



2. Environmental information

In compliance with the CSRD Directive and ESRS standards, Acea is committed to providing transparent and detailed reporting on its environmental performance. This section presents key environmental information reflecting the Group's ongoing commitment to sustainability and environmental protection in all its different aspects.

Our environmental strategy is based on sound principles that aim to reduce the ecological impact of our operations, promote climate resilience and contribute to the transition to a low-carbon economy. Through the responsible management of natural resources and implementation of innovative technologies, Acea is committed to minimising greenhouse gas emissions, optimising water use, reducing waste and protecting biodiversity.

In this section we provide an overview of our environmental initiatives, projects and achievements, outlining our progress and future goals. The disclosure includes quantitative and qualitative data illustrating our performance in the areas of:

- reducing greenhouse gas emissions (Scope 1, 2 and 3);
- energy efficiency and the use of renewable energy sources;
- sustainable management of water resources;
- waste reduction and management;
- protection of biodiversity and ecosystems.

This reporting is crucial not only in ensuring transparency in respect of our stakeholders, but also to guide our future actions and continuously improve our environmental practices. Acea recognises that environmental sustainability is a key element for long-term success and is committed to continuously improving all its operations.

2.1 DISCLOSURE REQUIRED BY THE EUROPEAN TAXONOMY

Pursuant to Regulation 2020/852 and Regulation 2021/2178 "Disclosure Delegated Act", the European Taxonomy is a classification system for economic activities that can contribute to achieving the environmental objectives set out in the European Green Deal: climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and the protection of biodiversity and ecosystem health. Currently, the Taxonomy has identified and regulated 155 economic activities within 16 production sectors.

The European Taxonomy lists and describes the economic activities that can contribute to achieving each environmental objective, if conducted in compliance with certain technical criteria, without causing significant damage to the remaining objectives and in compliance with social safeguards. These "eco-sustainable" activities are then enhanced, by representing their percentage contribution to three economic KPIs (turnover, capex and opex).

Regulation 2020/852 was applied from 2021, and supplemented with the gradual adoption of Delegated Acts. Specifically, in addition to the 'Disclosure Delegated Act', the European Commission adopted the "Climate Delegated Act" - C (2021) 2800 final, effective from 1 January 2022, in relation to the first two climate targets, supplemented by the "Complementary Delegated Act" - C (2022) 631, effective from 1 January 2023; the Commission regulated the remaining four environmental objectives, with the "Environmental Delegated Act" - C (2023) 2486, effective from 1 January 2024, which also amended the KPI reporting templates, and published Delegated Regulation 2023/2485, whereby further amendments were made to the Climate Delegated Act, both in terms of new activities and technical screening criteria.

Acea, which falls under the non-financial companies subject to the regulation since its first year of application, has regularly reported on the requirements of Regulation 2020/852 and Delegated Acts in its Consolidated Non-Financial Statement, anticipating the full application of the Environmental Delegated Act in relation to the 2023 financial year. With the entry into force of the CSRD Directive 2022/2464/EU, implemented in Italy by the Legislative

Decree 125/2024 of 6 September 2024, the information required by the European Taxonomy forms an integral part of Sustainability Reporting.

This section details the analysis carried out, in compliance with the regulations, to identify the Acea Group's activities eligible for the Taxonomy and the reporting of the three key performance indicators: turnover, capex and opex resulting from eligible and aligned activities.

Analysis of eligibility and alignment

The analysis carried out identified the Group's activities that correspond to those described in the Delegated Acts and relative Annexes (I and II of the Climate Delegated Act, dedicated to climate mitigation and adaptation objectives), and taking into account the Complementary Delegated Act and the Environmental Delegated Act, identifying eligible activities and, among these, the activities that are "environmentally sustainable", i.e. aligned with the Taxonomy criteria, specifying any activities that are partially aligned (for example, for the same activity, only some companies are aligned, or when, for different companies, the activity meets the technical screening criteria only for a portion of the facilities/structures).

The analyses carried out in 2024 considered all operating companies included in the Acea Group's line-by-line consolidation perimeter, including an additional 14 companies compared to 2023. Specifically, the analysis increased the scope of eligibility compared to the previous year, from 24 to 29 activities attributable to 6 sectors identified by the Regulation: energy, water supply, sewerage, waste treatment and decontamination; transport; construction and real estate activities; professional, scientific and technical activities; information and communication. Eligible activities can contribute to the following objectives:

- 19 activities: contribution to climate change mitigation and adaptation;
- 2 activities: contribution to climate change mitigation
- 3 activities: contribution to the sustainable use and protection of water and marine resources;
- 3 activities: contribution to the transition to a circular economy;
- 2 activities: contribution to pollution prevention and reduction.

Alignment to the Taxonomy was assessed in respect of the eligible activities, using the three criteria set out in the regulations, checking that each activity:

- contributes substantially to the achievement of one or more of the environmental objectives set out in Art. 9, in accordance with Art. 10 to 16 (Reg. 2020/852);
- does not cause significant harm (DNSH criterion) to any of the environmental objectives, in accordance with Art. 17 (Reg. 2020/852);
- is carried out in compliance with the minimum safeguards provided in Art. 18 (Reg. 2020/852), in support of sustainable and inclusive growth, and in compliance with international labour and human rights, and social and governance standards.

The Group adopted two distinctive approaches for the DNSH analysis: for the specific criteria, an assessment of the capacity of each individual activity to meet the requirements, while for “recurring criteria” (those detailed in the Appendices), the most common best practices available for each business were considered in order to guarantee, where possible, compliance with the applicable requirements for eligible activities. To complete the analysis, Acea verified compliance with the minimum safeguards, which include the minimum requirements for the protection of human and labour rights, as described in international standards. Acea’s commitments in this respect are directly referenced in the

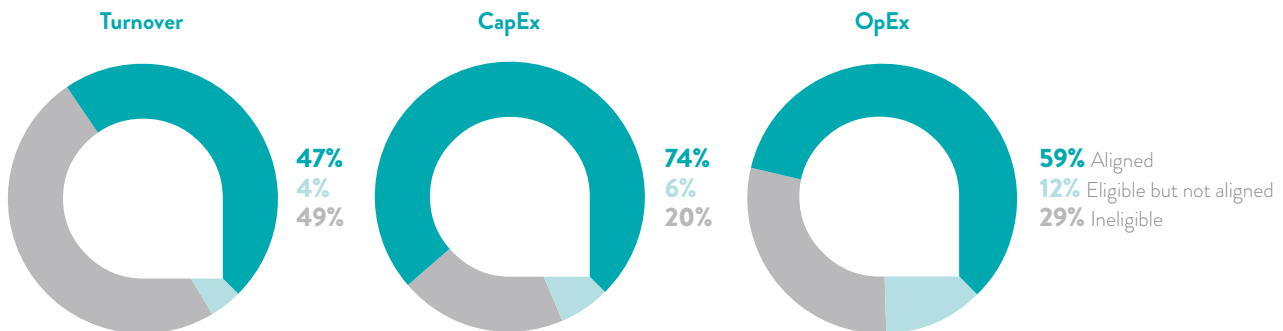
Group’s policies and documents, including, primarily: the Code of Ethics, the Human Rights Policy, the Integrated Management Systems and Sustainability Policy, as well as the corporate documents governing the Company’s conduct on antitrust, consumer protection, anti-corruption and privacy issues. For more details on the main policies and methods for managing these issues reference is made to paragraph 1.5 Group Policies and paragraph 4 Information on Governance.

Based on the analyses performed, Acea identified a total of 33 eligible activities for the Group. Following the rationalisation and target positioning choices by the companies, there are 29 activities that are eligible and valued in the economic and financial KPI tables, as explained above. The 4 rationalised eligible economic activities have been valorised in the complementary tables showing the overall alignment percentages for each objective. The following is noted regarding the total 29 eligible activities:

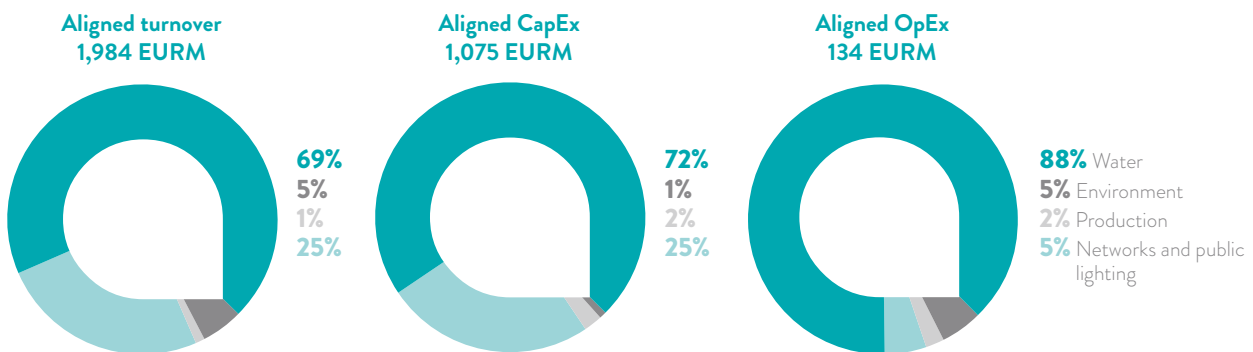
- 17 fully aligned activities;
- 8 partly aligned activities;
- 4 non-aligned activities.

Finally, performance indicators were associated with the activities: turnover, capex and opex from eligible and aligned activities, as shown below with respect to the Group total and with details of aligned activities according to business area.

KPIs attributable to eligible, aligned, and non-eligible activities



Details per business of economic KPIs for aligned activities



Turnover: of the total turnover of EUR 4,270 M, EUR 175 M is attributable to eligible activities but not aligned to the Taxonomy, EUR 1,984 M is aligned to the Taxonomy. The segments contributing the most to the aligned turnover are the Water segment, with 70% of the total (1,369 million) and the Networks segment with 25% (502 million).

Capex: out of the total capex considered for Taxonomy purposes of EUR 1,450 M (including increases during the year for Rights Of Use - IFRS 16 for about EUR 11,4 M), EUR 85 M is attributable to eligible but non-aligned activities, whereas EUR 1,075 M is considered aligned to the Taxonomy. The segments contributing the most to the aligned capex are Water (72% of the total for EUR 769 M)



and Networks (25% of the total for EUR 273 M).

Opex: out of the total operating expenses considered for the purposes of the Taxonomy, amounting to EUR 226 M, EUR 27 M is attributable to eligible but non-aligned activities, while EUR 134 M is considered aligned. Once again in this case, Water is the largest contributing sector with 88% of the total aligned opex (EUR 117 M).

The paragraphs below provide a sector breakdown of the activities that are eligible, aligned and non-aligned with the environmental goals of the Taxonomy. In accordance with the Regulation, it is noted that for the 19 eligible activities both in terms of the goals of mitigation and adaptation to climate change the mitigation goal was deemed prevalent.



14 activities are eligible for the water business:

- 8 activities with regard to climate change mitigation and adaptation goals (1 in the “Water Supply, Sewerage, Waste Treatment and Remediation” sector, 5 from the “Energy” sector and 2 from the “Construction and Real Estate” sector). After verification of the criteria for a substantial contribution and DNSH, 5 activities were found to be aligned with the target, 1 partly aligned and 2 not aligned. No activities were found to be aligned with the climate change adaptation goal;
- 3 activities for the “Sustainable use and protection of water and marine resources goal”, partially aligned;
- 3 activities for the Transition to a Circular Economy goal, of which 1 aligned, 2 partly aligned.

With reference to the capex associated with the “Sorting and recovery of materials from non-hazardous waste” activity, combined with the “Transition to a Circular Economy” goal, we note the intervention carried out by Acea Ato 2 for the recovery of sand from purification processes and the cleaning of sewerage networks for a total investment of approximately EUR 5.5 million in 2024.

Regarding foreign countries, only 1 activity is eligible and aligned, contributing to the climate change mitigation objective and relates to the “Water supply, sewerage, waste treatment and decontamination” segment.



8 activities are eligible for the Production area:

- 2 activities for the climate change mitigation goal;
- 6 activities for the climate change mitigation and adaptation goals.

These activities are mainly attributable to the “Energy” (4 activities), “Construction and Real Estate” (2 activities), “Transport” (1 activity) and “Professional, Scientific and Technical Activities” (1 activity) sectors. Following the analysis, 5 activities were found to be fully aligned with the climate change mitigation target, 1 was partially aligned and 2 were not aligned. No activities were found to be aligned with the climate change adaptation goal.



10 activities are eligible with reference to the Environment segment, which is mainly active in waste treatment:

- 7 activities with regard to climate change mitigation and adaptation goals (4 from the “Water Supply, Sewerage, Waste Treatment and Remediation” sector, 2 from the “Energy” sector and 1 from the “Construction and Real Estate” sector). Following the analyses, 7 activities were found to be fully aligned with the mitigation target, and of these, 6 activities were also aligned with the adaptation goal;
- 1 activity was aligned for the “Transition to a circular economy” goal;
- 2 activities were aligned for the Pollution Prevention and Control goal.



2 activities are eligible for the area, one falling under the “Energy” sector and the other under the “Construction and Real Estate” sector. One was fully aligned with the climate change mitigation goal, and another aligned with the climate change mitigation goal and also aligned with the climate change adaptation objective.



For the area, dedicated to research, innovation, design and laboratory activities at the service of Group companies, 1 activity in the “Water supply, sewerage, waste treatment and decontamination” sector is eligible, and fully aligned with the climate change mitigation objective. It is not aligned with the adaptation target. Intercompany activities are removed from the accounting of the KPIs, in accordance with the Regulation.



For the Commercial area, 5 activities addressing climate change mitigation and adaptation objectives are eligible, 3 in “Construction and real estate activities”, 1 in “Water supply, sewerage, waste treatment and decontamination”, and 1 in “Transport”. 4 were aligned with the climate change mitigation goal, and one was not aligned. It is not aligned with the adaptation target. It is specified that the analysis excludes the electricity sales business, which is not included in the Taxonomy, and which covers 46% of the Group's 2024 turnover.

The table below shows the list of Acea Group's eligible activities according to environmental goal, with an indication of the degree of alignment and the sectors within which there is at least one company where the activity is eligible.

Objective	Economic activities	Description of eligibility/alignment	Area
CCM/CCA	4.1 Electricity generation using solar photovoltaic technology	<ul style="list-style-type: none"> Eligibility: ASM Terni, Cavallari and the companies in the Production Area operating/installing photovoltaic plants for the production of electricity. Alignment: plants operated by ASM Terni, Cavallari and the Production Area companies. Overall compliance with DNSH criteria for applicable objectives. 	Water, Environment and Production
CCM/CCA	4.5 Electricity generation from hydropower	<ul style="list-style-type: none"> Eligibility: ASM Terni and Acea Produzione operate hydroelectric power plants for the production of electricity. Alignment: the Group's power generation plants are run-of-river plants and have no artificial reservoirs. Overall compliance with DNSH criteria for applicable objectives. 	Water and Production
CCM/CCA	4.8 Electricity generation from bioenergy	<ul style="list-style-type: none"> Eligibility: the activity is carried out by Acea Ambiente, Orvieto Ambiente, Deco and Ecologica Sangro. They operate plants for the production of electricity through biogas recovery. Alignment: bioenergy power generation activity is compliant with all criteria and complies with industry BAT. Overall compliance with DNSH criteria for applicable objectives. 	Environment
CCM/CCA	4.9 Transmission and distribution of electricity	<ul style="list-style-type: none"> Eligibility: the activity is carried out by ASM Terni and areti. They operate electricity transmission and distribution networks. Alignment: the activity involves transmission and distribution infrastructure or equipment which form part of the interconnected European system. Overall compliance with DNSH criteria for applicable objectives. Non-alignment: a residual percentage of areti's transformers contain PCBs. 	Water and Network and Public Lighting
CCM/CCA	4.13 Production of biogas and biofuels for use in transport and of bioliquids	<ul style="list-style-type: none"> Eligibility: the activity is carried out by Acea Ato 2, which started up the biomethane upgrading plant in the Roma Nord and Roma Est treatment plants; Non-alignment: although the plants operated by Acea Ato 2 are registered with the quality system for biomethane producers, biomethane production is not yet at full capacity. 	Water
CCM/CCA	4.15 District heating/cooling distribution	<ul style="list-style-type: none"> Eligibility: Acea Produzione and Ecogena manage district heating and cooling distribution infrastructures. Alignment: Acea Produzione manages district heating networks that reach and exceed 75% of the heat generated. Overall compliance with DNSH criteria for applicable objectives. Non-alignment: the district heating networks managed by Ecogena do not reach the threshold value of 75% of heat generated, as required by Directive 2012/27/EU. 	Production
CCM/CCA	4.20 Cogeneration of heat/cool and power from bioenergy	<ul style="list-style-type: none"> Admissibility and non-alignment: (SII) is completing construction work on a cogeneration plant that will utilise the biogas produced by the anaerobic digester from the Terni 1 treatment plant. The activity is therefore eligible, but it is currently not possible to verify whether it passes the technical screening criteria. 	Water
CCM/CCA	4.30 High-efficiency cogeneration of heat/cool and power from fossil gaseous fuels	<ul style="list-style-type: none"> Eligibility: Ecogena and Acea Produzione have methane-fuelled plants. Non-alignment: greenhouse gas emissions only in the operation phase exceed the maximum permitted limit of 100gCO₂/kWh. 	Production
CCM/CCA	5.1 Construction, extension and operation of water collection, treatment and supply systems	<ul style="list-style-type: none"> Eligibility: Aguas de San Pedro and Consorcio Agua Azul manage the water supply service, water collection and drinking water system. Alignment: the activity meets the consumed energy threshold of 0.5 kWh/cm and complies with the DNSH criteria for the applicable targets. 	Water Overseas



