

Sustainability Report  
**2023**



**We work every day to achieve  
a sustainable energy balance**

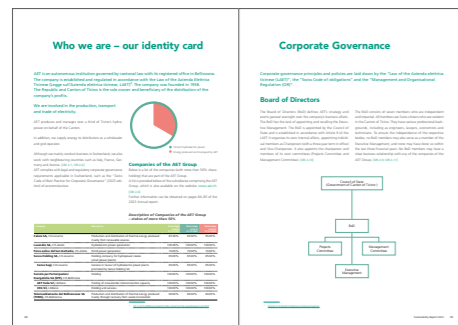
# Overview

This document is divided into 3 parts.

## The first section

provides various pieces of **key information concerning AET**, including the structure and membership of corporate bodies, an analysis of the main stakeholders within the company, its approach to sustainability, relevant issues and management strategies.

PP. 08–21



## The second section

is organised into **three chapters, which deal with the core dimensions of sustainability**, namely:

PP. 22–67

### Social

relations with people and community.

PP. 22–35



### Governance

economic relations, technological innovation and supply chain management.

PP. 36–43



### Environment

all the activities we carry out to reduce emissions, limit the use of resources and respect natural ecosystems.

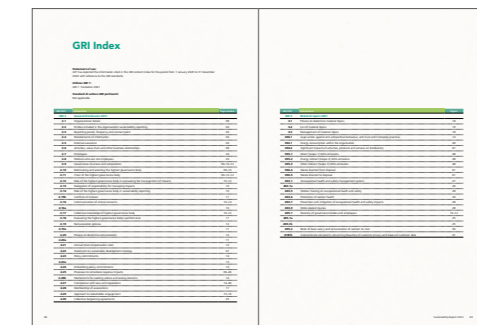
PP. 44–67



## Finally, an annexed table

indicates the **specific pages containing relevant information for GRI indicators** (Global Reporting Initiative – the international reference framework that is commonly used for drawing up sustainability reports –), which are flagged in the various chapters and sections using the reference [GRI].

PP. 68–69



## Methodological note

This is the first edition of the Sustainability Report published by Azienda Elettrica Ticinese (AET)<sup>3</sup>. It contains both qualitative and quantitative information intended to illustrate the company's commitment to sustainability topics for the 2023 financial year.

[GRI 2-2]

This document was published at the same time as the 2023 Annual Report, although it does not form part of that statement.

The information in this Report covers the period 1 January 2023 to 31 December 2023 and is based on the GRI. The GRI are international standards that enable companies to identify, prioritise and report on their own impacts and to communicate their contribution to sustainable development. The GRI has been adopted on a "with reference"<sup>2</sup>.

AET has also drawn inspiration from sectoral standards for electricity companies<sup>3</sup>.

The indicators and other specific information may be consulted in the GRI Index on page 68-69. [GRI 2-3]

This Report has been approved by the Board of Directors and the Executive Management of AET, but it has not been audited by a third party. [GRI 2-5]

In order to ensure proper usage of the GRI standards, AET has informed the Global Reporting Initiative that it is using the GRI standards. The communication was issued in 2024. [GRI 1-2]

As this is the first year that sustainability issues have been reported on, no qualitative or quantitative review of information has been carried out. [GRI 2-4]

<sup>1</sup> This Report focuses in part on AET (with registered office in Monte Carasso) in its own right, and in part on AET along with its subsidiaries in which AET has a majority stake (above 50%): the term "AET Group" will be used to refer to the latter. It is possible that some information may also relate to minority stakes; in order to avoid any misunderstandings, readers are invited to consult the captions/keys relating to graphs and pictures.

<sup>2</sup> [www.globalreporting.org](http://www.globalreporting.org)

<sup>3</sup> G4 Sector Disclosure Electric Utilities.

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**AET's work is closely linked to sustainability:** it directly affects and depends on the environment, local communities and the canton's economic tissue.

## Editorial

### Welcome to our first Sustainability Report

This report is based on the interpretation of the public mandate given to us by the Grand Council of the Canton of Ticino. Since our foundation in 1958, this Council has required us to work actively – to promote economic, social and environmental well-being.

In keeping with this mission, we can assert that, by generating, transporting and selling renewable electricity, we are helping to reduce CO<sub>2</sub> emissions and to achieve carbon neutrality. We aim to manage energy obtained predominantly from renewable and local sources by 2050. The portfolio of cantonal production in Ticino – consisting of hydropower, photovoltaic energy and wind energy – provides a solid starting point for pursuing this ambitious target.



**AET has deep roots in the local area: through our operations we derive value from the Canton's natural resources, whilst creating jobs and supply chain activity throughout Ticino, particularly in its peripheral regions. An awareness of this bond inspires us, when implementing our projects, to pay the utmost attention to any potential repercussions on the environment and on local communities.**

In social terms, we recognise our employees' central role in achieving our targets. As such, we are committed to ensuring that AET staff are involved as closely as possible in the company's strategies and take part in continuing professional development. We are committed to guaranteeing a working environment that recognises gender equality and inclusion and guarantees that these are practiced on a daily basis by everyone working in the company.

The principles of sustainability present us with an enormous challenge, and it is certainly no coincidence that they have become an integral part of our corporate governance. This Sustainability Report represents an important step forward in further reinforcing our approach: indeed, the indicators on which it is based are invaluable for analysing the impacts of the company's operations in greater depth, setting new targets and monitoring results. In short, its publication marks the 'official' launch of a shared process that will enable us to give sustainability an even more central role as a key element within the company's strategy. [\[GRI 2-22\]](#)

Please do not hesitate to contact us if you require any clarifications or if you need more detailed information concerning any of the issues addressed in the following pages.

