

1.02 RISK FACTORS: ACTORS, METHODOLOGIES AND MANAGEMENT AREAS

1.02.01 Risk governance

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

Hera's corporate governance system enables organisational strategies to be handled uniformly and consistently. The Risks Committee is the principal policy-making, monitoring and reporting organ for risk management. Additionally, under Article 7 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 2020, 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:

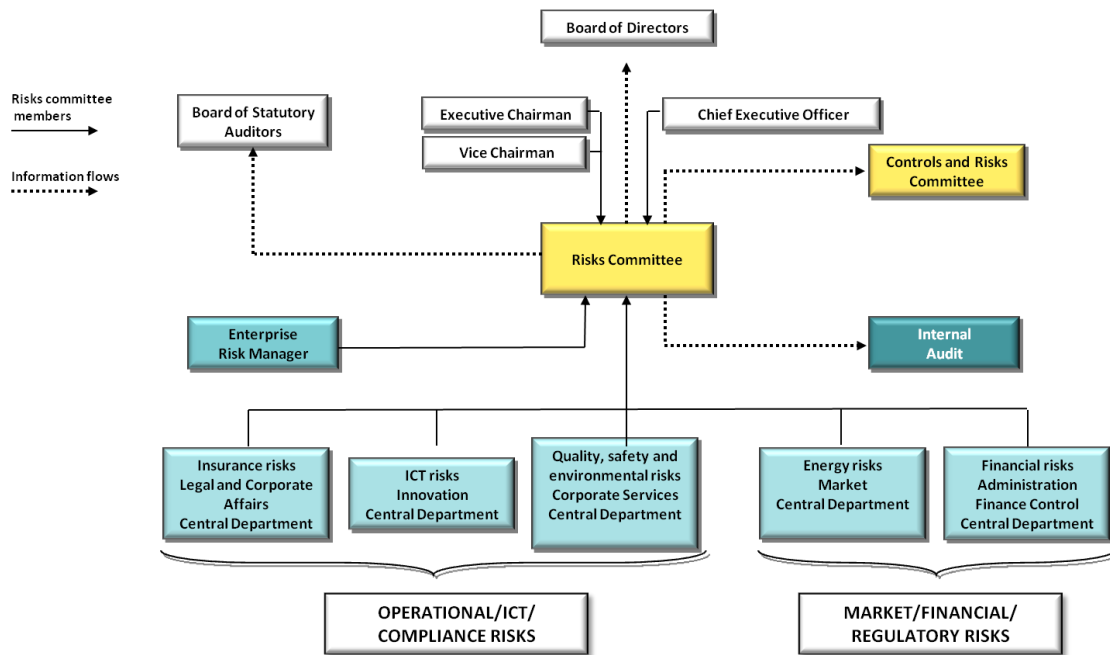
- the role of risk management, entrusted to the risk owners in charge of the different organizational sections;
- the role of risk guidance and control, entrusted to the Risks Committee, which relies on risk specialists who carry out second-level controls, i.e. who are responsible for defining, applying 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, to 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 President and CEO supervise, within their ambits, the internal control and risk management functionality; The Vice President oversees coordination between the Risks Committee and the Controls and Risks Committee;

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 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**, defining acceptable risk levels consistently with a given risk management strategy, through the identification of:
 - key risk scales;
 - risk metrics;
 - their associated limitations;
 - 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 13 January 2021, the sixth Enterprise Risk Management report on the 2021-2024 Business Plan was presented to the Board of Directors.

Over the course of 2020, the ERM analysis made further methodological improvements and refinements:

- backtesting of the previous year ERM analysis was carried out to assess that actually incurred impacts were consistent with estimated impacts, particularly with regard to the Covid pandemic;
- the Group's resilience analysis, carried out in previous years in relation to risks that may jeopardise the continuity of core activities, made it possible to plan further mitigation actions in the 2021-2024 business plan;

- the relevant risk scenarios for the Group were re-mapped, based on the risk structure identified by the World Economic Forum (WEF) in its customary annual analysis, aimed at identifying the degree of relevance of WEF top risks in the context of Hera;
- the identification of climate change (physical and transitional) risk scenarios relevant to the Group's activities was carried out, to begin assessing the impacts and business development opportunities for certain relevant risk factors in keeping with the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD).



The 2020 ERM analysis did not reveal any critical risks, either in terms of reputation or operating-financial impact.