Objective	Economic activities	Description of eligibility/alignment	Area
CCM/CCA	5.3 Construction, extension and operation of waste water collection and treatment systems	<ul style="list-style-type: none"> Eligibility: Acea Ambiente operates the Chiusi plant that treats wastewater through biological oxidation. Alignment: wastewater treatment and collection systems meet net energy consumption thresholds. Overall compliance with DNSH criteria for applicable objectives. 	Environment
CCM/CCA	5.5 Collection and transport of non-hazardous waste in source segregated fractions	<ul style="list-style-type: none"> Eligibility: Acea Ambiente, Aquaser, Ferrocarril and Tecnoservizi operate in the transport and intermediation of liquid and solid waste. Alignment: Non-hazardous waste, collected separately and transported by Acea Ambiente, Aquaser, Ferrocarril and Tecnoservizi, is separated at source and assigned for preparation for reuse or recycling. Overall compliance with DNSH criteria for applicable objectives. 	Environment
CCM/CCA	5.6 Anaerobic digestion of sewage sludge	<ul style="list-style-type: none"> Eligibility: Acea Ato 2, Gori and SII operate wastewater treatment plants that can be equipped with anaerobic digestion compartments to treat sewage sludge and produce biogas. Alignment: Acea Ato 2 anaerobic digestion plants are equipped with systems to detect the accidental releases of biogas, which is transformed into biomethane to be injected into the natural gas network. Overall compliance with DNSH criteria for applicable objectives. Non-alignment: Gori and SII plants do not use biogas directly for electricity production, which is therefore not injected into the natural gas network nor used as fuel. 	Water
CCM/CCA	5.7 Anaerobic digestion of bio-waste	<ul style="list-style-type: none"> Eligibility: Acea Ambiente and Orvieto Ambiente operate composting plants dedicated to the treatment of organic waste. Alignment: Acea Ambiente and Orvieto Ambiente plants produce biogas and digestate from the digestion process of separately collected municipal organic waste. In addition, they implement a monitoring and contingency plan to minimise methane leaks in plants. Overall compliance with DNSH criteria for applicable objectives. 	Environment
CCM/CCA	5.8 Composting of bio-waste	<ul style="list-style-type: none"> Eligibility: Acea Innovation and Acea Infrastructure are involved in the installation and management of composting plants. Alignment: composting plants produce compost from separately collected organic waste. The compost produced is used as fertiliser according to EU and Italian regulations. Overall compliance with DNSH criteria for applicable objectives. 	Commercial, Engineering & Infrastructure Projects
CCM/CCA	5.10 Capture and use of landfill gas	<ul style="list-style-type: none"> Eligibility: Orvieto Ambiente and Deco operate plants dedicated to capturing and utilising landfill gas. Alignment: all closed landfills did not become operational after 8 July 2020. Overall compliance with DNSH criteria for applicable objectives. 	Environment
CCM	6.15 Infrastructure enabling low-carbon road transport and public transport	<ul style="list-style-type: none"> Eligibility: Acea Innovation, Umbria Energy and Ecogena manage and install electric vehicle charging stations. Alignment: the Group's infrastructure is dedicated to vehicles with zero tailpipe CO₂ emissions. Overall compliance with DNSH criteria for applicable objectives. 	Commercial, Production
CCM/CCA	7.3 Installation, maintenance and repair of energy efficiency equipment	<ul style="list-style-type: none"> Eligibility: Acea Innovation, Umbria Energy and Ecogena are involved in the design, execution and marketing of energy efficiency devices. Non-alignment: Group companies do not, and are unable to, carry out an appraisal of the components used in the implementation of devices, in accordance with national legislation, because they install energy efficiency devices on third-party assets. 	Commercial, Production
CCM/CCA	7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	<ul style="list-style-type: none"> Eligibility: ASM Terni, Acea Innovation, Umbria Energy and Ecogena install wall-boxes and charging stations on private land. Alignment: Ecogena, Acea Innovation, Umbria Energy and ASM Terni deal with the installation, management and maintenance of electric vehicle charging stations. Overall compliance with DNSH criteria for applicable objectives. 	Water, Commercial, Production

Objective	Economic activities	Description of eligibility/alignment	Area
CCM/CCA	7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	<ul style="list-style-type: none"> Eligibility: ASM Terni, Adistribuzione and areti install and replace smart meters. Alignment: ASM Terni, areti and Adistribuzione install, manage and replace smart meters for gas, heating and electricity. Overall compliance with DNSH criteria for applicable objectives. 	Water, Networks and Public Lighting
CCM/CCA	7.6 Installation, maintenance and repair of renewable energy technologies	<ul style="list-style-type: none"> Eligibility: Acea Ambiente, Orvieto Ambiente, Deco, Tecnoservizi, Acea Innovation and Umbria Energy install solar photovoltaic systems. Alignment: companies carry out on-site installation, maintenance and repair of photovoltaic solar systems, solar hot water panels, heat pumps, electricity or thermal energy storage units, micro-cogeneration plants, heat recovery/heat exchanger systems. 	Environment, Commercial
CCM	9.3 Professional services related to energy performance of buildings	<ul style="list-style-type: none"> Eligibility: Ecogena carries out design and technical consulting activities aimed at increasing the energy efficiency of buildings. Alignment: the activity consists of energy efficiency consulting services, energy audits, energy performance contracting and energy services. 	Production
CE	2.2 Production of alternative water resources for purposes other than human consumption	<ul style="list-style-type: none"> Eligibility: Acea Ato 2, AdF and SII implement solutions for the reuse of purified wastewater for industrial/irrigation use. Alignment: AdF supplies purified wastewater from the Punta Ala plant for the irrigation of the golf course owned and operated by the Golf Punta Ala company. Overall compliance with DNSH criteria for applicable objectives. Non-alignment: SII does not have a specific authorisation to reuse water, and Acea Ato 2 activity has not yet started, so the technical screening criteria cannot be considered to have been passed. 	Water
CE	2.3 Collection and transport of non-hazardous and hazardous waste	<ul style="list-style-type: none"> Eligibility: ASM Terni and Umbriadue. are authorised to transport non-hazardous and hazardous special waste. Alignment: ASM Terni only allocates a proportion of waste for preparation for reuse or recycling. Source-separated waste is not mixed with other waste streams and the quality and quantity of the waste collected is continually monitored and evaluated. Non-alignment: Umbriadue does not guarantee compliance with all DNSH criteria. ASM Terni only allocates a portion of waste for reuse or recycling. 	Water
CE	2.7 Sorting and recovery of materials from non-hazardous waste	<ul style="list-style-type: none"> Eligibility: Acea Ato 2, Demap, Ferrocarr, Cavallari, Meg, S.E.R Plast and Tecnoservizi operate plants for the sorting and processing of non-hazardous waste streams into secondary raw materials. Alignment: Acea Ato 2, Cavallari, Ferrocarr, Meg, Demap, S.E.R Plast and Tecnoservizi produce secondary raw materials from separately collected and transported waste. For materials in which case separate collection is mandatory, the activity converts at least 50%, in terms of weight, of the separately collected non-hazardous waste into secondary raw materials suitable for the substitution of primary raw materials in production processes. 	Water/Environment
WTR	2.1 Water supply	<ul style="list-style-type: none"> Eligibility: Acea Ato 2, AdF, SII, Acea Ato 5, Gori, Gesesa, Acea Molise manage the water service, including water supply. Alignment: Acea Ato 2, Acea Ato 5, AdF, Gori, Gesesa and Acea Molise comply with the alternative criterion related to water leaks, calculated as required by ARERA Resolution 917/17, Ref. Macro-indicator M1. Overall compliance with DNSH criteria for applicable objectives. Non-alignment: SII does not always carry out loss recovery quantitative assessments and does not have concessions for all supply sources in use. Acea Ato 5 complies with the alternative criterion on water leaks, but is aligned at 79%. 	Water



Objective	Economic activities	Description of eligibility/alignment	Area
WTR	2.2 Urban waste water treatment	<ul style="list-style-type: none"> Eligibility: Acea Ato 2, AdF, SII, Acea Ato 5, Gori, Gesesa, Acea Molise and Umbriadue. manage the water service, including the treatment of wastewater. Alignment: SII and Gori carry out their operations without deteriorating the sound ecological status and potential of any water body; the plants are equipped with a collection system and a secondary treatment system. Not aligned: pollutants from discharges into receiving waters, in relation to Acea Molise, do not meet the maximum levels prescribed by national regulations, Umbriadue does not carry out assessments of direct greenhouse gas emissions from the wastewater system and Gesesa does not have sufficient information for the exceeding of criteria. Instead, AdF, Acea Ato 5 and Acea Ato 2 guarantee compliance with the criteria for only a portion of the plants. 	Water
WTR	4.1 Provision of IT/OT (information technology/operational technology) data-based solutions for loss reduction	<ul style="list-style-type: none"> Eligibility: Acea Ato 2 and Acea Ato 5 install technological solutions to control, manage, reduce and mitigate leaks in water supply systems. Alignment: Acea Ato 5 has implemented a WMS platform to display the entire water system of the company and manage the "Out of Service" mapping processes. Non-alignment: Acea Ato 2 is not aligned, as it does not meet the DNSH criteria related to the objectives of "Transition to a Circular Economy" and Pollution Prevention and Reduction. 	Water
PPC	2.1 Transport of hazardous waste	<ul style="list-style-type: none"> Eligibility: Cavallari transports hazardous waste prior to the treatment, recovery or disposal of materials. Alignment: Cavallari is authorised to transport hazardous waste as per the Environmental Operators Register, also on behalf of third parties. 	Environment
PPC	2.2 Treatment of hazardous waste	<ul style="list-style-type: none"> Eligibility: Berg operates a facility for the storage, treatment, disposal of hazardous and non-hazardous waste, and in particular performs biological treatment of hazardous waste and physical-chemical treatment. Alignment: Berg carries out its activities in accordance with the best available techniques and in a dedicated waste storage area. It also meets the criteria for handling mercury-containing waste. 	Environment

Notes

Activity 5.5-Collection and transport of non-hazardous waste in fractions separated at source overlaps with 2.3-CE-Collection and transport of non-hazardous and hazardous waste for the Environment sector.

With the rationalisation of activities, activity 5.7 -CCM- Anaerobic digestion of organic waste was valorised instead of 2.5 EC.

With the rationalisation of activities, activity 2.7 - CE - Sorting and recovery of materials from non-hazardous waste was valorised instead of 5.9 CCM.

Activity 2.1-Water Supply, overlaps with 5.1-CCM-Construction, Extension and operation of water collection, treatment and supply systems, Treatment and Supply Systems for the Water Division and 5.2-CCM-Renewal of Water Collection, Treatment and Supply Systems, which is being rationalised.

Activity 2.2-Urban Wastewater Treatment, overlaps with 5.3-CCM-Construction, Extension and operation of waste water collection and treatment systems, and 5.4-CCM-Renewal of Wastewater Collection and Treatment Systems for the Water Area.

Activity 2.2 (PPC) is eligible and aligned only for Berg, which contributed 0% to the three economic KPIs and is therefore not included in the relevant tables.

KPI DISCLOSURE SPECIFICATIONS

Accounting policy

This section describes the process for constructing the economic KPIs associated with eligible and aligned activities, in accordance with Annex I of Delegated Regulation (EU) 2021/2178. Specifically, the indicators were reconstructed using data from general, industrial and regulatory accounting; the share of each KPI for each economic activity is calculated in relation to total turnover, investments and operating costs exclusively for the expenses provided by the European Taxonomy.

Specifically:

- Eligible turnover: the numerator was considered to be the portion of consolidated net turnover derived from the sale of products and services, including intangible products and services (item Revenue from sales and services and other revenue and income in the consolidated income statement), related to economic activities eligible for the Taxonomy and, as the denominator, the total net turnover recorded in the Consolidated Financial Statements (ref. IAS 1, item 82, letter a).
- Eligible CapEx: the numerator considered was the portion of capital expenditure posted to the assets of the Consolidated Financial Statements, and defined based on the criteria under point 1.1.2.2 of the Delegated Act and the denominator was the total capital expenditure quantified on the basis of the criteria under point 1.1.2.1 of the Delegated Act. The denominator includes additions to tangible and intangible assets for the year, net of depreciation, amortisation, write-downs, revaluations and changes in fair value, excluding changes in fair value. Capitalised expenses were identified using data from the Consolidated Financial Statements, taking into account increases related to the IAS 16 categories (property, plant and equipment), IAS 38 (intangible assets) and IFRS 16 (leases) and IAS 40 (investment properties).

- Eligible opex: the numerator used was the portion of operating expenses associated with the eligible activities and defined on the basis of criteria under point 1.1.3.2 of the Delegated Act and the denominator was the total operating expenses quantified on the basis of the criteria under point 1.1.3.1 of the Delegated Act. The item includes direct non-capitalised costs that relate to research and development, building renovation measures, short-term lease, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of assets of property, plant and equipment by the undertaking or third party to whom activities are outsourced that are necessary to ensure the continued and effective functioning of such assets.

Acea has drawn up a Green Financing Framework and on the basis of this, in January 2023 issued a Green Bond totalling €700 million to support initiatives focused on four areas: water resource management; energy efficiency; circular economy; and green energy. With regard to the KPI relating to capital expenditure and turnover, there is a contribution from green bond issues for 2024 amounting to EUR 265 million or 18% of the eligible capex.

Detailed tables illustrating the percentages of turnover, capex, opex related to taxonomy-eligible, aligned and non-aligned activities are provided in Annexes (paragraph 5.2). The table relating only to activity on energy production from nuclear and fossil fuels (4.30 "High-efficiency cogeneration of heat/cool and electricity from gaseous fossil fuels") found to be eligible and not aligned, and the tables showing the percentages of alignment on all 6 taxonomy objectives are also provided.

It is specified that, within the templates in paragraph 5.2, only the amounts for economic KPIs with a value other than zero were reported.

2.2 CLIMATE CHANGE

ESRS E1; ESRS 2 IRO-1

2.2.1 CLIMATE CHANGE STRATEGY

Environmental protection is a fundamental premise of the Group's business strategy, with major investments in implementing actions contributing to mitigation and adaptation to the climate crisis, from reducing the emission intensity of activities to the transition to a circular economy.

The main lines of action are set out in the Sustainability Plan, which includes interventions for the resilience and digitisation of water and electricity networks to increase the climate change adaptability of infrastructure, energy efficiency, emission reduction and renewable energy production, as well as water resource protection projects that contribute to climate change mitigation and adaptation objectives. Acea also continues to offer its customers certified energy with a guarantee of origin, energy produced from renewable sources and gas with associated emission offsetting.

In 2024, Acea also updated the climate scenario analyses for the third year relating to the Group's different businesses according to the recommendations of the ISSB-TCFD system, which are now supplemented by the ESRS (E1) standards, to continue refining the ability to understand and manage physical and transition risks and

the related opportunities. This activity was also conducted in line with Article 19 of the CSRD, which requires companies to provide detailed information on how climate change could affect their activities, by analysing physical and transitional risks.

ESRS E1-1; ESRS 2 MDR-T Acea's climate strategy for climate change mitigation envisages a process to reduce climate-altering emissions with a 'Well below 2° C' target. This commitment has been validated by the Science Based Targets initiative (SBTi), and is aimed at limiting the global temperature increase to well below 2°C compared to pre-industrial levels, in line with the trajectories of the Paris Climate Agreement. Acea's targets are aligned with the EU Paris-Aligned Benchmarks, as they envisage a reduction in emission intensity of more than 50% from the baseline year and formalised targets on Scope 3 emissions. The commitment, which was not formalised through a specific "Climate Change Mitigation Transition Plan" as defined by the ESRS, was presented to the Board of Directors as part of the Business Plan, of which it is one of the basic elements. The current commitment includes targets to 2032 and will



be supplemented in 2025 with climate neutrality targets to 2050. The paragraphs below outline the emission reduction targets, the decarbonisation levers identified, the actions and resources envisaged in the Plan, and the related final figures to 2024. The decarbonisation levers underlying the achievement of the SBT targets mainly include:

- the increase in renewable energy production (Scope 1 target);
- the implementation of energy efficiency measures at facilities and premises and increased energy purchases with G.O. (Scope 2 target);
- the increase in the portion of energy sold with G.O. and the gradual reduction of gas distribution, in line with market developments that envisage an increasing electrification in consumption (Scope 3 target).

With regard to the Group's direct emissions, we note that locked-in emissions are mainly from waste-to-energy plants amounting to approximately 293,000 tonnes of CO₂ in 2024, which are included in the calculation for the purposes of SBTi targets. In the scope of the Group's decarbonisation programmes, feasibility studies are underway on CCSU (Emission capture and storage) and an initial pilot plant is planned at the new waste-to-energy plant that will be built in Santa Palomba to serve the capital. The impacts, risks and opportunities related to climate change are outlined below, with details on the transition risks. With regard to the objectives, planned actions and respective allocated resources, reference is made to Section 2.2.3 "Climate Change Targets, Actions and Resources".

ESRS 2 SBM-3 ESRS 2 IRO-1 The impacts, risks and opportunities related to climate change have been identified through a dou-

ble materiality analysis with a process that covers the entire Group value chain and actively involves internal and external stakeholders, as described in detail under General Information in paragraph 1.6 "Stakeholder engagement", and are reported in the table of IROs relevant to the topic.