We hope that you enjoy reading this Report.

Roberto Pronini  
CEO Azienda Elettrica Ticinese

# Who we are – our identity card

AET is an autonomous institution governed by cantonal law with its registered office in Bellinzona. The company is established and regulated in accordance with the Law of the Azienda Elettrica Ticinese (Legge sull’Azienda elettrica ticinese, LAET)<sup>4</sup>. The company was founded in 1958. The Republic and Canton of Ticino is the sole owner and beneficiary of the distribution of the company’s profits.

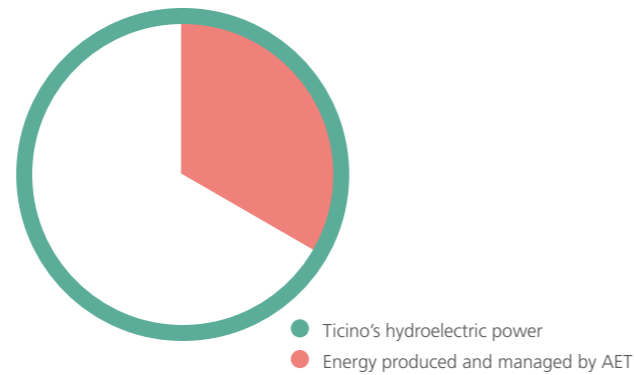
## We are involved in the production, transport and trade of electricity.

AET produces and manages over a third of Ticino’s hydro-power on behalf of the Canton.

In addition, we supply energy to distributors as a wholesaler and grid operator.

Although we mainly conduct business in Switzerland, we also work with neighbouring countries such as Italy, France, Germany and Austria. [GRI 2-1; GRI 2-6]

AET complies with legal and regulatory corporate governance requirements applicable in Switzerland, such as the “Swiss Code of Best Practice for Corporate Governance” (2023 edition) of economiesuisse.



## Companies of the AET Group

Below is a list of the companies (with more than 50% shareholding) that are part of the AET Group.

A list is provided below of the subsidiaries comprising the AET Group, which is also available on the website: [www.aet.ch](http://www.aet.ch). [GRI 2-6]

Further information can be obtained on pages 84–85 of the 2023 Annual report.

### Description of Companies of the AET Group – stakes of more than 50%

Company	Description	Percentage held at 31.12.2021	Percentage held at 31.12.2022	Percentage held at 31.12.2023
Calore SA, CH-Locarno	Production and distribution of thermal energy produced mainly from renewable sources	65.00%	65.00%	65.00%
Lucendro SA, CH-Airolo	Hydroelectric power generation	100.00%	100.00%	100.00%
Parco eolico del San Gottardo, CH-Airolo	Wind power generation	70.00%	70.00%	70.00%
Senco Holding SA, CH-Locarno	Holding company for hydropower stakes (small power plants)	65.00%	65.00%	65.00%
Senco Sagl, CH-Locarno	Services in favour of hydroelectric power plants promoted by Senco Holding SA	65.00%	65.00%	65.00%
Società per Partecipazioni Energetiche SA (SPE), CH-Bellinzona	Holding	100.00%	100.00%	100.00%
AET Italia Srl, I-Milano	Trading of cross-border interconnection capacity	100.00%	100.00%	100.00%
CEG Srl, I-Milano	Holding and services	100.00%	100.00%	100.00%
Teleriscaldamento del Bellinzonese SA (TERIS), CH-Bellinzona	Production and distribution of thermal energy produced mainly through recovery from waste incineration	60.00%	60.00%	60.00%

<sup>4</sup> [m3.ti.ch/CAN/RLeggi/public/index.php/raccolta-leggi/legge/num/528](http://m3.ti.ch/CAN/RLeggi/public/index.php/raccolta-leggi/legge/num/528)

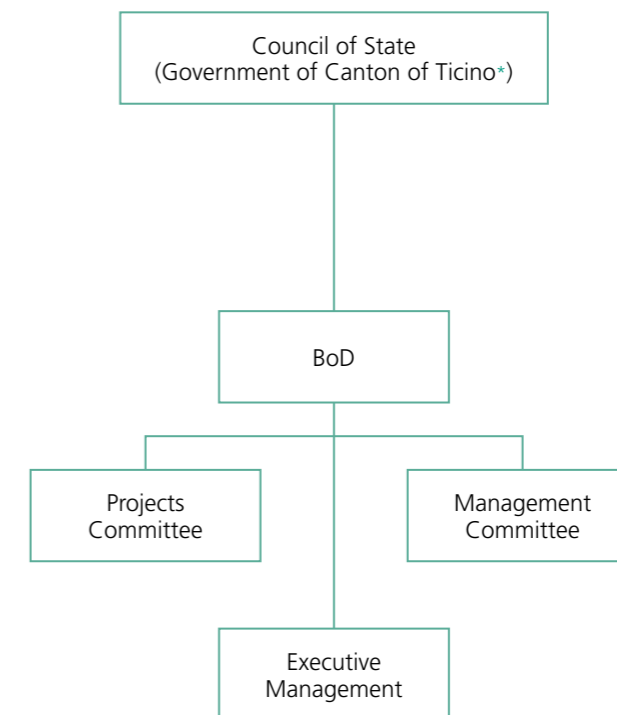
# Corporate Governance

Corporate governance principles and policies are laid down by the “Law of the Azienda elettrica ticinese (LAET)”, the “Swiss Code of obligations” and the “Management and Organisational Regulation (OR)”.

