical-regulatory training accompanied by training to develop risk perception awareness;
 - Constant monitoring and identification of evolving needs in terms of skills, and qualitative adjustment of existing skills and those to be acquired;
 - Establishment of a welfare system based on attention to people.
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Operating and financial area

Identifying commodity price risk

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

Managing commodity price risk

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

Identifying risks associated with the debt market

The operating and financial area, in addition to being characterised by fluctuating energy and commodity prices, may show different scenarios as a result of changes in interest rates, exchange rates, the credit spread and as an effect of possible liquidity crises. These fluctuations may have an impact on Group results, future growth and strategic investments (e.g. due to high refinancing costs).

The Group might not be able to meet its payment obligations due to an inability to raise new funds, or it may only be able to do so on unfavourable economic terms, due to an inability to liquidate assets on the market, or due to a changed risk perception. Among the factors determining this perceived risk, the creditworthiness assigned to Hera by rating agencies plays a key role, as it influences the possibility of accessing sources of funding and the related economic conditions. The Group's debt structure is not subject to financial covenants on debt balances, with the exception of the corporate rating limit (i.e. the assignment of a rating lower than BBB) defined on a portion of debt equal to approximately 150 million euro. On the other hand, with respect to the remaining outstanding debt, mandatory early repayment is provided for only in the event of a significant change of control over the Group, in the event that a concession is revoked (concession event), or assets are sold (sale of assets event), resulting in downgrading the Group to non-investment grade or lower, or terminating the publication of the rating.

Managing risks associated with the debt market

Hera's financial management is centralised in the Administration, Finance and Control Central Department, which aims to maintain an adequate balance between the maturities of assets and liabilities, matching investments to consistent sources of financing in terms of duration and repayment methods while taking into account the need to refinance the current debt structure. In order to meet its medium- and long-term commitments, Hera's strategy involves diversified financing sources and a balanced maturity profile, constantly monitoring rating indicators and the availability of long-term credit lines. This strategy is considered effective in minimising liquidity risk even in the event of particularly critical scenarios. Approximately 40% of the Group's financial debt is long-term (more than five years) and 59% of this is represented by bonds with repayment at maturity. See note 26 to the consolidated financial statements, "Non-current and current financial liabilities", for further details in terms of worst case scenarios.

Moreover, the Group's activities and strategies are particularly focused on ensuring that the highest rating level is maintained, as appears in its BBB+ rating with a stable outlook, confirmed by S&P, and the Baa2 rating confirmed by Moody's, even with a worsened outlook, from stable to negative, due to the worsening of the outlook of the sovereign rating).

Sensitivity analysis

Financial risk control and management processes are based on a careful monitoring of the Group's financial indicators, as well as a permanent presence on the benchmark markets, to minimise the impact of interest rate and spread volatility so as to ensure efficient debt servicing. The Group also uses derivative financial instruments to reduce its exposure to interest and exchange rate fluctuations. At 31 December 2022, the Group's exposure to the risk of interest rate fluctuations was 22%, while the

remaining 78% of debt is at a fixed rate. A 1% increase in the benchmark interest rate with respect to the business plan scenario, based on the assumption of a coupon rate shift and an unchanged debt structure, would increase financial expenses by an average of approximately ten million euro per year.

Identifying risks from counterparties

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

Managing risks from counterparties

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

In 2022, the 24-month unpaid ratio of the Group's main sales companies amounted to 0.71%.

Regulatory and business area

Identifying competition and economic risks

Within the final reference market, which is mainly limited to Italy, the economic and geopolitical context, the rising volatility in the prices of energy and other raw materials, as well as the difficulties connected to global logistics chains, all contribute to putting pressure on sales margins which, added to the increased competition on the free market, may impact the Group's profitability. The increased difficulty in forecasting volumes to cover the needs of the sales portfolio, continuously changing, may furthermore require Hera to purchase or sell additional energy on potentially unfavourable terms.

A potential reduction in waste production, deriving not only from the economic context and European and national regulatory frameworks and from new trends in customer behaviour, together with the unavailability of treatment and recovery infrastructures, may have a negative impact on the Group's ability to pursue its objectives. The risks of the waste management business related to the management of its set of plants are concentrated in the Herambiente Spa.

Managing competition and economic risks

The Group has maintained elevated flexibility in energy commodity procurement sources while at the same time developing hedging activities to minimize exposure to operating risks from electricity generation, thus ensuring ongoing alignment with the market and maximising natural hedging.