Specifically, Acea periodically conducts analyses on climate risk scenarios to strengthen its resilience strategies. The results of the analysis conducted in 2024 are shown below. The analysis involved the Group's operating companies that manage strategic assets such as power generation plants, water and electricity distribution infrastructure. The infrastructure considered is located in geographical areas where they are exposed to physical hazards that may lead to periods of operational disruption. Major climatic events that could compromise business operations include heat waves, fires, floods, heavy rainfall and prolonged periods of drought. Based on these factors, a climate risk map was developed to assess Acea's vulnerability and, where possible, quantify the economic impact, in line with CSRD guidance and, in particular, ESRS E1 standard, as described below. The analysis of resilience to climate change considers a short to medium and long-term time horizon.

The climatic risk analyses to assess transition and physical risks were carried out by carefully harmonising the methodology in line with the recommendations of the ISSB-TCFD system with the Group's Enterprise Risk Management methodology, with the aim of ensuring that the analyses carried out are aligned with the Group's strategic objectives, as described in paragraph 1.7 "Double materiality process, impacts, risks and opportunities".

Subtopic	Sub-subtopic	IRO	Description	Positive/Negative/ Current/Potential	Time frame	Value chain
Climate change mitigation		I impact	Innovation of industrial processes to support ecological transition	+	medium	• upstream • own operations • downstream
Climate change mitigation		I impact	Development of energy models based on electrification of consumption and production from renewable sources	+	medium	• own operations • downstream
Energy		I impact	Reducing energy consumption by optimising industrial processes	+	long	• upstream • own operations
Climate change mitigation		I impact	Production of direct greenhouse gas emissions, related to the use of fossil fuels and waste-to-energy, and indirect emissions	-	medium	• upstream • own operations • downstream
Climate change adaptation		I impact	Low resilience of plants, infrastructure and networks to the effects of climate change	-	long	• own operations
Climate change adaptation		R risk	Damage to infrastructure and production sites due to the effects of climate change (rivers flooding, storms)		long	• own operations
Climate change mitigation		R risk	Tightening/introduction of carbon pricing schemes with effects on industrial processes		medium	• own operations
Climate change mitigation		R risk	Tightening of regulations related to the marketing of products and services with a low environmental impact (Green Claims Directive)		medium	• own operations
Climate change mitigation		O opportunities	Growing push towards renewable energy, with business opportunities in the green energy production sector		long	• own operations

+ Positive impact; - Negative impact; ○ Effective; ○ Potential



Transition risks

Various climate scenarios developed by international organisations, including in particular the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC), were used to forecast the evolution of transition risks. The main scenarios used include:

- STEPS Stated Policies Scenario: based on climate policies already implemented by governments; it represents a future in which only the effects of current policies are reflected without necessarily achieving emission-reduction targets;
- APS Announced Pledges Scenario: based on climate commitments announced by countries, although not yet supported by concrete policy plans. It is a scenario that reflects a future with greater ambitions compared to STEPS;
- SDS Sustainable Development Scenario: represents a “well below 2° C” scenario and is based on an increase in clean energy policies and investments to achieve the main sustainable development goals;
- IEA NET ZERO by 2050 (NZE) Scenario: envisages achieving climate neutrality by 2050. This ambition would require a radical change in the energy and industrial sectors, with a transition to renewable energy sources, massive investments in carbon capture technologies and the phasing out of fossil fuels;
- SSP Shared Socio-economic Pathways Scenarios: five scenarios describing possible global socio-economic developments up until 2100; they help to assess the impact of climate policies on greenhouse gas emissions and understand different trajectories of socio-economic development.

For the identification of transitional climate risks and opportunities, an initial screening phase was conducted to identify the specific challenges of each business sector taking into account sector characteristics, market dynamics, emerging trends and existing and emerging regulations, with specific reference to European regulations and Directives, as well as global standards such as those defined by the TCFD taskforce and the Paris Agreement. As from January 2024, the TCFD (Task-Force on Climate-Related Financial Disclosure) transferred its mandate to the ISSB (International Sustainability Standards Board), the independent sustainability reporting

standard-setting body of the IFRS Foundation. Consequently, in this document we directly quote the ISSB-TCFD system meaning those same TCFD Recommendations. The analysis also took into account best practices adopted by global organisations and recommendations from sector and scientific reports.

The preliminary screening identified the main climate risks and opportunities that could potentially affect the Group's operations and value chain. The long list of potential transition risks and the preliminary results of the analysis were submitted to the risk owners of Group companies to prioritise the risks, based on the specific characteristics and activities of each company. In this way, the most relevant risks were identified for each corporate entity, allowing for a targeted analysis of potential vulnerabilities and opportunities, in line with the operational and strategic specific characteristics of individual entities. This approach was complemented by discussions with the corporate functions involved, identified on the basis of the pertinence and relevance of the risks and opportunities identified. The process included plenary meetings and one-on-one interviews to provide a better understanding of the risks, stimulate internal dialogue, reinforce the validity of the analysis, and at the same time, promote a corporate culture geared towards proactive risk management, the adoption of sustainable practices and the identification of opportunities.

With respect to relevant transition risks, companies are working to implement emission reduction strategies by investing in innovative technologies and/or adopting offsetting measures to also mitigate the financial impact, as described in the paragraphs below.

Physical risks

For the analysis of the Group's physical risks the IPCC's Representative Concentration Pathways (RCPs) scenarios were considered. Each scenario is associated with a level of global warming and provides an overview of how greenhouse gas emissions could evolve depending on the policies and practices adopted at international level. The following scenarios were considered for the analysis:

RCP Scenario	Scenario description
RCP 8.5	RCP scenario 8.5 is the most extreme; it predicts an increase of more than 4° C by 2100 and it is believed that this could be reached if no mitigation policy is adopted . The high economic and demographic growth rates described in the Shared Socio-economic Pathway 5 (SSP5) Scenario favour this scenario, triggering most of the so-called climate “tipping points” with consequences that are difficult to model.
RCP 4.5	RCP scenario 4.5 is the one considered most likely considering countries' current commitments . It envisages a temperature increase of between 2 and 3° C by 2100, well beyond the limits of the 2015 Paris Agreement and the Kyoto Protocol. Considering current commitments by countries, it is considered likely that 2.5°C will be reached by 2100.
RCP 2.6	RCP scenario 2.6 is in line with the Paris/Kyoto agreements , with a temperature increase of less than 1.5° C by 2100, and calls for a 70% reduction in emissions between 2010 and 2100 with substantial changes in energy use and greenhouse gas emission reduction programmes by also acting on carbon dioxide, in addition to other gases with a very high Global Warming Potential (GWP) (methane, nitrous oxide, sulphur hexafluoride and other fluorinated gases).

For the representation of Business Interruption Days (BID) we chose to focus on the RCP 4.5 climate scenario, which represents projections that are closest to the current conditions and trajectories that could materialise, and the RCP 8.5 scenario, which represents the worst-case trajectory that could occur in the absence of significant changes in climate policies.

The analysis for the identification of physical climate risks was based on a structured methodology, consistent with the main international reference standards and guidelines.

The main climate risks that could affect the Group's assets were selected according to a logic of relevance, classifying them *inter alia*, in line with the requirements of the European Taxonomy DNSH into:

- acute physical risks, which include extreme events such as storms, flash floods and forest fires, in which case the impact has been calculated in Business Interruption Days (BID);
- chronic physical hazards, representing gradual climate changes, such as desertification, drought or changes in rainfall.

The analysis was conducted taking into account the risk and vulnerability for economic activity related to physical climatic hazards. An analysis was also conducted in this regard on the geographical coordinates of the main assets, including altitude. For the assessment, data from the IPCC ATLAS database, the CORDEX-Copernicus project and literature data from sources such as Nature or MDPI were used, and a climate projection analysis programme from seven different climate models was used. The programme calculates the average of the climate projections and the distributions at the 25% and 75% percentiles, specific to different geographical areas, providing a simulation for the prediction of climate change in different regions in the different scenarios, with an indication of the average prediction value, the expected variability and uncertainties associated with the climate projections provided by the different models.

The results were prioritised with the cooperation of Group companies' contact persons who, on the basis of their knowledge of past risk situations, provided further specific criteria appropriate for the classification of results:

- **Water area:** for companies operating in the Integrated Water System sector, the prioritisation of results was carried out with different criteria for the different types of plants. For sewage treatment plants, the "population equivalent" criterion served by each plant was adopted; for sewage and water lifts, prioritisation was based on energy consumption; for springs and reservoirs, the hourly flow rate criterion was used, expressed in litres per second;
- **Environment area:** for companies operating in the waste management, treatment and disposal sector, the analysis focused on the most economically important assets, such as waste-to-energy plants, excluding offices;
- **Production area:** for electricity production assets, the prioritisation criterion was established according to the type of plant: for solar panels, hourly production was used; for hydroelectric power plants, which represent greater value both economically and in terms of production, all results were investigated without additional selection criteria;

- **Networks and public lighting area:** for the company *areti*, which manages the electricity distribution network, the criterion adopted to assess the relevance of results was based on the annual transformation capacity of each primary substation.

ESRS E1-9 In the analysis, the estimated economic impacts are defined by considering two aspects: the loss of revenue associated with BIDs (Business Interruption Days) and the damage to the asset; no detailed economic quantification is available for the current year.

2.2.2 CLIMATE CHANGE POLICIES

ESRS E1-2 The issue of climate change is a priority for the Acea Group, which is committed to identifying, assessing, managing and, where possible, reducing the impacts and risks generated by its operations or those linked to players across the value chain, both in terms of mitigation and adaptation.

The Group has formalised and adopted a number of commitments in this respect over the years. Specifically, the *Code of Ethics* defines climate change commitments within the broader sense of "environmental protection and enhancement", with the aim of defining a mitigation and adaptation strategy that includes measures to make energy use more efficient, enhance and exploit renewable sources, and increase infrastructure resilience. The Group's commitment to combating climate change is also confirmed in the "Integrated Management Systems and Sustainability Policy", corresponding to the call for specific focus on this issue in all technical management regulations, expressed by the ISO standard setter. Furthermore, in being aware that the impacts of climate change could affect the protection of human rights, Acea has reaffirmed its commitments to manage its operations in a way that is appropriate to containing this phenomenon in the Human Rights Policy.

Group policies are described in Section 1.6 of this document.

2.2.3 CLIMATE CHANGE TARGETS, ACTIONS AND RESOURCES






ESRS E1-4; ESRS 2 MDR-T With a view to managing significant climate-related impacts, risks and opportunities, the Group has formalised specific strategic objectives, in line with the policies adopted, so as to contribute to mitigating and adapting to climate change, which are included in the Sustainability Plan that also outlines the actions and investments for the action lines developed by operating companies.



Action lines ▼	Action ▼	IRO ▼	Description ▼
Strategic aqueduct works	<ul style="list-style-type: none"> ► Peschiera and Marcio works ► Other aqueduct works 	I	<ul style="list-style-type: none"> ► Innovation of industrial processes to support ecological transition ► Low resilience of plants, infrastructure and networks to the effects of climate change ► Damage to infrastructure and production sites due to the effects of climate change (rivers flooding, storms)
		I	
		R	
Strengthening the power grid	<ul style="list-style-type: none"> ► Network extension ► Network continuity ► Strengthening medium-voltage substations 	I	<ul style="list-style-type: none"> ► Low resilience of plants, infrastructure and networks to the effects of climate change ► Damage to infrastructure and production sites due to the effects of climate change (rivers flooding, storms)
		R	
Digitalisation	<ul style="list-style-type: none"> ► Broadband connectivity ► Smart Grid ► Business continuity ► Water and sewerage remote control ► Networks remote control 	I	<ul style="list-style-type: none"> ► Innovation of industrial processes to support ecological transition ► Development of energy models based on electrification of consumption and production from renewable sources
		I	
Decarbonisation	<ul style="list-style-type: none"> ► Photovoltaic ► Hydroelectric ► Renewables for self-consumption ► Energy efficiency ► Biomethane ► Purchasing electricity with G.O. ► Electricity sales with G.O. ► ESCO installations 	O	<ul style="list-style-type: none"> ► Growing push towards renewable energy, with business opportunities in the green energy production sector ► Development of energy models based on electrification of consumption and production from renewable sources ► Reducing energy consumption by optimising industrial processes ► Production of direct greenhouse gas emissions, related to the use of fossil fuels and waste-to-energy, and indirect emissions ► Tightening of regulations related to the marketing of products and services with a low environmental impact (Green Claims Directive)
		I	
		I	
		I	
		R	

With reference to the risk related to the “Tightening/introduction of Carbon Pricing schemes with effects on industrial processes”, it is noted that Acea currently manages this risk by adopting a strategy of purchasing CO₂ quotas in stages throughout the year, as described in the paragraph on Climate Change Metrics below.

ESRS 2 MDR-T, ESRS E1-3 The objectives and investments envisaged in the Sustainability Plan until 2028 are shown below, with the progress in the actions and related investments at 31.12.2024, with reference to the lines of action that contribute to the management and mitigation of impacts and risks and the development of opportunities relevant to climate change. For actions related to these strategic lines, only the capex was monitored, because opex represents a non-significant portion.

Action line ▼	Action (company) ▼	Target @ 2028 ▼	Target progress ▼	Overall 2024 ▼	Baseline 2023 ▼	Capex 2028 (EUR M) ▼	Capex 2024 (EUR M) ▼
Strategic aqueduct works	► Peschiera and Marcio Works (Acea Ato 2)	► Peschiera, completion of the planning/authorisation process	 84%	-	-	1,266	133.6
		► Marcio, completion of 4 works	 47%	-	-	-	-
	► Other aqueduct works (Acea Ato 2)	► Realisation 32 works	 6%	2 works completed, 5 in progress	-	129	20.5
Strengthening the power grid	► Network expansion (areti)	► 600 km prepared for connection of new loads	 13%	80 km	-	167	33.3
	► Network continuity (areti)	► Work on 240 km of LV network and 840 km of MV network	26% LV 15% MV	63 km LV 126 km MV	-	476	56.1
		► 285,000 beneficiary users	 16%	44,869 users	-	-	-
	► Strengthening medium-voltage substations (areti)	► Work on 34 primary and 3,800 secondary substations	38% primary 77% secondary	13 primary substations 2,929 secondary substations	-	100	34

Action line ▼	Action (company) ▼	Target @ 2028 ▼	Target progress ▼	Overall 2024 ▼	Baseline 2023 ▼	Capex 2028 (EUR M) ▼	Capex 2024 (EUR M) ▼
Network digitisation	► Broadband connectivity (areti)	► 2 primary substations	50%	1 primary substation		16	5.2
		► 6,100 secondary substations	24%	1,463 secondary substations			
	► Smart Grid (areti)	► 333,000 population equivalent beneficiaries	In progress	-	-	9	4.6
	► Business continuity (areti)	► 0 interruptions at the control room	In progress	2 interruptions	-	52	2.3
	► Network remote control (areti)	► 4,600 LV substations	26%	603	581	92	20.1
		► 12,985 MT substations	77%	1,334	8,667		
	► Sewer water remote control (Acea Ato 2, Acea Ato 5, AdF)	► 2,193 remote-controlled sewage plants	64%	49	1,345	20	2
		► 3,206 remote-controlled drinking water plants	100%	1,830	2,141	19	3.8
Water resilience	► Water requirements modelling (AdF)	► 24 Municipalities covered by the water supply plan	50%	3 Municipalities	9 Municipalities		
	► Aquifer modelling (Gori)	► Total coverage of 5 aquifers, 5 well fields and 2 springs	In progress				
Decarbonisation	► Photovoltaic (Acea Produzione)	► 870 MW realised and operational	29%	153.6 MW installed	101 MW under man- age- ment	318	16.2
	► Renewables for self- consumption (Acea Ato 2, Gori, AdF, Acea Ambiente)	► 17 MW of installed photovoltaic	6%	1 MW		14	0.7
	► Energy efficiency (Acea Ato 2, Acea Ato 5, AdF, Gori, areti, Acea SpA)	► 42 GWh of energy saved (vs 2023)	27%	11 GWh		157	14.8
	► Biomethane (Acea Ato 2)	► 1.2 Mcm/year produced	10%	0.12 Mcm		2	1.8
	► Purchasing electricity with G.O. (Acea Energia)	► 0.5 TWh of purchased green energy per year	69%	0.3 TWh		-	
	► Electricity sales with G.O. (Acea Energia)	► 75% green energy sold	-	46%		-	
	► ESCO installations	► 40 MW installed at customer sites (PV and CHP)	5%	-	2 MW	44	-
Biodiversity (abroad)	► Árboles para el Merendón (Aguas de San Pedro)	► +350,000 trees	24%	83,331			



ESRS E1-3; ESRS 2 Below is a description of the main actions implemented by Group companies in 2024, summarised in the previous Plan monitoring table.

The strategic works envisaged by the Plan in all areas, mainly water and electricity networks, contribute to the goal of adapting to climate change as they aim to increase infrastructure resilience and safety and, consequently, their ability to react and manage extreme phenomena by minimising service disruptions.

Specifically, in 2024, Acea Ato 2 participated in the definition of the Municipality of Rome's Climate Adaptation Strategy, to which it contributes through investments to increase resilience and safety and the strengthening of the drinking water and purification systems, the creation of a network for the distribution of purified wastewater for reuse for non-drinking purposes, and specific measures to mitigate the impact of heat waves and rising temperatures, including the extension of the drinking water network in squares and public spaces.