## Board of Directors

The Board of Directors (BoD) defines AET’s strategy and exerts general oversight over the company’s business affairs. The BoD has the task of appointing and recalling the Executive Management. The BoD is appointed by the Council of State and is established in accordance with Article 8 of the LAET. It organises its own internal affairs, appointing individual members as Chairman (with a three-year term in office) and Vice-Chairman. It also appoints the chairman and members of its own committees (Projects Committee and Management Committee). [GRI 2-10]

The BoD consists of seven members who are independent and impartial. All members are Swiss citizens who are resident in the Canton of Ticino. They have various professional backgrounds, including as engineers, lawyers, economists and technicians. To ensure the independence of the respective bodies, no BoD members may also serve as a member of the Executive Management, and none may have done so within the last three financial years. No BoD members may have a close business relationship with any of the companies of the AET Group. [GRI 2-9; GRI 2-11]



\* [www4.ti.ch/poteri/cds/governo/presentazione](http://www4.ti.ch/poteri/cds/governo/presentazione)

## Election and term of office

As a general rule, the BoD members are appointed by the Council of State for a term of three years, with a maximum overall term in office of twelve years. One of the members of the BoD is elected as Chairman, for a three-year term (renewable). [GRI 2-9; GRI 2-10; GRI 405-1]

Name		Start of term in office – Expiry of term in office	Function, Role in committees
Giovanni Leonardi	♂	01.08.2013 – 31.07.2025	<b>Chairman</b>
Claudio Cereghetti	♂	19.08.2014 – 31.08.2025	<b>Vice-Chairman</b> , Member of the Projects Committee
Alberto Passoni	♂	22.09.2015 – 31.08.2025	<b>Member</b> , Chairman of the Projects Committee
Fabiana Gianora	♀	01.02.2020 – 31.08.2024	<b>Member</b> , Member of the Projects Committee
Dino Cauzza	♂	01.01.2018 – 31.08.2026	<b>Member</b> , Chairman of the Management Committee
Marika Codoni-Sulmoni	♀	05.06.2020 – 31.08.2024	<b>Member</b> , Member of the Management Committee
Roberta Pantani Tettamanti	♀	01.12.2021 – 31.08.2024	<b>Member</b> , Member of the Management Committee

## Internal organisation

The BoD meets at least 6 times each year. In 2021, the BoD met 9 times and held two workshops. In both 2022 and 2023, the BoD held 10 ordinary meetings as well as one full-day workshop concerning strategic and particularly topical issues. Each quarter, the BoD receives a report on business performance from the Executive Management, which takes account of financial and commercial matters (including the situation on the markets, particularly the energy market), overall operational and business performance (including risk management, human resources, stakes etc.), as well as describing the private interests of BoD members and Executive Management members. [GRI 2-16a]

BoD members regularly attend board meetings, as well as those for the committees of which they are members. The committees analyse all matters falling within the purview of the BoD and draw up opinions for the BoD, although do not take any decisions (competence over which is reserved exclusively to the BoD).

## Projects Committee

The Committee has three members and meets upon the invitation of the Chairman.

This body is charged with submitting reports and opinions to the BoD concerning tangible investments or stakes.

This Committee met 7 times in 2021, 8 times in 2022 and 8 times in 2023.

## Management Committee

This Committee also has three members and meets upon the invitation of the Chairman.

It is charged with analysing and verifying the organisation and control of the company, while also supervising risk management, auditing (both external and internal) and the internal control system. The Management Committee can receive reports concerning critical or sensitive issues, which are discussed in meetings and subsequently referred for discussion by the BoD as a whole. [GRI 2-16]

Regarding reporting on sustainability issues, the Management Committee supports the process and formulates opinions on the content of the Report as well as suggestions and guidelines. It meets with sustainability managers at least once a year to assess progress. In order to increase the Committee's collective knowledge, at the first meeting - held in 2023 - the sustainability managers presented the general concepts of sustainable development and corporate social responsibility and their practical application, including in particular the choice of the GRI standard and its implications for AET. [GRI 2-12, GRI 2-13, GRI 2-14, GRI 2-17]

The Committee met 7 times in 2021, 9 times in 2022 and 8 times in 2023.

## Assessment of the BoD

The rules of conduct to be followed by the BoD, managers and employees in the course of the company's activities are set out in the AET Code of ethics and in the internal audit policies, which provides that Board members, members of the Executive Committee and managers must annually assess their compliance with the Code through self-certification.

In order to ensure good corporate governance, the private affairs of the members of the BoD are reviewed once a year, also on a self-certification basis. Appointments to other boards of directors, self-dealing, close relationships with third parties with whom the company does business and significant financial interests are considered. [GRI 2-15b]

The performance of BoD members is also assessed through self-certification. The results of this are communicated to the Cantonal Department for Finances and the Economy (DFE), which is responsible for oversight of AET. [GRI 2-18]

## Division of competence between the BoD and the Executive Management

The BoD exercises the non-transferable, inalienable powers described in Article 8 of the LAET and Articles 716, 716a and 716b of the Swiss Code of obligations, as supplemented by the Management and Organisational Regulation (OR).

The Executive Management is tasked with the operational, day-to-day management of the company; it is responsible for pursuing the objectives and strategic decisions adopted by the BoD and for implementing these decisions.

The CEO is answerable to the BoD and represents the company both externally and internally, regularly submitting information to the BoD and attending all its meetings. The Chairman of the BoD and the CEO are in regular contact with one another to coordinate their respective actions and to keep up to date with ongoing business.

## Remuneration

BoD members' remuneration comprises fixed annual remuneration and attendance fees for participation in official BoD meetings and BoD committees. Emoluments are set by the Council of State. All BoD members are reimbursed for the costs of travel to and from the registered office of AET (ref the: Annual report 2023, page 44 note 21 "Personnel expenses").