In waste management and treatment activities, the Group's diversified plant equipment features technologies that are cutting-edge and high-performance in terms of environmental impact, which to date have enabled the Group to achieve its strategic objectives. The implementation of a circularity strategy – through the polymeric material recycling process carried out by Aliplast Spa – and the development of recycling lines for other types of plastics make it possible to seize the opportunities offered by the evolution of European regulations.

Free-market businesses have gained increasing importance in the Group's portfolio, contributing significantly to its operating performance but also exposing it to growing competition. The Group responds to the challenge of competition by continuously innovating its sales offers and introducing new products in a timely manner, increasing its presence and customer base on the free market, and aiming to ensure the fulfilment of expectations in terms of service range and quality.

Risk analyses deriving from changes in the economic context (GDP and inflation) and energy market conditions (gas and electricity prices) make it possible to quantify the sensitivity of the Group's Ebitda to changes in primary operating and financial indicators.

In particular, a 1% reduction in GDP compared with the business plan's scenario would lead to an average annual drop in Ebitda of approximately 3 million euro.

Sensitivity analysis



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

Identifying regulatory risks

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

Periodic updates of the legislative and regulatory framework, both at national and European levels, may significantly impact the sectors in which Hera operates, influencing its profitability as a consequence.

Regulatory risks impact network businesses (water cycle, gas and electricity distribution and district heating) and the municipal waste collection business and result in the introduction or modification of economic, organizational and IT requirements to be met by Hera, and on potential market structure changes caused by them.

The tenders for gas distribution, the integrated water service, waste collection and street sweeping scheduled for the time covered by the Plan determine the risk of losing some of the areas currently managed, especially in contexts with a significant presence of competition, only partially offset by compensation for the portion of invested capital not yet depreciated.

Lastly, there is a risk arising from the regulatory uncertainty surrounding the end of protected services, in terms of the implementation timeframe.

Managing regulatory risks

The Group's organisational structure liaises with national and local authorities and carries out extensive consultation with institutional stakeholders, actively taking part in working groups established by authorities and adopting a transparent, co-operative, proactive approach towards possible regulatory instability.

The Group operates by making the most of its technical skills and management efficiency. Indeed, Hera's focus on service quality, cost efficiency and innovation is a competitive strength in tenders for gas distribution, the integrated water service and waste collection and street sweeping services.

Identifying strategic risks

Strategic risks, associated with long-term planning, financial sustainability, involvement in strategic initiatives and appropriate investment decisions, affect the soundness of results for the various supply chains and business units. Moreover, the Group's ability to achieve its strategic objectives may be compromised if the necessary licences, authorisations and permits to carry out its activities are not maintained or obtained.

Achieving the planned results is therefore conditioned by the different endogenous and exogenous risks that are simulated, measured and controlled as appropriate.

Managing strategic risks

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

Environmental-catastrophe, climatic, technological and human capital areas

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



The risk management approach is organised according to the specific areas in which environmental, technological and human capital risks occur.

Identifying environmental-catastrophe risks

Hera, while aware of the need to preserve natural resources, uses them to provide essential services to its customers. The Group's activities, in turn, have an environmental, water and carbon footprint, and adopting mitigation and adjustment measures to reduce environmental-catastrophe risks is therefore fundamental. In keeping with the ambitious goal to reduce current levels of greenhouse gas emissions compared to their current level, as set out by international organisations, the physical and transitional climate change risk scenarios relevant to the Group's activities have been identified. For further details, please refer to the next section, "Identifying climate change risks".



As regards the environmental standards with which Hera must comply in carrying out its businesses, the Group's activities are subject to various rules and regulations, including rules relating to CO₂ emissions, emissions of other substances produced by combustion, water discharge and the handling of hazardous and solid waste. Non-compliance with CO₂ limits contributes to climate change, while non-compliance with legal limits on other environmental aspects leads to worsened environmental conditions and exposes the Group to fines.

Scarcity of water resources, or possible contamination of water reserves, may affect the regular water supply and cause service interruptions or significant environmental, economic and social damage, worsening the water stress, which affects these natural resources by their very nature, in order to meet water demand.

In addition, note the risks stemming from the impact on the Group of weather variability in relation to the electricity and gas demand deriving from the various scenarios. The most significantly affected areas pertain to the Central Market Department, which is exposed in terms of electricity, gas and heat sales and to the variable demand resulting from different weather scenarios.

Managing environmental-catastrophe risks

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

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



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



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



Identifying climate change risks

The physical and transitional risks from climate change scenarios pertinent to the Group's activities have been classified according to their potential consequences on business, and submitted to further impact and mitigation assessments in relation to their criticality (some examples include extreme weather phenomena such as floods and droughts as well as health and economic risks).