Works in progress mainly refer to:

- the continuation of the planning and authorisation process for the construction of the second section of the Peschiera-Marcio aqueduct, one of the main aqueducts in Europe, which today guarantees water supplies to 80% of Romans with water of the highest quality and purity. The second line will increase infrastructure resilience and secure the water supply of the capital and certain areas in upper Lazio;
- the commencement of the construction of the 4 strategic works on the Marcio aqueduct: Marcio aqueduct 1st lot, Ottavia Trionfale pipeline, 1st phase of the doubling of the VIII Sifone, Monte Castellone pipeline;
- the commencement of five new strategic works to increase the resilience and safety of the aqueduct system serving ATO 2 Lazio Centrale and neighbouring ATOs, specifically: securing the Frascati Bunker, a new drinking water plant serving the Spolverino Water Centre, works in the municipality of Trevignano, a connection between the Villa Parodi and Altipiani di Arcinazzo reservoirs, and an interconnection near Civitavecchia;
- Works to strengthen the electricity grid enabling the connection of new loads and distributed generation on electricity grids, and aimed at mitigating and/or preventing the risk of user disconnections;
- the programme of digitisation and remote control of electricity grids to increase the flexibility and resilience of the network. Specifically, with reference to the smart grid, activities were completed to create the ADMS platform for managing the MV and LV network, and tools are currently being developed to manage energy flexibility on the electricity distribution network to rebalance loads in critical grid situations.

In addition, in 2024, areti drew up the Resilience Plan, in accordance with Article 77 of the Consolidated Act on the Quality of Electricity [Testo Integrato della Qualità Elettrica] (TIQE - Annex A of Resolution 646/2015/R/eel and subsequent amendments), which includes works aimed at limiting the probability of disconnection in the face of the main risk factors affecting the network. The plan contains the interventions aimed at improving the resilience index of the medium and low voltage electricity network in the metropolitan city of Rome. The main critical risk factors assessed in the Plan refer to flooding due to particularly heavy rainfall or landslides and floods caused by hydro-geological instability, and heatwaves associated with prolonged periods of drought.

NEW PHOTOVOLTAIC WINDOW AT THE VATICAN MUSEUMS

In 2024 Acea built the new photovoltaic window at the Vatican Museums' Cortile delle Corazze to produce renewable energy, with an important aesthetic and functional value. Replacing the existing glass panes with new photovoltaic glass has resulted in a roof that provides thermal insulation and a shading effect that significantly increases the liveability of the spaces. The work, completed in just six months, was carried out without interrupting museum activities and without any disruption to visitors. In addition to the Corazze Courtyard, the project also includes the photovoltaic glass roofing of the Vignaccia warehouse in the Vatican Gardens, which will be completed by early 2025. In total, the two plants will provide 350 kW of peak photovoltaic power for a total production of around 500 MWh of electricity per year. The intervention was completed with a new lighting system to improve the lighting efficiency of the site and with the installation of 20 "fast" charging points on 10 stations and 2 "ultra fast" charging points on an additional station at the side of the Aula Paolo VI entrance to encourage the spread of electric mobility.

Actions aimed at climate change mitigation encompass investments in decarbonisation by Group companies, in line with the decarbonisation levers required by SMTi targets. The 2024 actions include:

- the commissioning of new Acea Produzione photovoltaic plants mainly in Lazio (Licodia Eubea, Nepi, Bomarzo, Canino, Picinisco, Ferentino and Scurcola) with an installed capacity of 153.6 MW;
- the upgrading of biogas plants at the Roma Nord and Roma Est treatment plants managed by Acea Ato 2 for the production of biomethane, with the completion of the sustainability certification, in accordance with Decree-Law 7/8/2024 on biofuels;
- the purchase of approximately 0.34 TWh of electricity in 2024, with a guarantee of origin (30% of total Group electricity consumption) for consumption by Acea Ato 2, Ambiente, Acea Innovation, Serplast, AdF, Geal, Nuove Acque and Orvieto Ambiente;
- Acea Energia's sale to end customers of approximately 2.5 TWh of electricity G.O. (46% of total electricity sold), and the offsetting of CO₂ emissions related to the quantities of methane gas distributed and sold during the year through the purchase of voluntary carbon credits, as reported in paragraph below;
- the implementation of the energy efficiency measures programme at the head offices and facilities of Group Companies to reduce energy consumption and related emissions. Specifically, the company areti contributes to the objective through interventions to reduce technical energy losses for the adaptation to the standards of the nominal voltages of the HV, MV and LV networks and optimise the MV network set-up (also thanks to the use of MV/LV transformers with very low losses).

With regard to foreign companies, mention should be made of the work carried out by Aguas de San Pedro in Honduras, where the reforestation project in the Merendón area is continuing, which will lead to approximately 1.5 million fruit trees being planted by 2028, with a consequent benefit for the local communities also linked to employment opportunities. This project aims to reduce the environmental damage caused by deforestation through agroforestry practices and environmental education. To date, 1,200,000 trees have been planted, contributing to the capture of CO₂ emissions, the conservation of biodiversity and the protection of ecosystems.

ESRS 2 MDR-T The actions included in the Plan under the Decarbonisation action line contribute to achieving the targets validated by SBTi to 2032 (compared to the base year 2020), and already described in the climate change strategy:

- **Scope 1:** Reduce the intensity of direct emissions per unit of energy produced by 56% compared to the base year value (i.e. 0.71 tCO₂e/MWh);
- **Scope 2:** reduce indirect emissions related to energy withdrawals from the grid by 32% compared to the base year value (or 301,649 tCO₂e);
- **Scope 3:** Reduce indirect emissions related to the sale and distribution of natural gas by 30% compared to the base year value (or 439,514 tCO₂e);
- **Scope 1+3:** Reduce the intensity of indirect emissions related to the production and sale of electricity by 56% compared to the base year value (or 0.42 tCO₂e/MWh).

Performance monitoring for the first three years of SBTi, published on the Acea's website as required by SBTi, showed significant progress in the achievement of targets for the reduction of direct emissions and those related to the sale of electricity. Emissions related to electricity withdrawals will be reduced over the next few years thanks to energy efficiency measures and the increased use of energy purchases with Guarantees of Origin, while emissions related to methane gas will be reduced in the second half of the period, thanks also to the progressive electrification of consumption in Italy, as already envisaged when setting the targets.

Overall, the decarbonisation actions implemented by the various companies in the Group contributing to the SBTi targets, involved investments totalling EUR 33.5 million.

2.2.4 METRICS RELATED TO CLIMATE CHANGE

ESRS E1-5 Energy consumption

The Group's total energy consumption in 2024 was approximately 3,560 GWh, of which 37% was from renewable sources. Of the non-renewable portion, about 20% refers to methane consumption, mainly used for power generation processes and heating, while 36% relates to Solid Recovered Fuel (SRF) and pulper for waste-to-energy processes at the San Vittore del Lazio and Terni plants. Electricity consumption, amounting to about 1 TWh, of which about 35% was purchased from certified renewable sources with G.O., is mainly attributable to the withdrawal and distribution processes of potable and non-potable water, purification systems, and consumption by plants and premises. With reference to the Other items, it is noted that: the figure included in Renewable consumption (8 MWh) refers to biodiesel fuel for automotive use used by Acea Molise; the figure included in Purchased renewable consumption (6 MWh) refers to consumption from hydroelectric renewable sources purchased and consumed by Consorzio Agua Azul; the figure in Consumption of self-generated non-fuel renewable energy (4,927 MWh) mainly represents self-consumption by Acea Produzione hydroelectric plants.

ESRS E1-5 Measurement, calculation and/or estimation methodology

Data on the consumption of fuels used for plant operations and space heating (e.g. methane, diesel and petrol) are measured by on-site meters with uncertainties ranging from ± 0.5% to ± 2%. The consumption of biogas, photovoltaics and paper mill FSCs/pulper come from meters (with an uncertainty of ± 1%). Data on electrical, thermal and cooling energy consumed at the Group's facilities and used, for example, for water lifting plants are measured by meter readings with an uncertainty of ± 1%. The electricity consumption at company offices is measured by reading the bills provided by Acea Energia. With regard to the energy consumption of the Environment segment, for Acea Molise and Gesesa, the figures for December are estimated on the basis of historical data. The quantities of fuel used for the fleet of Group Companies comes from fuel cards that record the filling up of vehicles.


ESRS E1-5 Total energy consumption expressed in MWh

ESRS_E1-5	Type of sources	31/12/2024
		MWh
	Methane - Natural Gas	419,929
	Diesel	67,989
	LPG	447
	Petrol	11,940
	FSCs - non-renewable portion	808,180
	Electricity	675,252
	Thermal energy	71
	Refrigeration energy	35
	Technical network losses	279,070
	Non-renewable sources	2,262,913
	Fuel consumption for renewable sources, including biomass	Biogas self-consumed in landfill (including flared biogas) 78,708
		Biogas self-consumed in digestion plant (including flared biogas) 79,704
		FSCs - renewable portion 798,543
		Other 8
	Total	956,963
	Consumption of electricity, heat, steam and cooling purchased or acquired from renewable sources.	Electricity G.O. 344,996
		Thermal energy - Renewable 3,856
		Photovoltaic 2,355
		Other 6
	Total	351,213
	Consumption of self-generated non-fuel renewable energy	Photovoltaic 2,298
		Other 4,927
	Total	7,224
	Renewable sources	1,315,400

ESRS E1-5 Details of source type iro total consumption

ESRS_E1-5	31/12/2024
	Percentage
Portion of fossil sources iro total energy consumption (%)	63%
Portion of nuclear sources iro total energy consumption (%)	0%
Portion of renewables iro total energy consumption (%)	37%

ESRS E1-5 Details of fossil energy consumption in high climate impact sectors

	31/12/2024
Consumption of fuel from coal and coal products (MWh)	0
Consumption of fuel from crude oil and petroleum products (MWh)	80,301
Fuel consumption from natural gas (MWh)	419,929
Fuel consumption from other non-renewable sources (MWh)	808,180
Consumption of electricity, heat, steam and cooling from fossil sources, purchased or acquired (MWh)	888,245

ESRS E1-5 Energy intensity rate

The energy intensity rate for the Group's high-impact sectors is 0.0006 MWh/€. The rate represents the ratio of energy consumption expressed in MWh to consolidated net revenue of the high-impact sectors. According to the NACE classification defined in Delegated Regulation (EU) 2022/1288, the sectors considered in the calculation are: D - electricity, gas, steam and air conditioning supply, E - water supply, sewerage, waste treatment and sanitation, and F - construction.

The revenue corresponding to these segments, amounting to EUR 3,660,861,000, represent part of the Group's total net revenue in the "Notes to the Consolidated Income Statement".

Energy consumption along the supply chain

Acea constantly raises awareness and monitors its supply chain with respect to specifically, energy issues using a specific questionnaire submitted to a representative panel of suppliers. In addition, the questionnaire also includes a specific section on water withdrawals, broken down according to process and civil use, with the aim of promoting supplier awareness regarding water use.

In 2024, the questionnaire was completed by 47 suppliers (out of the 100 invited), representing 42% of the total expenditure on goods/services and works, with data on: fuel consumption, electricity, fuel and refrigerant gas.

Total energy consumption for the supply chain was then estimated by comparing the consumption indicated in the questionnaire with total purchases for the year, which amounted to 95,389 MWh.

ESRS E1-5 Energy production

The Group produces electricity, totalling about 982 GWh through the Production and Environment areas. More than 60% (around 600 GWh) comes from renewable sources, mainly from hydroelectric plants (52% of the renewable portion) and from waste-to-energy from paper pulp and FSCs (25%) at the two plants in San

Vittore del Lazio and Terni, as well as photovoltaics (10%). Photovoltaic production includes energy used for self-consumption. Non-renewable production relates to thermoelectric plants, mainly including the high-efficiency cogeneration plant at Tor di Valle fuelled by methane gas, and the non-renewable portion related to waste-to-energy managed by Acea Ambiente.

In 2024 Acea will have the following fleet of power generation plants:

- 8 hydroelectric power stations located in the Lazio, Abruzzo and Umbria regions for a total of 124.2 MW;
- 2 thermoelectric power stations located within the Municipality of Rome area: Montemartini (78.3 MW) and Tor Di Valle (28.5 MW), for 106.8 MW in total installed capacity;
- a photovoltaic park with a total capacity of approximately 170 MW, of which 153.6 MW will become operational by 2024;
- 2 waste-to-energy plants at San Vittore del Lazio and Terni, with a total available gross electrical power of approximately 62.5 MW.

In addition, the Environment area produces electricity from biogas derived from the anaerobic digestion process at the Orvieto Ambiente technology hub, the sites managed by Deco and Ecologica Sangro and the Acea Ambiente composting plants at Aprilia and Monterotondo Marittimo. The figure for "Other" under energy production from renewable sources refers to biomethane produced by Acea Ato 2.

ESRS E1-6 Measurement, calculation and/or estimation methodology

The energy generated by the plants is measured by meters installed on site, with uncertainties varying between $\pm 0.5\%$ and $\pm 5\%$ depending on the type of energy produced. As an example, the thermal energy produced in the Tor di Valle cogeneration plant is measured at the generator discharge pipes, with an uncertainty of $\pm 2\%$.

ESRS E1-5 Energy production from renewable sources

ESRS_E1-5	31/12/2024
	MWh
Hydroelectric energy	313,735
Photovoltaic energy	59,514
Biogas	76,658
FSC/Pulper - Renewable portion	147,595
Other	1,260
Energy production from renewable sources	598,762

Including the photovoltaic energy production of the plants operated by the equity-consolidated companies, total production is at approximately 173 GWh.

ESRS E1-5 Energy production from non-renewable sources

ESRS_E1-5	31/12/2024
	MWh
Thermoelectric power - from non-renewable sources	132,879
Thermal energy - from non-renewable sources	101,214
FSC/Pulper - non-renewable portion	148,742
Energy production from non-renewable sources	382,835



ESRS E1-6 Greenhouse gas emissions

GHG emissions are quantified according to the GHG Protocol guidelines by classifying them into direct (Scope 1) and indirect (Scope 2 and Scope 3) emissions. With reference to Scope 3, it is noted that the table below only shows the categories relevant to

the Group, i.e.: goods and services purchased, capital goods, fuel and energy related activities (not included in Scope 1 or 2), business travel, use of products sold, investments. The table below shows the emissions classified against SBTi targets and CSRD perimeter.

ESRS E1-6 Gross emissions Scope 1, Scope 2, Scope 3

	Retrospective				Goals and target year			
	SBT 2020	SBT 2023	CSRD 2024	%N/N-1	2025	2030	2032	Annual target % / base year
Scope 1 emissions [tCO ₂ e]								
Scope 1 emissions	428,043	372,227	398,813	NA	NA	NA	NA	NA
% of Scope 1 emissions covered by regulated emissions trading systems (%) (*)	39%	14%	13.4	NA	NA	NA	NA	NA
Scope 2 emissions [tCO ₂ e]								
Location based Scope 2 emissions	396,740	343,543	410,891	NA	NA	NA	NA	NA
Market-based Scope 2 emis- sions (tCO ₂)	301,649	305,888	421,755	NA	NA	NA	205,121	NA
Scope 3 emissions [tCO ₂ e]								
Total indirect emissions Scope 3	3,523,006	NA	2,306,415	NA	NA	NA	NA	NA
1 Purchased goods and services	9,713	NA	20,745	NA	NA	NA	NA	NA
2 Capital goods	1,929	NA	4,517	NA	NA	NA	NA	NA
3 Fuel and energy-related activities (not included in Scope 1 or 2)	2,850,252	1,682,901	1,537,403	NA	NA	NA	NA	NA
4 Upstream transport and distribution	NA	NA	NA	NA	NA	NA	NA	NA
5 Waste generated during operations	91,108	NA	NA	NA	NA	NA	NA	NA
6 Business trips	46	NA	336	NA	NA	NA	NA	NA
7 Employee commuting	1,937	NA	NA	NA	NA	NA	NA	NA
8 Leased assets upstream	NA	NA	NA	NA	NA	NA	NA	NA
9 Downstream transport	NA	NA	NA	NA	NA	NA	NA	NA
10 Processing of products sold	NA	NA	NA	NA	NA	NA	NA	NA
11 Use of products sold	439,514	680,241	697,006	NA	NA	NA	307,660	NA
12 End-of-life treatment of products sold	NA	NA	NA	NA	NA	NA	NA	NA
13 Leased assets downstream	NA	NA	NA	NA	NA	NA	NA	NA
14 Franchising	NA	NA	NA	NA	NA	NA	NA	NA
15 Investments	129,047	NA	46,408	NA	NA	NA	NA	NA

Scope 1 direct emissions mainly originate from the two waste-to-energy plants operated by the Environment area and the thermal power plants. Scope 1 emissions are calculated starting from energy consumption multiplied by specific emission factors (Defra 2024 coefficients) and also include contributions from certain processes in the Environment area (composting, treatment and disposal of liquid waste), sludge drying at treatment plants, consumption of petrol

and diesel vehicles, sulphur hexafluoride (SF₆) leaks that may occur at the areti and Acea Produzione plants, heating of premises and freon gas leaks/top-ups from air conditioners. In 2024 biogenic emissions, calculated from consumption for the Defra 2024 coefficients, amounted to approximately 290,000 tonnes of CO₂e and derive mainly from energy production plants in the Environment area.

Only the thermoelectric power plants (Montemartini and Tor di Valle) operated by Acea Produzione are subject to the Emission Trading Scheme (ETS). In 2024 53,450 tonnes of emission volumes were entered into the EU-ETS, 13% of the Scope 1 total.