[GRI 2-19a; GRI 2-20a]

## Executive Management

According to the principles laid down in the LAET and in the Management and Organisational Regulation (OR), the Executive Management “directs, coordinates and manages the business of the company and attends to its development; it prepares dossiers concerning matters falling within the remit of the BoD and formulates its own opinions”. [GRI 2-9] [GRI 2-11]

### Members of the Executive Management

[GRI 405-1]

The Executive Management consists of 6 members appointed by the Board of Directors.

Name	Function
Roberto Pronini	♂ CEO
Claudio Nauer	♂ Co-CEO, Head of Management Services
Flavio Kurzo	♂ Deputy CEO, Chief Financial Officer
Edi Losa	♂ Deputy CEO, Head of energy production
Fiorenzo Scerpella	♂ Deputy CEO, Head of grid
Giorgio Tognola	♂ Deputy CEO, Head of energy trade

### Internal organisation

The Executive Management is chaired by the CEO. The BoD appoints one of its members to with the rank of Co-CEO to deputize for the CEO. The other members have the rank of Deputy CEO and responsible for a specific area. The Executive Management meets at regular intervals (weekly or fortnightly) and its decisions are taken on a collegial basis; in the absence of the CEO, the Co-CEO acts on his behalf. [GRI 2-12, 2-17]

### Remuneration

Executive Management member salaries are set by the BoD. The total amounts paid to the Executive Management in remuneration (fixed components, variable components and incidental amounts) are set out in the 2023 Annual report (ref. page 44 note 21 “Personnel expenses”). [GRI 2-19, GRI 2-20]

AET’s salary system is approved by the BoD and considers comparative salary range data collected over the years from other companies in the industry.

The following table shows the CEO’s annual remuneration as a proportion of employees’ average remuneration. [GRI 2-21]

305%	2021
310%	2022
310%	2023

\* [www.iso.org/standard/65694.html](http://www.iso.org/standard/65694.html)

### Other grants

(ref the: Annual report, page 44 note 21 “Personnel expenses”)

- Representation costs: lump-sum reimbursements comply with the regulations approved by the tax authorities.
- BoD meetings: all payments (annual allowances and attendance fees) made to Executive Management members regarding their attendance as representatives of AET in the BoDs of subsidiaries are collected and retained by AET.

### Supervision and control instruments

Internal supervision and control within the company fall within the competence of the BoD, which defines the organisational principles. Meanwhile, actual operations are a matter for the Executive Management.

- Risks Committee:** is responsible for proposing and formulating risk policies at the strategic level for submission to the BoD. Based on its remit, it approves risk mitigation measures. It also approves the risk inventory, reports and communications related to risk management.
- Risk Management:** deals with managing risks, whether positive or negative\*, to protect the company’s assets and ensure an appropriate balance between the benefits and risks of the company’s activities.
- Normative Compliance:** supports the Executive Management in ensuring compliance with Swiss and European legislation, regulations and internal requirements as well as standards and rules of conduct applicable on AET-relevant markets.
- Internal Control System Supervisory Group:** has the task of implementing and supervising the internal control system, developing appropriate processes for identifying and supervising the risk of mistakes within the Cash Flow Statement, identifying key controls and ensuring the performance of delegated tasks.
- Internal and External Audit:** AET has both an internal auditor, responsible for supervising, implementing and managing internal controls, and an external auditor, which operates as an independent control body.

# Sustainability strategy

We have been committed to the principles of sustainability ever since the company was established, when the responsible use of the Canton’s natural resources and social wellbeing were placed at the heart of the mandate received from the Government of Ticino.

Over the years, we have interpreted our public role by paying particular attention to:

- optimising the use of the Canton’s renewable energy resources, in particular water, thereby ensuring an energy supply that is as renewable and local as possible, as well as being at a suitable cost;
- promoting the availability and development of qualified jobs in the Canton, acting as a stimulus for training and ongoing professional development;
- promoting the wellbeing of peripheral regions affected by the presence of production plants, ensuring supply chain activity and providing economic support to local communities;
- utilising the renewable energy resources offered by the Canton, with a special focus on the growing awareness of the environmental impact of this activity.

Our commitment to all these actions is aimed at their progressive improvement over time, supported both by a proactive approach and by the evolving legal framework governing our activities. Indeed, the latest version of the LAET, approved by Parliament in 2016, clarifies our role in accordance with the provisions of the Cantonal Energy Act and the Cantonal Energy Plan (PEC). [GRI 2-23a]

For AET, the reference to the PEC implies the need to respect its strategic addresses as defined by the cantonal Authority:

- efficiency, efficacy and energy-saving:** reducing consumption in terms of ultimate energy usage;
- energy conversion:** replacing energy carriers with the progressive phasing out of fossil fuels, particularly including fuel oil and liquid fuels (emissions stabilised at 1 tonne of CO<sub>2</sub> per capita);
- efficient, secure and sustainable energy production and supply:** diversifying supply, responsibly managing water resources, confirming and ensuring water outflow and the role of AET, and promoting other cantonal renewable energy sources (photovoltaic, wind, biomass, heat and geothermal).

In 2024, the PEC is set to be replaced by the new Cantonal Energy and Climate Plan (Piano Energetico Climatico Cantonale, PECC).

AET’s BoD is accountable to the Council of State with respect to implementing these priorities within the company’s strategy.

This Sustainability Report, commissioned by the BoD from the Executive Management, interprets and highlights the growing need to take account of sustainability as a whole as well as the need to measure the actual impact of the company’s operations. Indeed, the analysis made when the Report was drawn up lays the basis for establishing a sustainability strategy that is characterised by specific objectives, over and above those specified by the Canton. AET now incorporates the internal knowledge and expertise required so that it can take this next step in its evolution.