Climate scenario analysis is a methodology to test the resilience of business plans under different assumed future developments. Hera selected two of the most relevant scenarios out of the nine that were considered as starting points. In particular, the IEA ETP 2DS transition scenario by the International Energy Agency, chosen as an ambitious climate scenario, envisages a future evolution characterised by strong decarbonisation processes in order to keep the temperature increase below 2°C: this scenario has been used in identifying transition risks.



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

Type	Causes
Physical risks	<ul style="list-style-type: none"> ▪ heat waves; ▪ abnormal winter temperature changes; ▪ flooding and floods resulting in landslides and mudslides*; ▪ extreme weather phenomena*; ▪ rising sea levels; ▪ changes in the timing of annual and average rainfall; ▪ drying soils*; ▪ rising temperatures*; the risk associated with decreased gas consumption and district heating for residential use as a result of an increase in temperature was also assessed as significant in the long term.
Transition risks	<ul style="list-style-type: none"> ▪ electrification of energy consumption*; ▪ development of renewable energy sources; ▪ introduction of measures requiring structural and non-structural efficiency upgrades*; ▪ limits on the production of greenhouse gas emissions; ▪ an increase in the cost of raw materials and greenhouse gas emissions*; ▪ stigmatisation of the sector in which the company operates, i.e. limited access to the capital market; ▪ absence and/or obsolescence of the highly specialised skills required by the market to develop new technologies or replace existing products; ▪ legal disputes; ▪ obsolescence of existing plants and the associated need to introduce new, more sustainable solutions/technologies.

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

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

Note that physical risks are distributed over both the medium and long term, with a higher number of occurrences in 2031-2050, consistent with the principle that climate change impacts will become more evident in the long term.

Transition risks are mainly concentrated in the medium term, and are distributed across all categories of the TCFD classification. Each risk has also been associated with one or more management methods: 21 management methods were identified for physical risks and 13 for transition risks; some of the resulting actions have already been integrated into the investments made, as well as being reflected in the Business plan. For further details, please refer to the section "Hera's climate strategy" in the Sustainability Report. The investments and the mitigation and adaptation actions planned to date, moving in the direction of the energy transition towards carbon neutrality and the environmental transition towards the circular economy, as well as for technological evolution, in line with European strategies and the objectives of the UN 2030 Agenda, are now fully part of the Group's way of operating and are often implemented in advance compared to the estimated timeframe, in light of the Group's positive results.

The ongoing Russia-Ukraine conflict is leading to an increasing European effort to diversify energy supply sources and the transition process. For an evaluation of the potential effects in terms of impairment tests, specifically in relation to gas consumption, see note 25 of the consolidated financial statements in paragraph 2.02, "Commentary notes".

Managing climate change risks

Hera has launched a series of initiatives to mitigate the effects of climate change, and at the same time reduce its own carbon footprint. Risk assessment activities continue, with the appropriate level of detail,



especially with regard to transition risks and their modelling. Following the results of the first phase of analysis, a series of mitigation and adaptation activities have been identified, with no risks determined that – as regards their valuation over the time covered by the Business plan – may cause a need to make write-downs on the Group's assets.

Type	The Group's main initiatives/actions
Mitigation activities	<ul style="list-style-type: none"> ▪ reduction in internal energy needs through efficiency investments; ▪ specific investments for the growing role of renewable energy production, such as those planned in plants for biomethane production and initiatives to build electrolysis plants for producing green hydrogen; ▪ sales of renewable electricity and gas with compensated emissions; ▪ offers of photovoltaic generation systems; ▪ offers of energy efficiency services to retail and institutional customers; ▪ acceleration towards the reuse of raw materials through polymer recovery and regeneration activities with consequent reduction of CO₂ emissions.
Adaptation activities	<ul style="list-style-type: none"> ▪ consolidation of the resilience of Group infrastructure to climate change, increasing its capacity to adapt to adverse physical conditions. In this regard, the Rimini seawater protection plan will ensure a better response capacity of the integrated water service infrastructures to extreme precipitation events in the area; ▪ development of project hypotheses for the integration and partial replacement of water sources, as well as the construction of interconnections between them, in order to deal with emergency conditions by 2030; ▪ interventions for district-based water networks and monitoring leakage; ▪ agreements and investments for the reuse of purified wastewater, reducing pressure on primary water resources and thus water stress on the area served, which will be accentuated by climate change in the coming decades.

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



Identifying managerial and ICT security risks

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

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

the Group, and a security risk analysis is carried out annually to identify and assess risk, using a methodology based on a framework that considers three areas of security: availability, integrity and confidentiality.