Indirect Scope 2 emissions are caused by electricity withdrawals related to covering the needs of the Group's plants and sites, consumption for public lighting and technical losses in the electricity grid, which amount to 83,721 tCO₂e (calculated using the location-based factor). For the location-based calculation, the Ispra 2024 coefficient of 0.3tCO₂/MWh was used, for the market-based calculation, the AIB-residual mix coefficient of 0.5tCO₂/MWh was used.

Scope 3 emissions are calculated on the CSRD perimeter, and relate mainly to the sale of electricity (67%) and the distribution and sale of natural gas (31%), referring to the following activities in 2024:

- the companies active in the commercial sector that sell energy and gas Acea Energia and Umbria Energy placed 5,573 GWh of electricity on the market (both on the free market and the protected market), with a 46% share sold with a Guarantee of Origin, and therefore not responsible for climate-changing emissions;
- the methane gas sold by the same companies in the commercial segment amounts to 217,963,737 scm;
- the Adistribuzione and Notaresco companies distributed 96,382,124 scm of methane gas (97% distributed by Adistribuzione).

In the investment category, the emissions by investee and non-consolidated companies are shown.

Each entry is calculated according to a specific methodology, according to the GHG Protocol:

- the emissions for the Capital Goods and Purchased Goods and Services categories are calculated using the estimated consumption data for the supplier fleet, by normalising data from the collected questionnaires (Hybrid method);
- emissions from Fuel and Energy activities are calculated by considering the electricity sold for the market-based coefficient (AIB-residual mix 2024) (Average data method);
- emissions from Business Trips were provided by the independent travel agency, which calculated them from the distance data for the relevant emission coefficients (distance-based method);
- emissions from the Use of Products Sold were calculated considering the gas sold and distributed by the Group, multiplied by the Defra emission coefficient (Average data method);
- emissions from Investments were calculated considering Group companies' Scope 1 and Scope 2 emissions that were not included in the CSRD reporting scope or in the value chain (Investment method).

Emission intensity

Emission intensity is calculated as the ratio of the Group's total emissions to consolidated revenues, in which regard reference is made to the relevant item in the notes to the Group's consolidated income statement.

ESRS E1-6 Emission intensity

ESRS_E1-6	31/12/2024
Intensity of GHG emissions, location based (total GHG emissions vs net revenue)	0.00073 t CO ₂ /€
Intensity of GHG emissions, market based (total GHG emissions vs net revenue)	0.00073 t CO ₂ /€

ESRS E1-7 Emission offsetting

Acea's commitment to combating climate change is also realised by participating in voluntary offsetting projects, specifically by purchasing certified carbon credits to offset the amount of methane gas sold on the market.

The carbon credits purchased for 2024 contributed to funding mitigation projects in Cambodia and Vietnam with tangible benefits for the local communities, totalling EUR 407 thousand credits:

- Southern Cardamom REDD+ in Cambodia will protect a key area in the Cardamom Mountains rainforest ecosystem, one of the 200 most important places for biodiversity conservation on the planet; the project will support around 30 villages by providing new and sustainable livelihood opportunities for more than 17,000 people, with additional activities related to food security, health education and environmental awareness.
- Dak Psi 3 and 4 Hydropower Project in Vietnam, construction and operation of a run-of-river hydroelectric project with total

installed capacity of 45 MW from two waterfalls in one of the poorest areas of Vietnam. The project will impact positively on the environment and local communities and will help reduce Vietnam's dependence on electricity imports.

The total amount of carbon credits verified, recognised and cancelled by the two projects are as follows:

- Southern Cardamom REDD+ - Cambodia - 10,000 credits;
 - Dak Psi 3 and 4 Hydropower Project - Vietnam - 397,000 credits.
- In summary, credits amounting to 407,000 tCO₂eq were cancelled during the year, through certified reduction Verified Carbon Standard (VCS) projects and developed outside the European Union. No Absorption project was used, and no information is currently available on any credits that are expected to be cancelled in the future.



ESRS E1-8 Internal carbon pricing

The internal carbon price is used to assign an economic value to carbon dioxide emissions. This internal price helps the company to integrate emission costs into investment and management decisions, incentivising the reduction of emission and supporting the transition to a low-carbon economy.

Acea Produzione, the only company in the Acea Group obligated by the EU-ETS market, buys CO₂ quotas from Acea Energia, which in turn procures them during the year from external counterparties, so as to diversify the purchase price, while at the same time buying and

selling electricity, with a strategy that allows it to decrease the price risk and not compromise margins from the managed business. The price is estimated during the budget definition phase on the basis of market scenarios acquired from leading rating companies that deal with market forecasting and modelling, and is also used in climate risk analyses according to the ISSB - TCFD system, in which Acea Produzione participates together with other Group companies, to assess the Carbon Pricing (EU-ETS) transition risk. In 2024, the estimated price used in forecasts and scenarios was EUR 80/tonne, compared to the final average price of EUR 63.7/tonne.

2.3 POLLUTION ESRS E2

ESRS E2; ESRS 2 IRO-1 The Acea Group's main operations that could generate pollution-related impacts include waste management, power generation, water management and energy distribution, all of which, if not managed properly, could affect the environment and surrounding ecosystems.

Pollution-related impacts, risks and opportunities have been identified through a double materiality analysis with a process that covers

the entire Group value chain and actively involves internal and external stakeholders, as described in detail under General Information in paragraph 1.5. As proof of the Group's commitment to pollution issues, Acea is also in constant communication with local institutions and municipalities. Specifically, the analysis assessed the effects of Group company operations on air, soil and water pollution, including microplastics and hazardous substances.

Pollution Impact Risks and Opportunities

Subtopic	Sub-subtopic	IRO	Description	Positive/Negative/ Current/Potential	Time frame	Value chain
Water pollution		I impact	Damage to human health and ecosystems due to the presence of pollutants in the water (emerging pollutants, microplastics, etc.)	-	short	• own operations
Substances of concern		I impact	Environmental impacts from the use of chemicals in the Group's industrial processes	-	long	• own operations
Air pollution		I impact	Damage to human health due to harmful atmospheric emissions from sites and installations	-	short	• own operations
Soil pollution		R risk	Risk related to environmental offence charges by the relevant authorities for non-compliance with the Consolidated Environmental Act		medium	• own operations
Water pollution		O opportunities	Development of process control technologies to contain pollutants		medium	• own operations

+ Positive impact; - Negative impact; ○ Effective; ◌ Potential

2.3.1 POLLUTION POLICIES

ESRS E2-1; ESRS 2 MDR-T To strengthen its commitment to pollution prevention and control, the Acea Group has defined specific strategic objectives and over the years, implemented a series of policies aimed at identifying, assessing, managing and, if possible, mitigating its significant impacts and the risks related to this issue. In this regard, in its Code of Ethics, the Group emphasises its commitment to environmental protection through the prevention of pollution and minimisation of environmental risks and impacts. This commitment is also reflected in the Integrated Management and Sustainability Systems Policy in which the Group defines the protection of the natural environment as a priority. With a view to constant improvement, Acea also undertakes to define, pursue and monitor specific environmental objectives, taking into account the reference context, and identify actions and lines of action to increase its environmental performance. The Emergency Management Plans of companies operating in the water, energy and environmental sectors define the conditions that could prejudice the

continuity and quality of the services provided, classify emergency levels, describe preventive and remedial measures for types of unforeseen events, including pollution and environmental protection, and identify actions to limit the contamination of environmental matrices (air, water, soil).

Finally, Acea asks its suppliers to share its commitment to environmental protection, also with reference to minimising waste produced and implementing strategies to optimise the use of resources and reduce any direct and indirect negative impacts on the environment. Group policies are described in Section 1.5 of this document.

2.3.2 POLLUTION-RELATED OBJECTIVES, ACTIONS AND RESOURCES

ESRS 2 MDR-T; ESRS E2-3 The Group has formalised specific strategic objectives in the Sustainability Plan with a view to managing the relevant impacts, risks and opportunities related to pollution.





Action lines ▼	Action ▼	IRO ▼	Description ▼
Water quality	<ul style="list-style-type: none"> ► Quality of purified water ► Quality of drinking water ► PFAS monitoring, MOE, microplastics in water 	<p>I</p> <p>I</p> <p>O</p>	<ul style="list-style-type: none"> ► Damage to human health and ecosystems due to the presence of pollutants in the water (emerging pollutants, microplastics, etc.) ► Environmental impacts from the use of chemicals in the Group's industrial processes ► Development of process control technologies to contain pollutants
Innovation in the territory	<ul style="list-style-type: none"> ► Reducing odour emissions 	R	<ul style="list-style-type: none"> ► Risk related to environmental offence charges by the relevant authorities for non-compliance with the Consolidated Environmental Act

With reference to the impact of "Damage to human health due to harmful atmospheric emissions from sites and plants, it is noted that Group Companies, particularly the Environment Area, work constantly to reduce polluting emissions from their plants and have continuous emission monitoring systems in place, also with the aim of managing and minimising the "Risk associated with environmental offence charges by the relevant authorities for non-compliance

with the Consolidated Environmental Act".

The objectives and investments envisaged in the Plan are shown below, with the progress in the actions and related investments at 31.12.2024, with reference to the lines of action that contribute to the management of impacts, risks and opportunities relevant to pollution. For actions related to these strategic lines, only the capex was monitored, because opex represents a non-significant portion.



Action line ▼	Action (company) ▼	Target @ 2028 ▼	Target progress ▼	Overall 2024 ▼	Baseline 2023 ▼	Capex 2028 (EUR M) ▼	Capex 2024 (EUR M) ▼
Quality water	► Improving quality of purified water (Acea Ato 2)	► Reduction of non-compliant samples/ total samples analysed (ind. ARERA M6)	-	7.77%	9.6%	165	54.3
	► Improving quality of purified water (AdF)	► Reduction of non-compliant samples/ total samples analysed (ind. ARERA M6)	-	5.26%	11.28%	12.3	2.2
	► Quality of purified water (Gori)	► Reduction of total suspended solids to 91%	-	93%	-	50	0.02
	► Quality of drinking water (AdF)	► Improved quality of water provided (ind. ARERA M3)	-	4.68%	5.94%	3	0.6
		► Extension of the Water Safety Plan to the total area covered (265 zones)	 44%	5 zones	112 zones	-	-
	Water monitoring (Acea Infrastructure)	► 55 parameters of perfluoroalkyl substances (PFAS) and emerging organic micropollutants (MOE) in water	 69%	8 parameters	30 parameters	-	-
		► 50 monitorings/year of microplastics in water	 40%	20 monitorings	10 monitorings	-	-
Innovation in the territory	Reduction of odour emissions (Acea Infrastructure)	► Strengthening of controls: 7 control technologies, 30 odorous species, 12 receptors	 57%	1 technology 12 species 6 receptors	2 technologies 5 species 2 receptors	0.5	0.2

ESRS E2-2 ESRS 2 MDR-T; ESRS 2 MDR-A In general, all Group Companies in the various businesses pursue the continuous improvement in the processes and resources used to reduce the environmental impact, including water, air and soil pollution. All plants have the main environmental certifications (in line with ISO 9001, 14001, 45001, 50001) and the plants in the Environment area are EMAS certified, attesting to the ongoing commitment to sustainability and reduction of the environmental impact, mainly in terms of optimising energy efficiency and minimising harmful emissions.

Water quality improvement measures are among the main actions implemented by Group Companies in 2024:

- GI interventions by Acea Ato 2 and AdF to improve purified water, measured according to the M6 indicator of the Regulatory Authority for Energy Networks and Environment (ARERA). Indicator M6 measures the quality of purified water, defined as the rate overshooting the limits in discharged wastewater samples.
- GI interventions to AdFs to improve purified water, as measured by ARERA's M3 indicator, which measures the quality of the water supplied. This indicator assesses the adequacy of water quality intended for human consumption by taking into account various parameters, such as the incidence of non-potability orders and the rate of non-compliant internal samples. AdF, for example, has an ongoing programme to extend Water Safety Plans to all supplied areas (Water Safety Zones -WSZ) to improve the quality of the drinking water supplied. The other companies in the area have already established Water Safety Plans in advance of the deadlines set by the relevant regulations;
- activities to extend the spectrum of analyses conducted to improve monitoring capacity for perfluoroalkyl substances (PFAS), Emerging Organic Micropollutants (MOE) and Microplastics (MP) in water. In 2024, eight additional test methods were validated by Acea Infrastructure for pharmaceutical components to be detected in wastewater, with specific focus on antibiotics, and monitoring campaigns were conducted on the Tiber River;
- the development of activities by Acea Infrastructure to expand odour monitoring capacity through the adoption of control technologies for a greater number of odorous species and receptors, with a significant impact on communities in the areas surrounding the Group's plants.

It is also noted that the Environment area sites have implemented a series of interventions on plants to reduce pollution: completion of the revamping of the flue gas treatment line at the Terni waste-to-energy plant; interventions to control and reduce accidental leaks for composting sites and the installation of containment basins to limit spills; the construction of roofing and waterproofing to reduce odorous emissions; and the efficiency of the company fleet vehicles, with the reduction of emissions and pollution into the atmosphere.

Finally, in 2024, Areti continued its experimentation with the use of vegetable dielectric oil in transformers, replacing traditional oil, to reduce environmentally harmful spills.

2.3.3 POLLUTION METRICS

ESRS E2-4; ESRS E2-5 Without prejudice to the policies on pollution and the actions that the Group's companies put in place, particularly at the plants, with the aim of reducing any emissions of pollutants, the quantities measured in 2024 for each pollutant covered by the standard, are shown below, broken down according to air, water and soil.

In 2024, air emissions were only reported by companies in the Environment and Production area, as the water business has no emissions above the threshold to report. Emissions into water are mainly reported by companies operating integrated water systems, in cases where values are above the threshold. In this sense, Acea Ato 2 took into consideration the 4 plants with more than 100,000 population equivalent (Roma Nord, Roma Est, Roma Sud, Ostia), and Gori considering 7 (Angri, Area Nolana, Nocera Superiore, Scafati, Mercato San Severino, Foce Sarno, Punta Gradelle). In 2024, ground pollutant emissions were at zero, no spills were detected and no microplastics were used or generated.

ESRS E2-4 Measurement and calculation methodology

The water emissions reported for the Water area refer to the already existing and consolidated information flow to the supervising Ministry relative to the E-PRTR (European Pollutant Release and Transfer Register), because the thresholds envisaged by the CSRD are congruent with those of the E-PRTR itself (Italian Presidential Decree 157/2011). The values given for each plant derive from an average concentration value (mg/l) multiplied by the average flow rate for the year 2024.

Atmospheric emissions are monitored in a planned and consistent manner. The plants are managed according to UNI EN ISO 14001 and UNI EN ISO 45001 management standards. Acea Ambiente also applies the UNI EN ISO 50001 management system, while the waste-to-energy plants, the Orvieto Ambiente plant and the Deco and Ecologica Sangro sites also hold certification under the European EMAS III scheme. The main macro-pollutants of Acea Ambiente and Acea Produzione plants are monitored through Continuous Emission Monitoring Systems (CMMS). With reference to the Environment area, it is further specified that the monitoring of air pollutant emissions takes place both continuously and discontinuously, in accordance with sector regulations and the Integrated Environmental Authorisation of the sites, as specified in the site monitoring and control plan. For energy production sites, pollutant masses were calculated using the monthly average pollutant concentration for the flow rate of the flue gas for the fuel hours.


ESRS E2-4 Pollutant quantities of air, water, soil

ESRS E2_4	Pollutant	31/12/2024
		Kilograms
	Carbon monoxide (CO)	47,327
	Ammonium (NH ₃)	14,711
	Nitrogen oxides (NO _x /NO ₂)	206,181
	Sulphur oxides (SO _x /SO ₂)	6,104
	Chromium and compounds (expressed as Cr) (9)	1
	Mercury and compounds (expressed as Hg) (9)	0
	Nickel and compounds (expressed as Ni) (9)	0
	Lead and compounds (expressed as Pb) (9)	1
	PCDD + PCDF (dioxins + furans) (expressed as TEQ) (11)	0
	Polycyclic aromatic hydrocarbons (PAHs) (15)	0
	Chlorine and inorganic compounds (expressed as HCl)	12,685
	Fluorine and inorganic compounds (expressed as HF)	310
	Particulate (PM ₁₀)	1,937
	Other	35,126
	Emissions broken down by pollutant - Air	324,383
	Total nitrogen	6,062,602
	Total phosphorus	859,861
	Total Organic Carbon (TOC) (expressed as total C or COD/3)	4,694,435
	Other	12,087,814
	Emissions broken down by pollutant - Water	23,704,713
	Emissions broken down by pollutant - Soil	0

Pollutants in the air

Among the pollutants in the air resulting from combustion processes are carbon monoxide (CO), nitrogen oxides (NO_x) and sulphur oxides (SO_x), which come from energy production activities at the thermal power plants, the two waste-to-energy plants and biogas production. Specifically, nitrogen oxides (NO_x) are produced by the waste-to-energy plants of San Vittore del Lazio and Terni (46%), the Aprilia composting site (22%) and the Tor di Valle and Montemartini power plants (10%). The item "Other" includes certain compounds that the plants monitor as a whole in accordance with regulatory requirements and consists mainly of 28,000 tonnes of heavy metals (Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V) emitted from the Deco site.

Pollutants in water

Pollutants in water, including nitrogen, phosphorous and organic carbon, are mainly emitted by the water companies. Specifically, Acea Ato 2 is responsible for 88% of total nitrogen and phosphorus emissions through its 4 purification plants with more than 100,000 AE, and contributes 82% of total organic carbon emissions, with Gori contributing 15%.