“

### Future prospects

The BoD and Executive Management determine strategic, medium-term priorities in the area of sustainability and non-financial reporting.

[GRI 2-22]

”



# Governance strategies, internal policies and practices

AET has had a Code of ethics since 2011, which was updated in November 2022. The new version incorporates respect for human rights as well as corporate social and environmental responsibility as company values. [GRI 2-23, GRI 2-24]

The Code of ethics sets out the principles and rules of conduct that guide AET: all members of governing bodies, managers and employees of AET must abide by the Code.

AET promotes respect for human rights, corporate social and environmental responsibility and respect for the equal, dignified treatment of all people to whom the Code applies.

In particular, the Code focuses on the following fundamental principles:

- credibility, transparency and reliability;
- professionalism and the appreciation of human resources;
- flexibility and dynamism;
- legality, honesty and probity;
- loyalty, integrity and good faith;
- respect for individuals and equal opportunities;
- environmental sustainability;
- public commitment and identification with the local territory.

## Information relating to 2023:

- no reports were received through the whistleblowing platform;
- no fines were imposed on the company due to non-compliance with laws or regulations; [GRI 2-27]
- no legal action was launched regarding anti-competitive behaviour, anti-trust and monopoly practices; [GRI 206-1]
- no anomalies were identified concerning BoD members' private affairs, and no negative assessments were made about the BoD's performance. [GRI 2-16]

## ACTIVITIES PERFORMED IN 2022-2023

- **Establishment of a "whistleblowing platform" in the autumn of 2022:** this is a new instrument available to all AET employees for reporting any serious problems encountered within the company's general operations or concerning interpersonal relations. Whistleblowers can access the platform securely and anonymously. All reports are examined by a well-defined task force, whose members are known to employees. This instrument operates alongside the traditional option of reporting through line managers. [GRI 2-26b]
- **"ClimAET" survey of all company employees:** acting in conjunction with Compliance, Human Resources performed a climate survey with employees. The excellent response rate and positive feedback received from employees are testament to the company's increasing focus on its working environment.

**Future prospects**

Arrange for all staff to once again complete the ClimAET survey, which will also include specific questions concerning sustainability.

Raise further employee awareness on the matters addressed in the Code of ethics and on other sensitive issues, such as harassment, bullying and sexual harassment.

# Stakeholders and their involvement

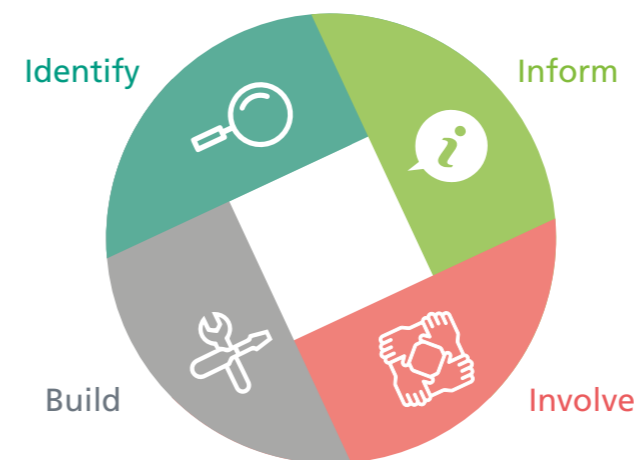
We recognise as a stakeholder any party with which we have a significant relationship, where their interests are affected in any way by the company's operations because of commercial exchanges with AET or if those interests are significantly affected due to any other reason.

AET involves stakeholders in accordance with the principles set out in the Code of ethics and the "Quality, Security and Environmental Service" according to constructive approaches, prioritising dialogue and engagement.

Maintaining the relationship with stakeholders is an ongoing, dynamic and multi-directional process. Within this context, we are developing procedures for identifying, analysing and managing reciprocal relations. [GRI 2-29]

## Il nostro modello relazionale

- **We identify:** analysing and mapping stakeholders;
- **We inform:** using our website and publications that are intended for the media;
- **We involve:** online, at events, through sponsorship and according to guided processes;
- **We build:** partnerships with municipally-owned companies or through selected campaigns, such as the photovoltaic energy campaign developed and promoted in conjunction with Ticino Energia.



**Future prospects**

Further promote engagement with the Authorities, such as the Council of State, the Environment, Territory and Energy Committee of the Grand Council, and the AET Public Mandate Control Committee, including sustainability issues.

Also address sustainability issues within the BoD's annual workshop.

Incorporate sustainability into the surveys performed by the company (with customers and suppliers).

## Map of stakeholders (internal and external) [GRI 2-29]

Here are the macro categories of our key stakeholders.



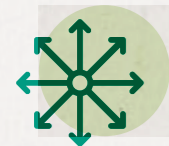
**Employees:** the company's workers represent the most important asset in achieving the company's objectives, and the company's priority is to provide them with the best conditions of stability and security, as well as adequate opportunities for growth through continuous training.



**State:** the Canton is AET's owner and as such determines its policy, governance and strategy. The Canton provides a guarantee for the company, which respects the mandate vested in it. The parties enjoy a long-term relationship that is characterised by reciprocal trust.



**Institutions:** we perform an essential public role – the production and supply of energy to distributors – and most of our activities are regulated by public authorities. The relationship with the institutions is therefore essential, both for planning activities and for operations.



**Distributors:** the relationship with the distributors is fundamental to maintaining the balance between electricity production and distribution throughout the Canton. We supply energy to distributors in Ticino, along with other distributors to the north of the Gotthard Pass.