Areas of significant risk include reputational impact deriving from possible proceedings by supervisory/regulator/investigation bodies, generated by the degrees of discretion on the opening of audit/investigation procedures in cases of non-univocal interpretative guidelines (even when the Hera Group's conduct complied with legal provisions), as well as the economic-financial impact deriving from high-intensity seismic events relating to networks. The risk deriving from potential fires at waste treatment and recovery plants is confirmed; however, the related impact in terms of consequences on Group results is assessed as insignificant, while consequences for the environment and operational continuity have zero impact. However, due to growing social awareness on the issue, such events may lead to significant reputational consequences because of perceived risk. It should also be noted that the risk deriving from the critical materials of the gas networks present last year has been eliminated, while the context affected by the Covid-19 emergency, i.e. the economic-financial weakening of individual entities and consequent greater exposure to non-virtuous conduct on which the company's monitoring has limited effectiveness, leads to less reliability on the part of the entities to whom part of the works are subcontracted.

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 with regard to climate change and sustainable development. Paragraph 1.01 "Trends and contexts, 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, Hera carries out the specific analysis, measurement, monitoring and management activities described below.

RISK TREATMENT AND MANAGEMENT

AREA	TYPE	IDENTIFICATION
ECONOMIC - FINANCIAL	DEBT MARKET	Fluctuations in interest rates, exchange rates, credit spreads and liquidity crises.
	COMMODITY PRICE	Fluctuations in commodity prices.
	COUNTERPARTS	Counterparties unable to meet the obligations undertaken, both in terms of respect of economic conditions and in the execution of contractual provisions.
BUSINESS AND REGULATORY	COMPETITIVE AND MACROECONOMIC	Business activities involving increasing competition on the free market, carried out mainly in Italy, with an economic context of limited growth: <ul style="list-style-type: none"> Changes in energy consumption levels (Covid-19); Reduced production of volumes of waste treated at Hera's plants, which affects the achievement of targets.
	REGULATORY - LEGAL	<ul style="list-style-type: none"> Interventions by the regulatory authorities of the sectors in which Hera operates; Regulatory developments with possible impact on both network and market businesses.
	STRATEGIC	<ul style="list-style-type: none"> Failure to achieve the strategic objectives set in the long-term planning process; Loss of the necessary licenses, authorizations and permits for the regular performance of company activities.
CLIMATIC-ENVIRONMENTAL, TECHNOLOGICAL AND HUMAN CAPITAL-RELATED	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

- 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 counterparties identification and selection through credit checks;
 - Constant monitoring of counterpart positions;
 - Possible external transfer of risk through credit assignment.

- Continuous innovation in and timely presentation of the commercial offering;
 - High degree of flexibility in the supply sources for energy commodities, in parallel with 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: entering the process of recovering and recycling polymeric materials and the production of biogas.
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- Dialogue activities with national and local authorities through an organizational structure designated for this purpose;
 - Timely alignment of commercial offerings to 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 the face of multiple adverse risk scenarios in an enterprise-wide logic;
 - Constant monitoring of authorization processes and the requirements for maintaining them.

- Adequate environmental control system, both as regards the governance of environmental certification processes and related audits, and as regards the operational management of controls and assessments;
 - Reporting on company performance and engagement in the area of climate change;
 - Activating projects to promote the production of energy from renewable sources and reduce energy consumption;
 - Supporting clients to reduce their greenhouse gas emissions;
 - Incentivizing recovery strategies.
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- Centralized network monitoring systems that are in constant operation, with real-time detection of potential critical factors;
 - Constant monitoring of the level of cybersecurity risk, with governance and organizational structures designed for this purpose.
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- Careful identification of hazards and assessment of emerging needs;
 - Continuous and targeted initiatives to raise awareness about improving protection and prevention processes in terms of safety, and technical-regulatory training accompanied by training to develop risk perception awareness;
 - Constant monitoring and identification of evolving needs in terms of skills, and qualitative adjustment of existing skills and those to be acquired;
 - Establishment of a welfare system based on attention to people.

Operating-financial area

Price volatility

Identification of 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.

Unified procurement and hedging management

Commodity price risk management

In order to standardise the approach to risk of 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 the processes to achieve effective management of procurement and hedging concerning the energy market, with a clear-cut focus on the skills involved. The Group's approach provides for a single interface for the management of risk to 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.