The item "Other" consists of 98% of the chlorides emitted into water by the company Gori through its 7 plants serving more than 100,000 AE.

ESRS E2-5 The table below shows the substances of concern and substances of very high concern generated or used during the pro-

duction processes, subdivided according to hazard classes.

ESRS E2-5 Substances of concern and very high concern

ESRS E2_5	Risk class	31/12/2024
		Tonnes
	Germ cell mutagenicity	0
	Reproduction toxicity	0
	Endocrine system disruption to human health	0
	Endocrine system disruption to the environment	0
	Persistent, mobile and toxic or very persistent and very mobile properties	0
	Persistent, bioaccumulative and toxic or very persistent and very bioaccumulative properties	0
	Respiratory sensitisation	0
	Skin sensitisation	51
	Chronic danger for the aquatic environment	77
	Danger for the ozone layer	0
	Specific target organ toxicity (repeated exposure)	1
	Total amount of substances of concern generated or used during production or acquired	129
	Total amount of substances of very high concern generated or used during production or acquired	0

Substances of concern are reported by the company Simam and are used mainly for carpentry activities. The chemicals used are dosed online, with no direct human contact with these substances, including iron chloride (which impacts the skin), sodium sulphide and sodium hypochlorite (which can affect the aquatic environment). The quantities of chemical compounds are extrapolated us-

ing management software that records the quantities purchased for each order placed. Also of note is the presence of ammonia (NH₃) used for the flue gas treatment at the Terni waste-to-energy plant.

2.4 WATER AND MARINE RESOURCES **ESRS E3**

ESRS E3; ESRS 2 IRO-1 Impacts, risks and opportunities related to waters and marine resources have been identified through a double materiality analysis with a process that covers the entire Group value chain and actively involves internal and external stakeholders, as described in detail under General Information in paragraph 1.7.

Specifically, the analysis focused on companies that manage and process water resources to ensure a thorough understanding of the environmental impacts and informed management of water-related risks, which is fundamental to the Group's operations. With reference to these issues, Acea is also in constant contact with the municipalities where it operates and the relative territorial entities.



Subtopic	Sub-subtopic	IRO	Description	Positive/Negative/ Current/Potential	Time frame	Value chain
Acque	Water consumption	I impact	Reducing water consumption based on industrial process optimisation	+	long	• upstream • own operations
Acque	Water withdrawals	I impact	Increased reliability and resilience of water infrastructure and improved quality of service with the adoption of innovative technologies	+	long	• own operations • downstream
Acque	Water discharges	I impact	Alteration of the chemical composition of reservoirs	-	medium	• own operations
Acque	Water withdrawals	I impact	Reduced availability of quality water due to system inefficiencies (ageing networks, water losses, etc.).	-	short	• own operations • downstream
Acque	Water withdrawals	R risk	Scarcity of water resources due to climate change, affecting water service management		medium	• own operations
Acque	Water discharges	O opportunities	Development of solutions for wastewater treatment and reuse		medium	• own operations

+ Positive impact; - Negative impact; ○ Effective; ◌ Potential

2.4.1 POLICIES ON WATER AND MARINE RESOURCES

ESRS E3-1; ESRS 2 - MDR-P Water represents one of the key elements of Acea's business.

In confirming the importance it attributes to the sustainable management of water resources, the Group adopts a structured approach, also defining specific strategic objectives, aimed at identifying, assessing, managing and, where possible, reducing the impacts and risks associated with the issue, and seeking opportunities associated with the protection of water and marine resources. In this respect, as stated in the Acea Group's Code of Ethics and Integrated Management and Sustainability Systems Policy, the company has set as its main objective the sustainable management of the water and other natural resources used, maximising their uses, optimising reuse and recovery processes and promoting the efficient management of their end uses. The Group's commitment to the protection of water resources is also implemented through single policies and guidelines implemented by the companies operating in the Integrated Water Service, which include specific commitments to ensure high standards of purification quality, for example through the constant monitoring of discharged water with the aim of limiting pollution to surface water bodies, preventing environmental damage and promoting the protection of ecosystems and natural habitats. Group policies are described in Section 1.5 of this document.

2.4.2 OBJECTIVES, ACTIONS AND RESOURCES RELATED TO WATER AND MARINE RESOURCES

ESRS E3-3; ESRS 2 MDR-T The management of the Integrated Water Service is one of the fundamental businesses of the Acea Group, which therefore pays special attention to the protection of water resources in all their forms. Furthermore, the objectives of protecting and conserving water resources are particularly relevant because the areas where Acea operates and/or impacts are all in areas of high water stress, as defined by the Aqueduct Water Risk Atlas map drawn up by the World Resources Institute (WRI).

ESRS 3-2 The Group has formalised strategic objectives linked to the impacts, risks and opportunities related to the issue and highlighted as relevant as a result of the double materiality analysis, focusing on:

- the management of the relevant impacts, risks and opportunities related to water risk-prone areas, including the improvement of water quality;
- responsibly managing impacts, risks and opportunities in terms of marine resources, including the nature and quantity of marine resource products (such as gravels, deep-sea minerals, fish products) used by the company; and
- reducing water consumption, including an explanation of how these targets apply to water risk-prone areas, including those with high water stress.

The plan lines of action with reference to the IROs relevant to the issue are shown below.

Action lines ▼	Action ▼	IRO ▼	Description ▼
Optimisation of the sewage treatment system	<ul style="list-style-type: none"> ► District metering of the sewerage network ► Upgrading purification 	I	► Alteration of the chemical composition of reservoirs
Digitalisation	<ul style="list-style-type: none"> ► Water and sewerage remote control 	I	► Increased reliability and resilience of water infrastructure and improved quality of service with the adoption of innovative technologies
Water quality	<ul style="list-style-type: none"> ► Quality of purified water ► Quality of drinking water ► Monitoring perfluoroalkyl substances (PFAS), microorganic pollutants (MOE), microplastics (MP) 	I	► Alteration of the chemical composition of reservoirs
Reduction in losses	<ul style="list-style-type: none"> ► Reduction in lost volumes 	I I R	► Reducing water consumption based on industrial process optimisation ► Reduced availability of quality water due to system inefficiencies (ageing networks, water losses, etc.). ► Scarcity of water resources due to climate change, affecting water service management
Circularity of resources	<ul style="list-style-type: none"> ► Wastewater reuse 	O	► Development of solutions for wastewater treatment and reuse
Water resilience	<ul style="list-style-type: none"> ► Modelling water needs ► Aquifer modelling 	R	► Scarcity of water resources due to climate change, affecting water service management

The objectives and investments envisaged in the Sustainability Plan until 2028 are shown below, with the progress in the actions and related investments at 31.12.2024, with reference to the lines of action that contribute to the management and mitigation of impacts and

risks and the development of opportunities relevant to water, water consumption, water withdrawals and water discharges. For actions related to these strategic lines, only the capex was monitored, because opex represents a non-significant portion.

Action line ▼	Action (company) ▼	Target @ 2028 ▼	Target progress ▼	Overall 2024 ▼	Baseline 2023 ▼	Capex 2028 (EUR M) ▼	Capex 2024 (EUR M) ▼
Optimisation of the sewage treatment system	► District metering of the sewerage network (Acea Ato 2, Acea Ato 5)	► 1,930 km of network	16%	371 km	-	96	25.0
	► Upgrading purification (Acea Ato 2, Acea Ato 5, AdF, Gori, Gesesa)	► Work on 46 treatment plants	20%	9		335	41.2
Reduction in losses	► Reduction in lost volumes (Acea Ato 2, Acea Ato 5, AdF, Gori, Gesesa)	► Reduction in the volume of water lost of 93 Mcm (vs 2023)	34%	457 Mcm lost	489 Mcm lost	952	267.3
		► Losses 41.1% (-5.6 p.p. vs 2023)	-	44.7% (-2 p.p. vs 2023)	46.7%		
Circularity of resources	► Wastewater reuse (Acea Ato 2, AdF, Gori)	► 7 Mcm/year for reuse	41%	2.9 Mcm (3.4 Mmc on CSRD perimeter)	-	12	0.02



ESRS E3-2; ESRS 2 MDR-A; ESRS 2 - MDR-T In accordance with the policies adopted by Acea, aimed at managing the impacts, risks and opportunities associated with issues related to water and marine resources, the Group implemented measures during 2024 to achieve its water and environmental protection goals.

Specifically, in view of various internal assessments conducted and recent studies by ISPRA and CMCC (Euro-Mediterranean Centre on Climate Change), an action strategy was developed along a number of main lines, such as: the containment of losses, both physical and commercial, efficiency gains in networks and inter-connection of aqueduct systems, safeguarding of supply sources, with a view to preventing risks and protecting current and future needs, digitalisation of water networks and measurement methods. In terms of reducing both physical and commercial water losses, day-to-day water management is implemented in a responsible and efficient manner through several specific lines of action such as the district metering of water networks, combating misuse and optimising metering and monitoring.

In 2024, all companies in the Water area continued to carry out interventions aimed at reducing losses, mainly related to the digitisation and district metering of networks, but also water reclamation, meter replacements and work on pipelines, which reduced losses to about 45% as a calculated average figure across all Group Companies. Metrics include the Group water balance.

The companies in the area also constantly strive to improve the quality of the water distributed. This objective, reported in the environmental goals, includes constant monitoring of the resource with analytical controls, in addition to those carried out by the local health authorities, both on drinking water intended for users, which is of fundamental importance given its health repercussions, and on wastewater returned to the environment after purification treatment, which is functional in guaranteeing the regeneration of aquatic ecosystems and water bodies, and generally, the environmental quality of the territory. With regard to the optimisation of the sewage treatment system, we note specifically:

- the implementation of interventions to optimise the treatment sections of the Acea Ato 2 and AdF purification plants, with the aim of minimising going over the BOD, COD, SST, total phosphorus and nitrogen parameters;
- upgrading of purification, through centralisation, efficiency and decommissioning of plants aimed at increasing overall purification efficiency. Specifically, Acea Ato 2 extended two treatment plants and decommissioned four inefficient plants with an investment of EUR 28 million;

Compliance with drinking water analyses for all companies within the scope of reporting is between 96% and 100%. The ARERA indicator (M3b) requires compliance with percentage threshold values of samples (for the non-compliant) on drinking water analyses. Acea carries out extensive analyses, exceeding those stipulated by regulatory requirements. Some parameter overruns may occur, but the values of compliance certifications recorded by the Group meet ARERA requirements to ensure full service delivery.

With regard to strengthening resource circularity processes, we note the implementation of measures for the recovery and reuse of purified waste water to reduce the consumption of drinking. For example, wastewater is used for cleaning the forecourts at the Chiusi wastewater treatment plant, used as technical water for washing equipment, sand and screenings at Gori sites, or used as industrial water at Acea Ato 2 sites. AdF also provides reclaimed wastewater to a third party for the irrigation of a golf course as part of the circular economy.

With a view to the circularity of resources, we also note the adoption at Acea Ambiente sites of innovative systems for the recovery and treatment of the first rain water for reuse as industrial water (Terni, Orvieto Ambiente, Aprilia, and Monterotondo Marittimo sites) or for fire-fighting and dust abatement (Orvieto Ambiente), as part of programmes for the continuous monitoring and reduction of water consumption. In addition, demineralised water is produced from rainwater at the waste-to-energy plant in San Vittore del Lazio and reused entirely in the process with zero discharge into the environment.

2.4.3 WATER AND MARINE RESOURCES METRICS

ESRS E3-4 At Acea, water resources are used in various industrial processes, such as electricity production, the compost generation process, the cleaning of water treatment and anaerobic digestion plant compartments, as well as for hygienic and sanitary uses and, in lesser quantities, for laboratory activities.

All Group companies are committed to reducing the consumption of drinking water. Specifically, programmes to reuse the recycled portion, including by reusing purified water in the plants, as outlined in the previous section. Specifically, in 2024 all Acea Ato 2's industrial water plants became fully operational, allowing for the recovery and reuse of approximately 2.8 million cubic metres of purified water for industrial purposes. Out of the approximately 3.4 million total cubic metres of recycled and reused water shown in the table, 83% refers to Acea Ato 2. Companies in the Environment area limit their use of drinking water, mainly utilising water from wells and adopting rainwater recovery systems, as described in the previous paragraph. The reuse of treated waste water is an effective response to water stress in Acea's areas of operation, but specific regulatory interventions are required to further expand its potential. In this sense, European Regulation 2020/741 on the reuse of treated water in agriculture, besides introducing important requirements, facilitates the option of increasing this reuse.

2024 data on water withdrawals, quantities of water recovered and reused, and total water consumption, is shown below for all from high water stress areas, as recorded by the World Resource Institute's Aqueduct Water Risk Atlas tool.

ESRS E3-4 Water withdrawals

ESRS_E3-4	Water use	31/12/2024
		m ³
	Water for industrial purposes	1,169,225
	Water for civil purposes	2,833,045
	Water withdrawals	4,002,270

ESRS E3-4 Volumes of recycled and reused water and stored water stored

ESRS_E3-4	31/12/2024
	m ³
Total volume of recycled and reused water	3,377,247
Total volume of stored water	15,252
Changes in the volume of stored water	80

ESRS E3-4 Water consumption

ESRS_E3-4	Water use	31/12/2024
		m ³
	Water for industrial purposes	4,434,302
	Water for civil purposes	1,850,638
	Water consumption	6,284,940

ESRS E3-4 In the case of water for industrial purposes, this mainly refers to water recovered from purification and treated by Group companies themselves; regarding the volumes of reuse of purified water recorded, for example, by Acea Ato 2 (62% of the total consumed for industrial purposes), these refer to uses within the wastewater treatment process, for the maintenance and cleaning of compartments such as the sludge lines and initial pre-treatment. This reduces the use of water resources according to a circular economy logic. Other industrial uses include recovered rainwater. The Monterotondo Marittimo composting plant has a rainfall recovery system that, after phytodepuration, enables the collection of water into special aerated reservoirs both as a reserve for fire-fighting and as a reserve of industrial water for reuse in processes. The water consumed for civil purposes, i.e. sanitary use at the company's premises, is mainly supplied from public waterworks (99%). The quality of the same water is regulated in Italy by Legislative Decree No. 18 of 23 February 2023, which implements Directive (EU) 2020/2184 on the quality of water intended for human consumption.

Water consumption is measured for 68% by direct measurement, 32% by best estimates, and a very small portion (0.1%) by sampling and extrapolation.

ESRS E3-4 Water intensity rate

ESRS_E3-4	31/12/2024
	m ³ /Mln€
Water intensity rate	1,472

The water intensity rate is calculated as total water consumption in m³ compared to net revenues from own operations in millions of euro; Regarding the value of consolidated net revenue, reference is made to the relevant item in the notes to the Acea Group consolidated income statement.

Group Water Balance and Loss Reduction

The issue of containing leaks in water distribution networks, which all Group Companies are committed to, is at the heart of sustainable water resource management, and requires constant monitoring of networks to identify leaks or intercept other anomalies and intervene promptly. The Business Plan envisages major investments for the district metering of networks aimed at optimising operating pressures and reducing lost volumes, focusing on field losses starting in the most critical districts. The adoption of georeferencing systems enables constant improvements to the monitoring process, based on the verification and calibration of the meters installed on the sources and in the drinking water plants, and the expansion of the census and georeferencing of networks to detect leaks.

The water balance of the Water area Group company is shown below, with the evaluation of losses carried out in line with ARERA Resolution 917/17 R/IDR, which requires water losses to be calculated across the entire perimeter of the aqueduct system (and not only the distribution network) and include apparent losses. The consolidated Group figure is the total of the amounts from the different companies in the perimeter.

Acea Group Water Balance	u.m.	2024
drinking water collected from the environment or from other systems and fed into the aqueduct systems	Mm³	1,137.6
surface water	Mm ³	30.1
from wells	Mm ³	310.7
from springs	Mm ³	707.5
water collected from other aqueduct systems	Mm ³	89.4
total drinking water leaving the aqueduct system	Mm³	638.5
total drinking water dispensed and billed in the network	Mm ³	540.9
total drinking water authorised and not billed in the network	Mm ³	50.6
total drinking water exported to other systems	Mm ³	43.3
total metered drinking water losses	Mm ³	3.7
Loss assessment according to ARERA Resolution 917/17 R/IDR		
total Group water losses	Mm³	499.1
water loss percentages	%	43.9
Treated water Acea Group		
water treated at the treatment plants	Mm ³	817.7
treatment plants	no.	632



It is noted that withdrawals for the water balances of the companies in the Water business, as well as withdrawals for the Group's civil and industrial water consumption, illustrated above, are made in areas at

potential risk of water stress, as analysed using the World Resource Institute's Aqueduct Water Risk Atlas tool.



2.5 BIODIVERSITY AND ECOSYSTEMS ESRS E4

ESRS E4; ESRS 2 IRO-1 Based on their typical activities such as water supply, energy production and distribution, and waste management, Acea Group Companies could impact on biodiversity. On this basis, Acea focuses closely on protecting ecosystems, as defined in the procedures of the Environmental Management Systems, which pursue continuous improvements in reducing impacts, in the assessments for the planning and creation of plants, as well as in managing operational areas. Biodiversity-related impacts have been identified through a double

materiality analysis with a process that covered the entire Group value chain and actively involved internal and external stakeholders, as described in detail under General Information in paragraph 1.7.

Specifically, the analysis focused on activities that interact with the natural environment, to provide an in-depth understanding of ecological impacts and informed management of the activities with a potential impact. As a result of this analysis, no relevant opportunities or risks were identified with regard to biodiversity.