Managing operational and ICT security risks

Centralised network monitoring systems (remote control of fluids and the electricity network) ensure continuous real-time monitoring and supervision and, in some areas, remote management, making it possible to promptly report potential critical factors to the technical structures in charge of emergency response and, where possible, to intervene directly to resolve the potential critical situation. These systems have been used in a variety of situations, allowing the service to be restored within an appropriate timeframe and ensuring adequate resilience of the services offered.

The Group constantly monitors the level of IT security risk, runs tests to continually assess the level of penetrability of its systems and network security, and carries out training campaigns to raise awareness among all users.

During 2022, work continued on measures aimed at ensuring the confidentiality, integrity and availability of Hera's systems. The main initiatives, a consolidated part of the Group's strategy and its method of action, are described in paragraph 1.01, "Contexts and trends, strategic approach and Group management policies". By way of example, in the context of industrial plants, coordination of cybersecurity improvement initiatives has been boosted, aimed at a single monitoring model for cybersecurity covering both IT (Information Technology) and OT (Operation Technology) areas. In order to block any vulnerabilities in systems or applications that could be exploited by an attacker, vulnerability assessment activities have also been intensified, extending them to industrial plants.

Identifying people's safety and development risks

People and their behaviour increasingly influence the effectiveness of corporate strategies. The protection of people thus remains a key element that must be reflected in workplace safety and at the level of social protection. The Group therefore continually focuses on the emerging needs and requirements of all employees.

Hera's structured process for identifying hazards and the related risk assessment informs its analysis of roles, work activities, processes, workplaces, equipment, vehicles, plants and substances used. With reference to the specific nature of its business and its local presence, the Group has also established criteria for identifying risk scenarios due to the spread of the Covid-19 virus from an Enterprise Risk Management viewpoint.

The risk mitigation measures adopted and the effectiveness of their implementation are periodically monitored and reviewed. In this regard, a specific checklist has been developed for periodic monitoring by the heads of the various organisational units.

With the aim of identifying, measuring and monitoring the risks that threaten the Group's assets and the continuity with which it provides essential services, a risk assessment model has been implemented for the physical security of these assets. This model aims to prevent and mitigate threats and impacts caused by events (malicious, culpable or accidental) such as fire, theft and acts of sabotage/vandalism.

Managing people's safety and development risks

In order to ensure worker health and safety and mitigate on-the-job injury risk, the Group is constantly committed to measures promoting better monitoring as well as to the enhancement of safety protection and prevention practices aimed at reducing the frequency and severity of accidents.

The teaching methods chosen for worker training are no longer solely technical or normative, but geared towards developing self-awareness in the perception of risk and in adopting safe and aware behaviour.

The prevention and protection measures put in place by the Group aim to minimize the probability of an adverse event occurring, and lower the severity of the consequences following the event.

It is of fundamental importance for Hera to develop workers' awareness of the risks associated with their work, and the company increasingly uses training courses that encourage people to gain greater awareness, modifying their own behaviour in terms of risk perception and becoming a virtuous example for other workers.

Focusing on these aspects is an essential element of operations, in order to maintain a steady decrease in the number of injuries, the accident frequency rate, the severity rate and the number of days of absence due to injury. In this respect, the Group has obtained important certifications for occupational health and safety, such as ISO 9001 (quality management system), ISO 14001 (environmental management system) and ISO 45001 (health and safety on the workplace). The process of hazard identification and risk assessment and control is carried out in a preventive and proactive (rather than reactive) manner, in order to identify appropriate risk reduction and control measures.

The ongoing commitment shown by people and the integration of safety into processes and training are the cornerstones of the Group's safety culture. This strategic element of risk management is based on the premise that everyone is responsible for their own health and safety, as well as that of the people with whom they interact.

This principle has been included in the procedure for managing the process of identifying hazards and assessing risks to the health and safety of workers. This procedure provides that each employee promptly report and halt any risky situation or unsafe behaviour. In addition, in 2022, the heads of the organisational units completed and managed about 5,000 checklists, instrumental in monitoring the measures adopted and the possible need for specific procedures for managing workers.

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

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

For example, to better manage events, the Group's synergies, skills and resources have been made use of by centralising the alarm reception point in a control room with a view of all alarms/alerts concerning assets, and also by managing the global contractor's networks and systems (for installation and maintenance of systems, and activation of surveillance services).

Lastly, with reference to social wellbeing, and with the aim of fostering a positive working environment, Hera has created a welfare system based on attention to people. This system includes interventions which are monetary or linked to the quality of life, such as services relating to the family, education, work-life balance, wellbeing, leisure and health.