Liquidity and credit rating

Identifying risks associated with the debt market

The economic and financial environment, in addition to fluctuating energy and commodity prices, shows changes in interest rates, exchange rates, credit spreads and possible liquidity crises. Such fluctuations may affect 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 to do so only on unfavourable economic terms, or an inability to liquidate assets on the market or due to a changed risk perception on the part of the market. Among the factors determining this perceived risk, the creditworthiness assigned to Hera by the rating agencies plays a key role, as it influences the possibility of accessing funding sources and 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 defined on a portion of debt equal to approximately 150 million euro (i.e. in the assignment of a rating lower than BBB). 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, rather than the termination of the publication of the rating.

Responding to financial needs

Managing risks associated with the debt market

Hera's financial management is centralised in the Central Administration, Finance and Control 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 87% of the Group's financial debt is long-term (more than five years) and 80% of this is represented by bonds with repayment at maturity.

Moreover, the Group's activities and strategies are particularly focused on ensuring that the highest rating level (one notch above the sovereign rating) is maintained.

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 2020, the Group's exposure to the risk of interest rate fluctuations was 10.4%, while the remaining 89.6% of debt is at a fixed rate.

Sensitivity analysis 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 the Group's debt structure in the plan, would increase financial expenses by an average of approximately €7 million per year.

Identifying risks from counterparties

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

Managing risks from counterparties

Origination process 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. Please refer to paragraph 1.08 "Covid-19 emergency management" for further details on additional assessment activities regarding the model for forecasting the expected loss from customer receivables. In the 2020 financial year, the 24-month unpaid ratio of the Group's main sales companies amounted to 0.87%.

Regulatory and business area

Identifying competition and economic risks

Decline in consumption Hera operates mainly in Italy, where an uncertain economic environment persists and energy consumption and waste disposal volumes are stagnant, in part as a result of the epidemic. The decrease in energy demand is putting pressure on sales margins which, combined with increased competition on the free market, may impact the Group's profitability. Additionally, changes in end customers' energy consumption levels may require Hera to buy or sell extra energy on unfavourable terms.

Environment business The potential reduction in waste production, deriving not only from the economic context and European and national regulatory frameworks but also 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 environment business related to the management of its set of plants are centralised under the Herambiente Group.

Managing competition and economic risks

High flexibility in procurement The Group has maintained elevated flexibility in energy procurement sources while at the same time developing hedging activities to minimize exposure to operating risks from electric generation, partly thanks to the lack of long-term gas supply contracting ("Take or Pay" provisions), thus ensuring ongoing alignment with the market and maximising natural hedging.

Plant equipment and recycling opportunities 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 has enabled the Group to achieve its strategic objectives. The implementation of a circularity strategy – through the inclusion of polymeric materials in the recycling process carried out by Aliplast – and the development of recycling lines for other types of plastics make it possible to seize the opportunities offered by the evolution of European legislation.

Over the years, free-market businesses have gained increasing importance in the Group's portfolio, contributing significantly to its economic performance but also exposing it to growing competition. The Group responds to the challenge of competition by continuously innovating its commercial offering and introducing these new products in a timely manner, increasing its presence and customer base on the free market, and ensuring the fulfilment of expectations in terms of service range and quality.

Sensitivity analysis

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

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

A 1% reduction in inflation rate compared with the business plan scenario would lead to an average annual drop in EBITDA of approximately 12 million euro. The reduction of the electricity price in the wholesale market by 1 €/MWh compared with the business plan scenario would lead to an average annual drop in EBITDA of approximately 0.5 million euro.

Finally, the reduction of the gas price by 1 €/smc compared with the business plan scenario would lead to an average annual drop in EBITDA of approximately 0.2 million euro.

The evolution of the legislative and regulatory framework

Identifying regulatory risks

Hera carries out part of its activities in a regulated market, therefore its operations are influenced by the regulatory measures taken by the sector authorities and legislator (in particular concerning tariffs and market structure), government incentives for renewable energies, the concessions granted by local authorities (in the case of regulated activities relating to waste collection services, gas distribution, integrated water service and public lighting) and national authorities (in the case of 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 environment sectors.

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

Regulatory risks impact network businesses (water, gas and electricity distribution) and the urban hygiene 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, integrated water service, waste collection and sweeping scheduled in the plan determine the risk of losing some of the areas currently managed, especially when there are significant competitive contexts. However, it should be noted that, in the event of a loss of management areas, the Group is compensated for the portion of invested capital not yet depreciated.

Lastly, there is a risk arising from the regulatory uncertainty surrounding the end of the protected category market, both in terms of the way in which the transition to the free market will take place and the safeguard mechanisms envisaged for customers, and in terms of implementation timeframe.