ESRS 2 SBM-3

Subtopic	Sub-subtopic	IRO	Description	Positive/Negative/ Current/Potential	Time frame	Value chain
Impacts and dependencies in terms of services / ecosystems		I impact	Restoration of ecosystems through renaturation (planting, etc.)	+	 long	• own operations
Impacts on the extension and condition of ecosystems		I impact	Alterations in the environmental balance of ecosystems caused by the presence of Group sites and plants on the territory	-	 long	• upstream • own operations

+ Positive impact; - Negative impact; ○ Effective; ◌ Potential

ESRS 2 IRO-1 As part of its dual materiality process, Acea identified and assessed dependencies on biodiversity, ecosystems and related services at its operating sites and upstream and downstream along the value chain. An analysis of the physical, transitional and systemic risks with regard to biodiversity is not available. A new integrated transition plan is being developed, which will include climate, resources and nature and for the first time in 2025, will consider opportunities, physical, transition and systemic risks in terms of biodiversity.

ESRS E4 SBM-3 For the purpose of identifying and assessing the relevant impacts, risks and opportunities relating to biodiversity and ecosystems, Acea has identified its sites/plants located in high biodiversity areas, i.e. nationally-derived Protected Natural Areas (EUAPs) and Natura 2000 Network Sites (Sites of Community Interest, Special Areas of Conservation and Special Protection Areas), mapping the infrastructure of the Group's main companies. The analysis conducted on over 23,000 sites/plants, including pylons but excluding underground electricity grids and pipelines, showed that less than 5%, could have significant impacts on biodiversity whereas around 10% represent potential interference in biodiversity-rich areas. The analyses conducted on the electricity distribution network showed interference with protected areas over approximately 400 km of network. No plants from the Environment Segment, carrying out waste-processing activity, are located in the aforesaid areas.

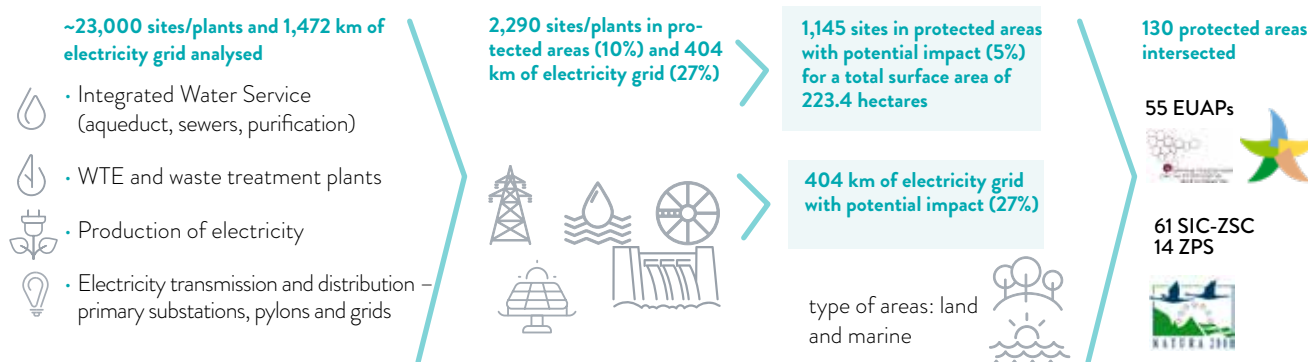
In the analysis, Acea also identified high biodiversity priority areas by calculating the relative Environmental Fragility Index (IFA) to assess the different habitats included and the portion of land occupied, the fragility of the habitat and the type of sites/installations present for each of the protected areas intersected.

The IFA definition is based on the information provided by the Nature Map, calculating the ratio between the area of each habitat and the protected area containing it, and multiplying this value by the habitat's own ISPRA-defined environmental fragility. For each protected area, the IFA was defined by totalling the environmental fragility values for the habitats, and an association was created with the Group's highest impact facilities in the area. The product between the IFA and the area intersected by the plants made it possible to identify twelve "priority" zones, the first eight with potential impacts related to sites/facilities, the last four with potential interference with electricity distribution networks.

An awareness of the potential interference enables the optimisation of operations and companies have planned and/or implemented various actions to safeguard biodiversity, some in "priority" areas with a high level of biodiversity.

Group companies with plants in the area	Natural area	Type of protected site
Gori	Monti Lattari Regional Park	EUAP
Gori	Dorsale dei Monti Lattari	SCIs-SCZs
Acea Ato 2	Piana di S. Vittorino - Sorgenti del Peschiera	SCIs-SCZs
Acea Ato 2, areti	Riserva naturale Valle dell'Aniene	EUAP
Gori	Parco regionale bacino fiume Sarno	EUAP
Gori	Monte Mai and Monte Monna	SCIs-SCZs
Acea Ato 2	Farfa River (medium-high course)	SCI-SAC/SPA
Acea Ato 2, areti	Riserva naturale Litorale romano	EUAP
areti	Parco regionale urbano Pineto	EUAP
areti	Castel Porziano - coastal strip	SCIs-SCZs
areti	Castel Porziano - presidential estate	SPAs
areti	Riserva naturale dell'Insugherata	EUAP

Acea sites/plants analysed, with potential impacts on biodiversity and protected areas intersected



NOTE: where SCIs/SCZs and SPAs coincide, they are only considered once under SCIs/SCZs.

2.5.1 BIODIVERSITY AND ECOSYSTEM PROTECTION STRATEGY

ESRS E4-1 A new integrated transition plan is being developed that will include climate, resources and nature, and will be completed by 2025.

The preservation and enhancement of biodiversity are among the environmental priorities of Group's companies, which are committed when carrying out their activities to contain the factors responsible for the loss of biodiversity - avoiding the overexploitation of natural resources, the introduction of invasive species and the pollution of air, water and soil - and implementing measures to restore ecosystems, wherever possible.

To this end, Group Companies manage their processes in compliance with the environmental authorisations which each plant is subject to, striving to safeguard the flora and fauna present and protect the natural environment, including by adopting the best available technologies and the best environmental management practices. Specifically, the activities involved in the Integrated Water Service are aimed at the maintenance of optimal environmental conditions and sites where water is drawn, near to springs, are managed with attention to the conservation of existing ecosystems and, more generally, the preservation of the water flow. Likewise, with treatment activities,

the primary goal is that discharges, after appropriate treatment at Acea plants, comply with the limits established by regulations in the sector and do not damage but rather protect the natural habitats of the receiving bodies of water. Targets for improving the purification efficiency of some water companies form part of this commitment.

As far as hydroelectric power stations are concerned, Acea Produzione manages water withdrawals and releases in compliance with the concessions issued by the relevant authorities and with current legislation; for all reservoirs, management projects are defined with the relative impact studies for protected areas, to ensure the maintenance of the reservoir capacity and safeguarding of the quality of the stored water and the recipient water body, as well as guaranteeing the functioning of the discharging and intake bodies (Italian Legislative Decree no. 152/2006, Ministerial Decree 30/06/2004 and subsequent amendments). The company also provides for the protection of the habitats of all species present in order to mitigate the effect of the artificial barrier of the dams, which interferes with the natural migration of fish and the gradual sedimentation of the riverbed, with consequent changes in the native flora of the banks. Protection of the aforementioned basins ensures the living conditions of the "resident" and "migratory" birds, which use these sites for reproduction and feeding even during migration.



2.5.2 BIODIVERSITY AND ECOSYSTEM POLICIES

ESRS E4-2 The Acea Group recognises the priority importance of protecting the environment and is committed to managing environmental risks through policies to ensure the integrity of ecosystems and the protection of biodiversity, and assessing and managing relevant impacts, risks, dependencies and opportunities in this area. Specifically, the Code of Ethics defines the objective of protecting the territories in which Group companies operate, also with specific attention to combating deforestation. This commitment extends to the value chain based on adherence to the Code of Ethics, which requires that suppliers also share, inter alia, the principles of biodiversity and ecosystem protection, thus contributing to responsible and sustainable environmental management. The protection of the natural environment, biodiversity and ecosystems is a commitment confirmed in the Integrated Management and Sustainability Systems Policy, which aims to guide the operations of various management systems on the subject, as well as in the Human Rights Policy, where the company's focus on this issue is highlighted. This document formalises Acea's commitment to safeguarding the integrity

of ecosystems while respecting the community and the intergenerational pact, including through the implementation of environmental and energy management systems, which define objectives, improvement programmes and monitoring tools to prevent and reduce the environmental impacts related to Group company operations. Group policies are described in Section 1.5 of this document.




2.5.3 OBJECTIVES, ACTIONS AND RESOURCES RELATED TO BIODIVERSITY AND ECOSYSTEMS

ESRS 2-MDR-T; ESRS E4-4; ESRS 2 MDR-A With a view to managing the relevant impacts, risks and opportunities related to biodiversity and the protection of ecosystems, the Group has formalised specific strategic objectives, in line with the policies adopted, included in the Sustainability Plan, which also outlines the actions and investments planned up to 2028.

Action lines ▼	Action ▼	IRO ▼	Description ▼
Biodiversity	<ul style="list-style-type: none"> ► Removal of high-voltage pylons ► Sarno basin reclamation ► Ecosystem Protection Plan 	I I	<ul style="list-style-type: none"> ► Alterations in the environmental balance of ecosystems caused by the presence of Group sites and plants on the territory ► Restoration of ecosystems through renaturation (planting etc.)

Below are the objectives and investments foreseen in the Sustainability Plan to 2028 and the progress of the actions and related investments as of 31.12.2024, with reference to the lines of action that contribute to the management and mitigation of the relevant impacts on the subject identified as a result of the double mate-

riality analysis: impacts and dependencies in terms of ecosystem services and impacts on the extent and condition of ecosystems. For actions related to these strategic lines, only the capex was monitored, because opex represents a non-significant portion.

Action lines ▼	Action (company) ▼	Target @ 2028 ▼	Target progress ▼	Overall 2024 ▼	Capex 2028 (EUR M) ▼	Capex 2024 (EUR M) ▼
Biodiversity	► Removal of high-voltage pylons (areti)	► 115 pylons removed	 43%	49 pylons	3	1.4
		► 620 m ² of reclaimed land in high biodiversity areas	 32%	200 m ² reclaimed land		
	► Sarno basin reclamation (Gori)	► Elimination of 69 unlawful discharges	 6%	4 discharges eliminated	143	55

ESRS E4-3 With reference to the management of biodiversity-related impacts, risks and opportunities, the company plans to implement several projects in 2024 that will contribute to the protection of ecosystems. The main actions implemented by operating companies in different businesses are outlined below, specifying, where applicable, the priority areas with a high biodiversity value, where the intervention is focused.



The Sarno basin reclamation programme continued, aimed at resolving the pollution of the river hydrographic basin with the completion of the sewerage system and consequent collection and treatment. Thanks to the project, swimming in the sea at the Gulf of Castellammare has once again become possible after 50 years. (Parco regionale bacino fiume Sarno). In 2024, two discharges were eliminated in the municipality of Gragnano and two in the municipality of Castellammare di Stabia.

We remind you in addition of the different ongoing interventions by Acea Ato 2 to ascertain and prevent possible critical events in neighbouring habitats, where it constantly monitors the areas affected by water service management and purification activities:

- in the areas of the Peschiera-Capore aqueduct system, where the doubling of the upper section is being carried out, a study was conducted by the Federico II University of Naples, which showed how the release of water from the spring positively impacts the Farfa River ecosystem, promoting biodiversity. (Piana di S. Vittorino, Sorgenti del Peschiera Fiume Farfa medium-upper course);
- at the major purification plants (Roma Nord, Roma Sud, Cobis, Ostia, Roma Est, Fregene), monitoring programmes have been carried out, which have shown that the analysed plants play a positive role for the ecosystem by providing synanthropic biodiversity hotspots, favouring the presence of an extremely characteristic fauna community (Valle dell'Aniene Nature Reserve, Litorale Romano Nature Reserve).

Monitoring of the peregrine falcon also continued (included under the category of “Least Concern” in the Red List) at the Villa Borghese and Villa Pamphili sites, in an area around the Acqua Vergine springs.

Adistribuzione gas, which operates the methane gas distribution network, minimised the impact on biodiversity in the Abruzzo Region's National Park by restoring conditions at the site after the pipelines were laid.



None of the plants in the Environment area fall under high biodiversity areas. The Acea Ambiente UrBees project aimed at environmental monitoring by observing the behaviour of bees as bio-indicator insects at the waste-to-energy plant in San Vittore del Lazio continues. It confirms the overall good health of the bees and absence of cases of unforeseen diseases or depopulation, as well as the absence of dust from the plant on the bees' wings.

Activities also continued to create and manage green areas at Acea Ambiente sites, including the Terni and Orvieto Ambiente plants, where native tree species were planted to reduce the visual impact of the plants and increase the presence of plant and animal species in the surrounding areas. In addition, beehives were installed in the perimeter of the Orvieto Ambiente plant in 2023, while a zoning project is being developed within the plant complex to create a natural garden.



Areto is continuing with the decommissioning and demolition programme for the overhead power lines and pylons within important areas subject to protection, including Parco di Veio, Riserva Naturale della Marcigliana and, south of Rome, Riserva Naturale Decima Malafede and Riserva Naturale del Litorale romano. In 2024, 49 pylons were removed in the Decima Malafede Nature Reserve and the Litorale Romano Nature Reserve. The activity contributed to the restoration of 200 m² of soil in a high biodiversity area, in line with the European Nature Restoration Directive that came into force in 2024, which aims to restore at least 20% of land and marine areas in the European Union by 2030.

ESRS 2 MDR-A; ESRS E4-3 It is noted that Acea did not undertake any biodiversity offsets in 2024.

2.5.4 BIODIVERSITY AND ECOSYSTEM METRICS

ESRS E4-5 As mentioned above, Acea has identified its sites/plants located in high biodiversity areas, i.e. nationally-derived protected natural areas (EUAPs) and Natura 2000 network sites (Sites of community interest, Special areas of conservation and special protection areas), mapping the infrastructure of the Group's main companies.



ESRS E4-5 Sites located in or in the vicinity of biodiversity-sensitive areas

ESRS E4-5		31/12/2024
		Hectares
Sites in or nearby protected areas or major biodiversity areas negatively affected by the business	Owned	439
	Leased	0
	Managed	278
		Number
Sites in or nearby protected areas or major biodiversity areas negatively affected by the business	Owned	543
	Leased	21
	Managed	2,131

ESRS E4-5 The hectares corresponding to Group sites within or near protected areas or major biodiversity areas refer for 41% (about 300 hectares), to areas under the Casoli dam and related ancillary works, related to the Sant'Angelo hydroelectric power plant, owned by Acea Produzione, for a total of 5 sites; for 19% (about 140 hectares) this refers to sensitive areas managed

by the water company Gori, corresponding to more than 500 sites, including water and sewage; for 18% (about 130 hectares) refer to areas managed by Acea Ato 2 and corresponding to almost 550 sites, including water and sewage. Finally, almost 1,500 sites corresponding to 2% of the areas (about 13 hectares) include areti secondary substations and high-voltage substations.

2.6 USE OF RESOURCES AND THE CIRCULAR ECONOMY **ESRS E5**

ESRS E5; ESRS 2 IRO-1 Impacts, risks and opportunities related to the use of resources and the circular economy were identified based on an assessment carried out with the support of internal and external experts. This assessment involved the entire Acea Group value chain, carefully analysing its assets and activities so as to identify potentially relevant impacts, risks and opportunities. Furthermore, stakeholders were actively involved in the assessment process, participating in the voting of impacts, to foster a shared approach and responsible management of the risks related to the use of resources and promotion of circular economy practices.

In addition, risks related to the use of use and the circular economy were assessed by the company's internal experts, integrating the methodologies used for risk assessment (ERM), already in use in the Acea Group. Opportunity, on the other hand, was identified as being long-term, going beyond the existing strategic planning guidelines, consequently the assessment was carried out according to ISSB - TCFD principles, referring to internationally recognised scenarios and metrics.

Subtopic	Sub-subtopic	IRO	Description	Positive/Negative/ Current/Potential	Time frame	Value chain
Waste		I impact	Contribution to the resolution of critical issues related to mass waste production using waste-to-energy processes	+	long	• own operations
Outflows of resources related to products and services		I impact	Reduction of pressures on the natural environment by processing to reuse civil and industrial waste (plastic, paper, sludge, wastewater, etc.)	+	long	• upstream • own operations
Resources inflow, including use of resources		I impact	Reducing pressures on the natural environment by sourcing environmentally sustainable goods and products (reusable, recycled, etc.)	+	long	• upstream • own operations
Waste		I impact	Environmental impacts related to waste generated by business processes	-	medium	• own operations
Waste		R risk	Non-compliance of suppliers with the current legislation, with reference to operational waste management		medium	• own operations
Waste		O opportunities	Development of production solutions/technologies with low environmental impact (advanced systems for waste treatment, etc.).		medium	• own operations

+ Positive impact; - Negative impact; ○ Effective; ◌ Potential

2.6.1 POLICIES FOR THE USE OF RESOURCES AND THE CIRCULAR ECONOMY

ESRS E5-1 The use of resources and the circular economy are a priority issue for the Group, which is committed to assessing, managing and, where possible, reducing the related impacts and risks, as well as identifying and developing opportunities related to the issue, focusing on resource circularity.