**Counterparties and customers:** we are committed to satisfying the needs of our commercial counterparties and our customers, pre-empting market expectations and proposing cutting-edge services, particularly investing in the digitalisation of processes.



**Suppliers:** our company is an important customer for economic operators involved in the procurement of works, goods and services. Not including energy purchases, goods and services worth CHF 32-35 million per year will be purchased from 850-900 suppliers between 2021 and 2023. The supply chain is analysed at the supplier qualification stage and monitored throughout the supply lifecycle.



**Bank and insurers:** transparent relations with banks ensure us access to the financing required to guarantee our operations. We maintain excellent relations with the social security bodies and the insurers with which we insure our employees, thereby protecting our operations as well as our investments.



**Society:** we are mindful of our impact on society. As such, we provide transparent support to many sporting, social and cultural projects, acting in accordance with the guidelines applicable to those initiatives.



**Certification bodies:** we have achieved certification under ISO 9001:2015 for the quality management system, under ISO 14001:2015 for the environmental management system and under ISO 45001:2018 for the occupational health and safety management system. All company activities are organised in such a way that guarantees the best possible qualitative standard.



**Media:** we communicate with the public using both traditional and digital media. Our relations with the press are extremely transparent and open.



**Training bodies/schools:** acting in partnership with other relevant companies in the Canton, we support the Bodio Training Campus, which is dedicated to the training of specialised professionals. AET itself trains around forty apprentices each year.



**Associations:** we are members of various sectoral organisations, in which we play an active role in decision making processes and can share expertise and professional knowledge, as well as keeping abreast of all developments.

## Membership of organisations and associations

At AET we maintain close links with several sectoral associations, both in Switzerland and abroad.

This active involvement enables us, first and foremost, to reinforce our position in the Swiss electricity sector, while also maintaining an active focus on international regulatory developments thanks to our involvement and dialogue with authorities, counterparties and market partners.

### International/European

- CIGRE – Conseil International des Grands Réseaux Électriques
- EFET – European Federation of Energy Traders
- ISDA – International Swaps and Derivatives Associations
- RECS – Renewable Energy Certificate System

### National

- Association of Swiss Electricity Companies (Associazione delle aziende elettriche svizzere, AES-VSE)
- Swiss Water Management Association (Associazione svizzera di economia delle acque, ASEA-SWV)
- ECS (Energy Certificate System) Switzerland Association
- naturemade
- Swiss Wind Energy Association (Suisse éole)

### Local

- Ticino Water Management Association (Associazione Ticinese di economia delle Acque, ATEA)
- Canton of Ticino Chamber of Commerce
- Association of Electricity Producers from Italian-speaking Switzerland (Elettricità svizzera italiana, ESI)

[GRI 2-28]

# Materiality process

The contents of the Report were established by applying the principles provided for under the GRI standard:

**Stakeholder involvement:** for this first year, we chose to involve internal stakeholders, supported by external experts. The topics were presented and discussed by representatives of the different business areas, and the Board and Executive Committee validated the methodology and results.

**Sustainability context:** our company is directly affected by global climate change and by technological and digital development. In turn, it is also a business that has strong ties to the local area in which it has a direct impact, exercising significant influence in economic and social terms. As a result, its strategy as well as its relations with employees, suppliers and counterparties are closely linked to sustainability considerations.

**Materiality process:** the first phase of the analysis considered around fifty key social, economic and environmental dimensions. These were identified and assessed according to internal expertise and electricity industry standards. The issues were then screened for internal and external impacts, resulting in a selection of ten issues relevant to AET. The topics identified in 2022/2023 will be re-evaluated every two years, considering business developments and regulatory progress in the area of sustainability; if necessary, they will be modified, increased or reduced based on analysis and dialogue with stakeholders.

**Completeness:** we concentrated on the areas in which we have the greatest impact, presenting facts and future progress, although not including contexts in which we do not have a direct impact, such as in cases involving minority stakes. There is not currently any basis for comparison with previous years, although any adjustments and corrections will be displayed in future reports. [GRI 3-3]

## Materiality matrix 2023

The consolidated results have been brought together within the matrix set out below.

This Report adopts a “double materiality” approach, as provided for under the EU directive on non-financial reporting.

The classic approach to “materiality” uses the criterion of significance (i.e. “material”) for the company and its stake-

holder in order to establish whether specific sustainability information should be included within non-financial reporting.

With the introduction of “double materiality”, organisations are called upon to report both on the impact of climate change on their own activities (outside-in approach) and, conversely, on the impact of the company’s activities on the environment (inside-out approach). [GRI 3-1]

AET’s double materiality matrix consists of 10 issues which are subdivided into the following 3 groups:

### Social aspects

- Employee health and safety
- Inclusion and social commitment
- Developing professional skills and raising public awareness of energy issues.