The proactive approach to regulatory frameworks

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, integrated water service and collection and sweeping services.

Identifying strategic risks

Strategic risks associated with long-term planning, financial sustainability, the 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.

Achievement of 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 a business plan against a variety of adverse risk scenarios, which supports an integrated risk projection from an enterprise-wide viewpoint. The system performs scenario analysis, stress testing and what-if

analysis 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-catastrophy, climatic, technological and human capital areas

Seismic, atmospheric and other climatic events may affect the resources deployed and consequently the Group's performance. Hera seeks to enhance these resources by ensuring that they are preserved and developed so as to continue to enjoy their benefits in the future. In this context, the environmental risks resulting from climate change are particularly important, as well as accidents to the Group's plant equipment which in turn may generate potential environmental damage. In this respect, in 2020 the Group developed a detailed analysis of the TCFD recommendations which led on one hand to implementing, at the operational and strategic level, best practices for managing risks and opportunities related to climate change, and on the other hand allowed the Group to gradually align its current reporting instruments with recommendations. Risks arising from cybercrime, which Hera also assesses in terms of their impact on service continuity, are also becoming increasingly significant. It also becomes imperative to determine whether accidents may pose a risk to people's rights and freedoms, i.e. whether they may cause physical, material or immaterial damage, based on the parameters and acceptability thresholds defined by Group policies (published on the company's web portal).



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

Identifying environmental-catastrophy risks

Environmental footprint and essential customer services

Hera uses natural resources to provide essential services to customers. As its activities have an environmental, water and carbon footprint, the Group is aware of the need to preserve natural resources by adopting mitigation and adjustment measures to reduce these risks. In keeping with the ambitious goal to reduce current levels of greenhouse gas emissions as set out by international organisations, the following physical and transitional climate change risk scenarios have been identified as relevant to its activities. For further details, please refer to the next section "Identifying climate change risks".



In terms of the environmental standards that Hera must comply with in carrying out its business, 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 environmental changes, 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 on natural resources in order to meet water demand.

In addition, there are 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-catastrophic risks

Generally, pro-active investments aiming at a lower 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 to 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 reducing environmental risks by complying with the energy efficiency objectives set by the legislator 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 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 bathing safety plan currently underway which, in addition to maintaining the quality of marine resources, increases the resilience of the stormwater drainage infrastructure in the face of extreme events. For further details on the specific initiatives, please refer to the section "Reducing greenhouse gas emissions" in the Hera Group 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 more details, see the "Transition to a circular economy" section in the Sustainability Report.



The strengthening of the resilience of the Group's water supply and distribution system initiated in 2019 in a medium to long-term outlook is still ongoing. Furthermore, the reduction of the water footprint is pursued through the water management system, which aims to promote 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 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 business plan scenario leads to an average annual drop in EBITDA of approximately 13 million euro.

Identifying climate change risks

Physical and transition risks and their effects on business

The physical and transition risks from climate change scenarios pertinent to its activities have been classified according to their potential consequences on business, and were submitted to further impact and mitigation assessments in relation to their criticality (some examples are 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 optimistic climate scenario, envisages a future evolution characterised by strong decarbonisation processes in order to keep the temperature increase below 2°C. The 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). Based on this latter scenario, eight physical risks and eight transition risks were identified, associated with related business impacts.

- Physical hazards are generated by heat waves, abnormal winter temperature changes, flooding and floods resulting in landslides and mudslides, extreme weather phenomena, rising temperatures, rising sea levels, changes in the timing of annual and average rainfall, and the drying out of soils. The risk associated with the decrease in gas consumption and district heating for residential use as a result of the increase in temperature was also assessed as significant in the long term.



- Transition risks are generated by the electrification of energy consumption and the development of renewable energy sources, the introduction of measures requiring structural and non-structural efficiency upgrades, limits on the production of greenhouse gas emissions, the increase in the cost of raw materials and greenhouse gas emissions, the stigmatisation of the sector in which the company operates and limited access to the capital market, the absence and/or obsolescence of the highly specialised skills required by the market to develop new technologies or replace existing products, legal disputes and the obsolescence of existing plants and the associated need to introduce new, more sustainable solutions/technologies.

For the physical and transition risks assessed as having a higher priority level, a further in-depth analysis is underway to estimate their economic and financial impacts.