Specifically, the integrated management and sustainability systems policy includes the objective of sustainably managing energy, water and other natural resources, focusing on enhancing their uses, reuse and recovery processes with a view to the circular economy, while paying particular attention to rationalisation of their end uses. Furthermore, Acea is committed to implementing and promoting a business model based on the circularity of resources, focusing especially on the Environment area, with waste recovery programmes, and the Water area, with commitments related to the conservation and protection of water, with measures to reduce leakages and waste, water recovery and reuse projects, and by training consumers and citizens on the correct use of the resource. Group policies are described in Section 1.5 of this document.

With reference to the impact “Reducing pressures on the natural environment by sourcing environmentally sustainable goods and products (reusable, recycled, etc.)”, we note the principles set out in the Group’s Sustainable Procurement Policy, which promotes the creation of a virtuous ecosystem with its suppliers by promot-

ing initiatives aimed at reusing resources, minimising waste, and protecting social aspects. Specifically, Acea recognises the value of companies that have chosen to gain certification in the quality, safety, environment and energy schemes and enhances the value of companies that demonstrate that they apply sustainability criteria, also by supporting the adoption of sustainability performance monitoring systems (e.g. Ecovadis), as described in section 4.2 Management of relations with suppliers. The correct adoption of the Policy, as well as the principles set out in the Group Code of Ethics that is submitted to suppliers, helps to mitigate the risk associated with “non-compliance of suppliers with the current legislation, with reference to operational waste management”. The obligation for suppliers to properly manage waste in compliance with current regulations is also specified in the procurement contracts of Group companies.

2.6.2 OBJECTIVES, ACTIONS AND RESOURCES RELATED TO THE USE OF RESOURCES AND THE CIRCULAR ECONOMY

ESRS 2 MDR-T; ESRS E5-3; ESRS 2 MDR-A The issue of the circular economy is of priority importance to the Group and in line with the policies adopted, includes a dedicated strategic objective in the Sustainability Plan, with specific lines of action for the various businesses, with specific focus on the Environment area.



Attention to the circularity of resources is a common goal of all Group companies, which contribute to the recovery and reuse of every possible resource and to the overall effort to reduce the amount of waste produced.

With a view to managing the relevant impacts, risks and opportunities related to this issue, the Group has formalised specific strategic objectives included in the Sustainability Plan, which also outlines the measures and investments for the lines of action developed by operating companies.

Action lines ▼	Action ▼	IRO ▼	Description ▼
Circularity of resources	► Increased volume of processed waste	I	► Contribution to the resolution of critical issues related to mass waste production using waste-to-energy processes
	► End-of-Waste Recovery (recycling)	I	► Reduction of pressures on the natural environment by processing to reuse civil and industrial waste (plastic, paper, sludge, wastewater, etc.)
	► Sludge recovery for biolignite	O	► Development of production solutions/technologies with low environmental impact (advanced systems for waste treatment, etc.).
	► Purification sand recovery	I	► Reducing pressures on the natural environment by sourcing environmentally sustainable goods and products (reusable, recycled, etc.)
	► Reduction of sewage sludge	I	► Environmental impacts related to waste generated by business processes

The objectives and investments envisaged in the Plan are shown below, with the progress in the actions and related investments at 31.12.2024, with reference to the lines of action that contribute to the management of impacts, risks and opportunities relevant to the issue.

For actions related to these strategic lines, only the capex was monitored, because opex represents a non-significant portion.

Action line ▼	Action (company) ▼	Target @ 2028 ▼	Target progress ▼	Balance 2024 ▼	Baseline 2023 ▼	Capex 2028 (EUR M) ▼	Capex 2024 (EUR M) ▼
Circularity of resources	► Increased volume of processed waste (Acea Ambiente)	► 1.9 Mt/year	-	1.7 Mt	-	433	94.7
	► End of Waste Recovery (AS Recycling)	► Material recovery > 85% of input volumes	-	83%	-	33	5.5
	► Recovery of purification sand "soil washing" (Acea Ato 2)	► 65% recovered material	Plant to launch	-	-	6	5.5
	► Reduction of sewage sludge	► -40% (vs 2023)	-18%	123.419 t	149.770 t	51	8.9

Interventions that contribute to the circular economy of resources relate mainly to the Environment and Water areas:

- increased volume of processed waste: in the Environment area, for example, the recovery of plastic and metal materials from separate urban waste collection (Demap), the recycling of plastic and paper waste for the production of secondary raw materials; in addition, the plan includes a target to increase waste-to-energy treatments with the aim of reducing waste treated in landfills, with a reduction in emissions from the supply chain and benefits for the territory. In the Water area, the recovery of sludge for the production of biolignite to be used as fuel or fertiliser;
- End of Waste (AS Recycling) recovery: the upgrading of waste input sorting and recycling plants for the recovery of secondary raw materials (recycling);
- sand recovery from soil washing (Acea Ato 2): recovery of sand from purification processes and sewer cleaning
- reduction of sewage sludge: refer to interventions mainly in Acea Ato 2 plants.

ESRS E5-2; ESRS 2 MDR-A; ESRS 2 MDR-T In accordance with the policies adopted by the Acea Group, aimed at managing the impacts, risks and opportunities associated with issues related to the use of resources and the circular economy, the Group implemented a series of and measures and interventions during 2024 that contribute to the objectives of protecting the environment and natural resources, with particular reference to the circular economy.

The efficient use of resources and maximisation of circularity processes are a common commitment of the Group companies, specifically the Environment Area.

A description of the main actions implemented by Group Companies in 2024 that contributed to the objectives of efficient use and circularity of resources are provided below, and summarised in the Plan monitoring table above:



WATER

- measures to reduce sewage sludge, amounting to EUR 8.9 million. Specifically, the measures implemented by Acea Ato 2 included: the commissioning of the Roma Sud treatment plant, the revamping of the sludge silos at the Cobis and Montagnano treatment plants, and the construction of the dewatered sludge treatment plant at the Roma Est purifier;
- the completion of the “soil washing” plant built by Acea Ato 2 for the recovery of sand from purification processes and sewer cleaning.



ENVIRONMENT

Interventions that contribute to the circular economy of resources relate mainly to the Environment and Water areas:

- increased volume of waste processed through the waste-to-energy plants in San Vittore del Lazio and Terni that integrate circular economy and resource efficiency. San Vittore del Lazio, the only plant in the region, processes special non-hazardous waste; Terni processes pulper waste from paper mills. Both plants recover energy from waste combustion and reduce waste treated in landfills, benefiting local communities and with an overall reduction in supply chain emissions linked to the waste chain;
- the recovery of plastic and metal materials from separate urban waste collection (Demap), the recycling of plastic and paper waste for the production of secondary raw materials (Ferrocart, Meg, Tecnoservizi), including mainly: the recovery and treatment of organic waste for the production of compost and electricity, also used for self-consumption, at sites in the Environment area;
- interventions for the recovery of secondary raw materials with the upgrading/construction of waste sorting and recycling plants, with a recovery rate of 83% of the total waste entering the recycling area;
- energy valorisation of landfilled waste, with the production of electricity from the biogas produced at the plant and in the landfill (Orvieto hub);
- the recovery of whey, a by-product of dairy processing, for re-use as a food product (Iseco);

- the construction and operation of community-based composting plants (so-called Smart Comp), which have resulted in the production of more than 100,000 tonnes of quality compost, also reducing emissions locally by avoiding the transportation and disposal of waste that is now composted on site.



ENGINEERING & INFRASTRUCTURE PROJECTS

- Simam aims to reduce the impact on the environment right from the design phase: treatment services are provided with mobile plants designed to favour modularity, thus avoiding oversizing and the waste of resources and offering versatile solutions in the event of process modifications and reusable options in the event of treatment decommissioning. Simam is also committed to finding innovative solutions for the recovery and reuse of resources, starting with the treatment of wastewater and waste, and the optimisation of treatment plants both in terms of management methods and the adoption of new technologies.

Finally, all the Group's sites and offices implement separate waste collection, in accordance with the specifications of the municipalities where they are located, also with a view to constantly educating and improving the sensitivity of the people in the offices.

2.6.3 METRICS FOR THE USE OF RESOURCES AND THE CIRCULAR ECONOMY

ESRS E5-4; ESRS E5-5 Over the last year, Acea generally increased its capacity to intervene in the management of the final part of the waste cycle, with the aim of recovering, recycling, reusing and, where possible, recovering energy. Specifically, the Group manages the treatment of municipal solid waste (MSW) and other types of waste (such as green waste from separated waste collection, industrial waste, etc.) for the recovery of material and disposal of residual materials in landfill, the storage, selection, sorting and separation of multi-material waste originating from separated waste collection, such as plastic and metal packaging, for subsequent recovery, the treatment of liquid waste such as leachates and liquid sludge, waste-to-energy the volumes for disposal, the land needed for the disposal and recovery of the waste energy portion, and the production of high quality compost for agricultural use.

ESRS E5-4 Resource inflows

Incoming flows mainly include various types of materials and waste arriving at Environment Area plants, and the chemical resources used for process management, from the treatment of wastewater from water companies to the operation of production plants and the Environment Area.

Of the incoming materials, 47% refer to biological resources, mainly biomass arriving at the Aprilia and Monterotondo Marittimo composting sites (approximately 160,000 t) and at the Orvieto Ambiente composting line (112,00 t) and the biological component arriving at the waste-to-energy plants in San Vittore del Lazio and Terni (174,000 t). Other incoming liquid waste involves Simam and the Chiusi site for a total of 380,000 t. Non-organic materials used during the year are also calculated (approximately 986,000 t); these include the portion of waste-to-energy FSCs and pulper,



amounting to approximately 150,200 and 40,000 t, respectively. Deco's Municipal Solid Waste (MSW) Mechanical Biological Treatment (MBT) plant received more than 245,000 t of municipal solid waste (MSW), from which it recovers material and FSCs. The company Cavallari receives waste at its sites mainly from separate urban waste collection or special non-hazardous waste from production activities, totalling about 110,000 t. Tecnoservizi, a company operating in the mechanical treatment and recovery of sorted municipal waste, receives more than 95,300 t, including quantities of used

hydraulic oil and motor oil. Another important facility is the Ecologica Sangro landfill site, which treated approximately 62,000 t before being sent to landfill. Regarding the Networks & Public Lighting area, Areti accounts for approximately 4,100 t of electromechanical materials installed in works on substations and networks, as well as oil and sulphur hexafluoride (SF₆) top-ups. Technical materials include approximately 41,500 t of chemicals used for process management, from water company wastewater treatment to production plants, to the Environment area.

ESRS E5-4 Resource inflows

ESRS E5-4	Incoming flows	31/12/2024
		Tonnes
	Overall total weight of products used during the reporting period	1,911,281
	Total secondary components	0
		Percentage
	Biological materials	46.5%
	Secondary components	0%

ESRS E5-4 Measurement, calculation and/or estimation methodology

Data for the different types of waste is taken from management software, and can therefore be considered as direct measurements derived from certified weighing systems on entry and exit from the plant. For biological materials (organic waste), the input streams to the sites also come from extractions from management software used to register incoming weighed biomass forms. Data on purchased chemicals, which constitute a part of the total weight of the products used during the reporting period, is taken from the purchase invoices of the supplier companies verified by a certified proprietary weighing system.

ESRS E5-5 Resource outflows

Resource outflows mainly relate to the activities of plants in the Environment area. Specifically, they include the quality compost produced at the Monterotondo Marittimo and Aprilia sites and at the Orvieto Ambiente site and used in agriculture, and the Solid Secondary Fuel (CSS), produced mainly by Deco and Cavallari, used

by cement works or waste-to-energy plants, which will respectively valorise its material or energy component. "Other" includes other products placed on the market, mainly the result of material recovery and waste from the environment chain. Ferrocarril, for example, produces about 20,500 tonnes of secondary raw materials (MpS)/EoW from the processing and paper waste, Cavallari produces and sells paper, cardboard and secondary raw materials and pallets (about 16,500 t), Meg, whose plants receive waste from sorting centres accredited by the Consortia (Corepla, Conip, Ecolight) or from private producers who sort and select plastic waste, obtains different types of plastics from its production processes, defined as MpS/EoW and all conforming to UNI standards. Compared to incoming waste quantities, Meg converts at least 70% in terms of weight, of the recovered plastic waste into secondary raw materials (about 9,600 t released on the market). Tecnoservizi also produces and markets around 7,400 t of EoW paper. Wastewater accounted for in outflows are the quantities recovered and sold to third parties, mainly related to water sold by AdF for non-agricultural irrigation. The company Iseco produces milk powder from dairy derivatives.

ESRS E5-5 Outflows

ESRS E5-5	Outflows	31/12/2024
		Tonnes
	Compost	43,047
	SRF	102,285
	Milk powder	1,384
	Waste water	72,100
	Other	56,597
	Weight of products released on the market	275,414
	Weight of recycled content (including packaging)	NA

ESRS E5-5 Product durability is not an applicable figure, given the Group's business.

ESRS E5-5 Waste produced

The principles of the circular economy drive the shared goal pursued by all Group companies in their overall commitment to reduce waste. The main categories of waste produced are outlined below, including sludge or sand and screenings for the companies in the Water area, leachate for the landfill sites in the Environment area, and fly and bottom ash for the waste-to-energy plants in the Environment area. 58% of the total waste produced (898,000 tonnes)

is recovered, whereas the remainder is destined for disposal. Companies in the Environment area that sent significant amounts of waste for recovery include: Deco (22% of total waste to recovery), Tecnoservizi (15%) and Acea Ambiente's two waste-to-energy plants (10%). Companies in the Water area, on the other hand, send more than 120,000 tonnes of waste for recovery (23% of the total).

ESRS E5-5 Waste not intended for disposal

ESRS_E5-5	Types of waste	Preparation for re-use	Recycling	Other recovery operations
Tonnes				
Waste not intended for disposal	Hazardous	52,045	3	844
	Non-hazardous	287,129	68,291	118,997

ESRS E5-5 Waste intended for disposal

ESRS_E5-5	Types of waste	Incineration	Landfill disposal	Other recovery operations
Tonnes				
Waste intended for disposal	Hazardous	1,212	573	15,916
	Non-hazardous	891	167,962	184,148

ESRS E5-5 Total waste produced

ESRS_E5-5	Materials in waste	31/12/2024
		Tonnes
Total waste produced	Buffer tank water	10,756
	Lead batteries	37
	Paper and cardboard	7,536
	Hazardous fly ash	9,179
	Hazardous bottom ash	50,584
	FSCs (combustible waste)	124,648
	Sewage sludge	157,476
	Iron and steel	15,156
	Oils, mineral oils and concentrates produced by separation processes	386
	Leachate	57,308
	Sands and screens	22,311
	Surplus	74,613
	Excavated earth and rocks	24,163
	Transformers and capacitors containing PCBs	16
	Plastic	106,359
	Other materials	237,484
	Total	898,010



ESRS E5-5 Among the waste produced, the most significant category is sludge from water companies. Specifically, Gori produced about 65,500 t of sludge (42% of total sludge), Acea Ato 2 almost 45,000 (29%). It is noted that water companies aim to reduce the volume of sludge produced by implementing new drying lines, latest-generation centrifuges and other specific systems every year. These initiatives have a major impact in terms of the circular economy: reducing the water content of the sludge optimises opportunities to use it in material and/or energy processes and reduces disposal costs.

14% of waste consists of Solid Secondary Fuels produced mainly by Deco (79%) and Cavallari (10%), which are sent for energy recovery in cement works or waste-to-energy plants. Plastics are mainly produced by Cavallari (59%) and Meg (20%) and everything is sent for recovery. Hazardous bottom ash is produced by the waste-to-energy plant San Vittore del Lazio (93%) and the remaining amount by Terni. Most bottom ash and fly ash is recovered. The surplus, consisting of various scraps from the treatment of different types of waste, is mainly produced by the Orvieto Ambiente (26%) and Cavallari (26%), Demap (21%) and Ferrocarril (14%) landfills and is sent to various disposal operations.

The item “Other materials” includes very different types of waste and scrap from the different business areas. For example, 38% is produced by Deco's plants, mainly waste from mechanical biological treatment, sent for disposal as well as heavy inert materials and aqueous waste solutions sent for disposal; 32% is produced by Tecnoservizi and includes inert waste from demolition and construction, insulation waste, bituminous mixtures and other waste from various processes, mainly sent for disposal.

The distribution of the main types of waste, in particular hazardous waste and non-recycled waste, is described below. Hazardous waste, as defined by the European Waste Codes (EWC), is classified according to specific hazard characteristics. The waste-to-energy plant at San Vittore del Lazio produces about 86% of the total hazardous waste, including slag and bottom ash from the combustion process, fly ash and residual sodium products from the flue gas treatment process. The category of non-recycled waste comprises most of the waste generated (91%), including all waste sent for disposal and recovered waste, except for recycled waste in the strictest sense (9%).

ESRS E5-5 Details of non-recycled, hazardous and radioactive waste

ESRS_E5-5	31/12/2024
	Tonnes
Non-recycled waste	819,071
Hazardous waste	70,591
Radioactive waste	0

ESRS E5-5 Recyclable content of products and non-recycled waste

ESRS_E5-5	31/12/2024
	Percentage
Recyclable content in products	1%
Recyclable content in product packaging	0%
Non-recycled waste	91.2%

ESRS E5-5 Product durability is not an applicable figure, given the Group's business.

ESRS E5-5 Measurement, calculation and/or estimation methodology

The waste produced is accounted for using specific management software that records data from the forms, following operations on the loading and unloading registers. Quantitative data on waste disposed of derives from direct measurements taken using weighing systems, which are periodically calibrated and certified. In addition, environmental legislative compliance checks are systematically carried out on suppliers handling and transporting waste. Specifically, sewage sludge is mechanically removed from sedimentation tanks and placed on drying beds, after centrifugation in larger plants.