### Governance aspects

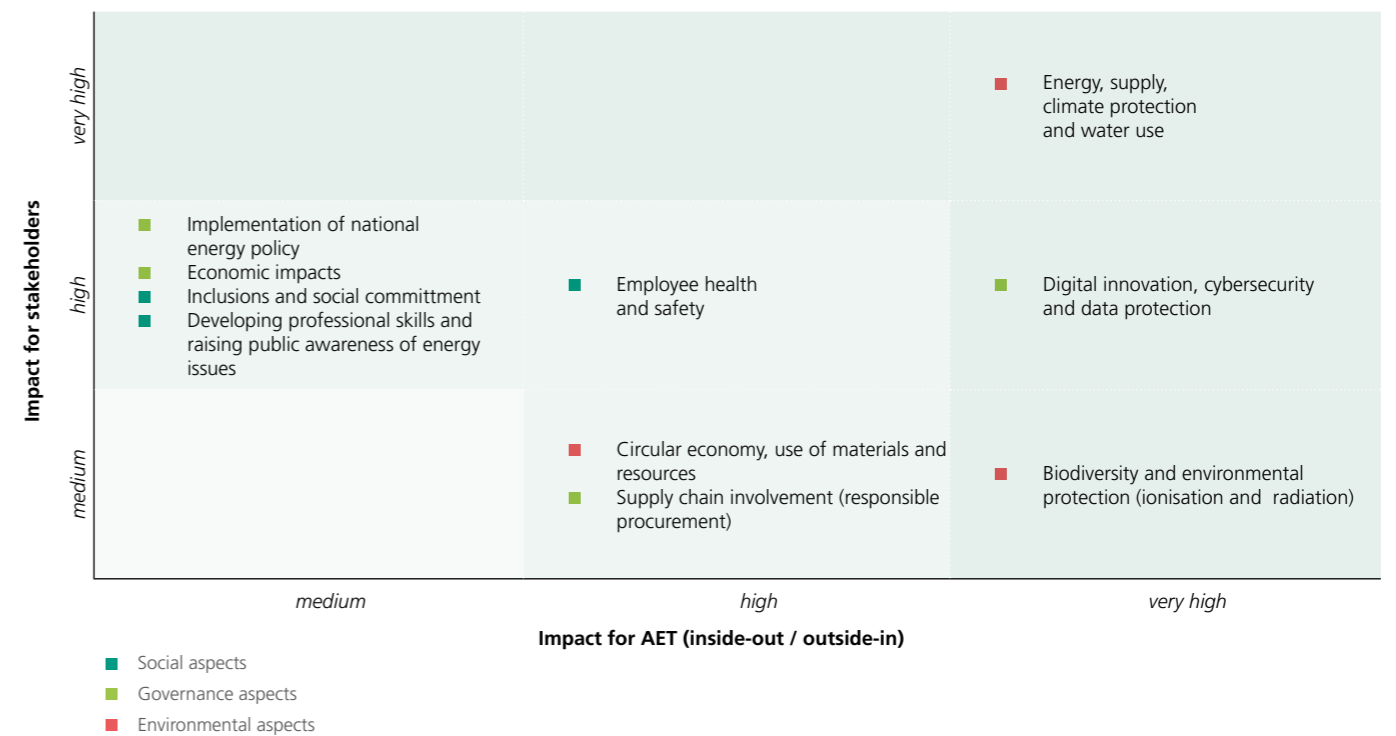
- Implementation of national energy policy
- Economic impacts
- Digital innovation, cybersecurity and data protection
- Supply chain involvement (responsible procurement).

### Environmental aspects

- Energy, supply, climate protection and water use
- Circular economy, use of materials and resources
- Biodiversity and environmental protection (ionisation and radiation).

The positioning of the various topics within the matrix indicates their degree of importance to AET and to stakeholders. As such, the topics in the top-right box are the most relevant ones from both perspectives.

[GRI 3-2]



**Future prospects**

Improve and extend the involvement of internal stakeholders, for example through workshops that also focus on sustainability and surveys.

Propose supplier and customer surveys to collect suggestions, with a view to understanding how third parties associate sustainability and AET.

# Alignment with UN Sustainable Development Goals



We aim to play a leading role in the energy transition for Italian-speaking Switzerland. On this basis, we recognise the Agenda 2030 goals as a key component of our business model. These goals include the 17 UN sustainable development goals (SDGs) covering the three dimensions to sustainable development (social, economic and environmental).

In this first Report, we have identified the SDGs that are closest to our sustainability pathway, which will be included to supplement the GRI indicators.

By adhering to the UN SDGs, we aim to provide tangible evidence of our commitment to work towards a positive future for the planet thanks to dialogue with stakeholders, to the development of good internal practices as well as to training and awareness-raising in sustainability.

AET material topic	UN SDGs to which we contribute
Employee health and safety	#3 Good health and well-being
Inclusion and social commitment	#5 Parità di genere
Developing professional skills and raising public awareness of energy issues	#4 Gender equality
Digital innovation, cybersecurity and data protection	#7 Affordable and clean energy #9 Industry, innovation and infrastructure
Economic effects	#8 Decent work and economic growth
Supply chain involvement (responsible procurement)	#12 Responsible consumption and production
Energy, supply, climate protection and water use	#6 Clean water and sanitation #7 Affordable and clean energy #13 Climate action
Circular economy, use of materials and resources	#8 Decent work and economic growth #9 Industry, innovation and infrastructure #12 Responsible consumption and production
Circular economy, use of materials and resources	#14 Life below water #15 Life on land



## Social

**We create value by informing, involving and supporting our employees and our communities in the interest of future generations.**

# Information concerning employees

At AET, we firmly believe that, irrespective of the role of each individual, all staff contribute to fulfilling the targets that we have set ourselves.

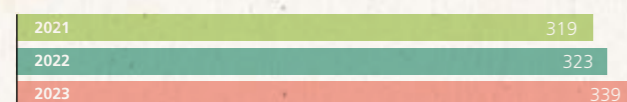
Within this outlook, the Human Resources Department and the Quality, Security and Environmental Service work together closely to ensure the suitable development of employees' skills and potential, as well as to safeguard individual health and safety.