Managing climate change risks

Hera has launched a series of initiatives to mitigate the effects of climate change, aimed at reducing its carbon footprint.



- To offset risks arising from climate change, the Group has adopted multiple measures. Just a few examples include reducing internal energy consumption through investments in energy efficiency and expanding renewable energy production with specific actions and investments, such as the biodigester in Sant'Agata Bolognese and initiatives aimed at creating electrolysis plants for the production of green hydrogen, selling electricity to customers with offset emissions and offering photovoltaic generation systems, providing energy efficiency services to retail and institutional customers, and the drive to reuse raw materials through polymer recovery and regeneration activities with a consequent reduction in CO2 emissions.
- On the adaptation front, Hera initiated actions to consolidate the resilience of its infrastructure to climate change, increasing its ability to adapt to adverse physical conditions. In this regard, the optimised Rimini bathing safety plan will ensure that the integrated water service infrastructures have an improved capacity to cope with extreme rainfall events in the area. Additional project hypotheses are being developed for the integration and partial replacement of water sources, as well as for the construction of interconnections between them, in order to cope with emergency conditions by 2030 (including the project to draw water from the Emilia-Romagna canal). Hera has also made agreements and investments to reuse purified wastewater, reducing the pressure on primary water resources and thus water stress at the local level, an element that will be exacerbated by climate change in the coming decades.

Identifying operational and ICT security risks

Exceptional events and service provision rules

Despite careful planning and insurance protection, the 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 operational 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 premise systems (hosted in corporate 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, both business-critical information and personal information (i.e. any data relating to natural persons, as more fully defined by the privacy code Legislative Decree 196/03) may result in serious financial losses with consequent damage to market image. To identify and assess this risk, the Group has adopted a methodology based on the international Magerit framework, assessing the three security parameters of availability, integrity and confidentiality.

Managing operational and ICT security risks

Physical security and monitoring of plan sites

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.

Attention to information confidentiality

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.

In 2020, actions continued to be taken to ensure the integrity and availability of Hera systems; the main initiatives, which are subject to constant technological updating, are aimed at increasing ICT security to protect infrastructure, devices and personal identities and are carried out by introducing the best technologies on the market and the use of continuous monitoring and control services (24 hours a day, 365 days a year). Actions to enhance IT security control, implemented through the role of owner of the quality, safety and environment process (in charge of regulatory compliance and risk analysis) and the owner of the ICT security process (in charge of operational strategy, defining ICT security procedures and requirements and intervention and risk mitigation plans) continued during the year. Analysis of data traffic on the internal network also provides additional protection. Optimisation of the intrusion detection system goes beyond merely signalling intrusion attempts by automatically blocking them. Activities to detect vulnerabilities in systems or applications that may be exploited by an attacker were also intensified.

A Threat Intelligence service has been set up that monitors the main bulletins provided by the various private and public bodies and, through a direct relationship with the national Computer Security Incident Response Team (CSIRT), allows the status of these bulletins to be monitored. Given that the management of corporate information and information systems influences the Hera Group's reputation, the executive management has set up an information security management process in accordance with the lines set out in the ISO/IEC 27001:2005 standard, which involves the participation and support of all Group employees. During 2020, the Group did not receive any complaints from its customers concerning privacy issues or data loss.

Individual health and safety and social risks

Identifying people's safety and development risks

People and their behaviour are the common denominator in the areas of climate, environment, technology and human capital, they can 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. Hazard identification and risk assessment are based on analysing the roles, work activities, processes, workplaces, equipment, vehicles, plants and substances used. The Group is continually focusing on the emerging needs and requirements of different categories of employees.

Training, prevention and protection

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 will no longer be solely technical or normative, but will be geared towards developing self-awareness in the perception of risk and in adopting safe and aware behaviour. Focusing on these aspects is an essential element of operations in order to maintain a steady decrease in the number of injuries, the injury frequency index, the severity index and the number of absence days due to injury. In this respect, the Group has been granted important awards on occupational health and safety such as ISO 9001 (quality management system), ISO 14001 (environmental management system) and Ohsas 45001. 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.

People's ongoing commitment 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 they interact with. 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 and the related links available on

Hera's Corporate Information Portal. In particular, this procedure provides that each employee promptly report and halt any risky situation or unsafe behaviour.

With reference to social wellbeing, Hera has created a welfare system based on a focus on people aimed at fostering a positive working environment. This system includes monetary and quality-of-life related actions, such as services for family, education, work-life balance, wellbeing, leisure and health.