## Reporting on AET employees

[GRI 2-7, GRI 2-8]

### Total number of employees

(including apprentices)



Data include employees of subsidiaries

Data is collected and represented on a "headcount" basis. Over time, fluctuations in staff numbers (due to retirement, appointments and resignations) have remained in line with the average for companies that are comparable to AET's size and geographical reach. AET has established itself as a highly sought-after employer, as also confirmed by the significant level of interest generated by job advertisements, both through standard communication channels and on social media.

### Permanent and temporary employees

(except apprentices)

	Female			Male		
	2021	2022	2023	2021	2022	2023
<30 years	5	4	3	22	24	26
30-50 years*	23	25	27	130	128	132
>50 years	15	15	16	82	81	85

### Full-time employees

(including apprentices)

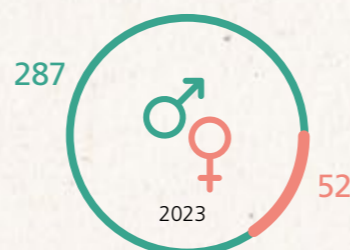
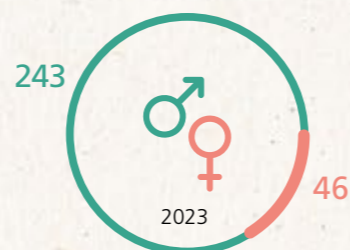
	Female			Male		
	2021	2022	2023	2021	2022	2023
<30 years	9	11	9	60	61	69
30-50 years*	6	8	9	117	121	126
>50 years	3	3	4	78	74	78
<b>Total</b>	<b>18</b>	<b>21</b>	<b>22</b>	<b>255</b>	<b>256</b>	<b>273</b>

### Part-time employees

(including apprentices)

	Female			Male		
	2021	2022	2023	2021	2022	2023
<30 years	2	0	0	1	2	1
30-50 years*	17	18	18	10	7	6
>50 years	12	12	12	4	7	7
<b>Total</b>	<b>31</b>	<b>30</b>	<b>30</b>	<b>15</b>	<b>16</b>	<b>14</b>

\* Until 31.12.2021: 3 members of staff of TERIS and Calore SA and 2 members of staff of AET Italia  
Until 31.12.2022 and 2023: 1 member of staff of AET Italia

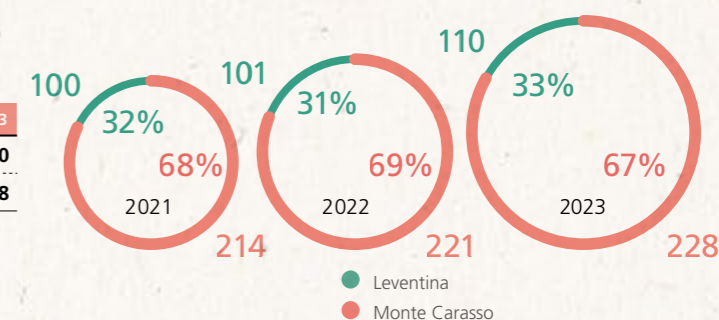


### Employees by region

(including apprentices)

	2021	2022	2023
Leventina	100	101	110
Monte Carasso	214	221	228

The figures in the table do not include the employees of the subsidiaries



### Percentage of people within governance bodies at AET broken down according to gender and age band

[GRI 405-1a]

	Women			Man		
	2021	2022	2023	2021	2022	2023
31-50 years	14.3%	17.2%	20.8%	85.7%	82.8%	79.2%
>50 years	11.8%	14.3%	11.9%	88.2%	85.7%	88.1%
<b>Total</b>	<b>12.9%</b>	<b>15.6%</b>	<b>15.2%</b>	<b>87.1%</b>	<b>84.4%</b>	<b>84.8%</b>

### Percentage of employees within areas of AET broken down according to gender and age band

[GRI 405-1b]

	Female			Male		
	2021	2022	2023	2021	2022	2023
Management & Services Area	41.7%	36.0%	37.0%	58.3%	64.0%	63.0%
Finance Area	58.3%	58.3%	58.3%	41.7%	41.7%	41.7%
Commercial Area	22.2%	25.0%	31.6%	77.8%	75.0%	68.4%
Production Area	1.5%	1.4%	1.3%	98.5%	98.6%	98.7%
Grid Area	1.4%	1.3%	1.3%	98.6%	98.7%	98.7%
Apprentices	13.3%	15.2%	12.0%	86.7%	84.8%	88.0%
Ancillaries	85.7%	76.5%	76.5%	14.3%	23.5%	23.5%
Temporary	16.7%	0.0%	0.0%	83.3%	100.0%	100.0%
<b>Total</b>	<b>16.2%</b>	<b>16.2%</b>	<b>15.8%</b>	<b>83.8%</b>	<b>83.8%</b>	<b>84.2%</b>

### Collective bargaining agreements

Our company has applied a collective employment agreement since 2002, which is negotiated with trade unions active within the cantonal electricity sector. The rate of subjection to the "Collective employment agreement for AET employees" (CEA) was approx. 77% for the years 2021, 2022 and 2023.

[GRI 2-30]

The new version of the CEA for the 2022-2026 four-year period entered into force on 1 January 2022, acting as a basis also for employees who are not formally covered by the collective agreement.

## Occupational health and safety compliance

We are actively committed to ensuring compliance with all federal and sectoral legislation. We are also committed to incorporating health and safety aspects into all company operations. We place special focus on analysing and implementing any legislative changes applicable.

The main reference legislation is listed below [and where a federal act (FA) is cited, it is implicit that the respective ordinance is also included\*]:

- Federal Constitution
- Federal Constitution
- FA on Accident Insurance
- FA on Electrical Installations
- FA on Cableways for Passenger Transport
- FA on Protection against Dangerous Substances and Preparations
- FA on Employment in Business, Trade and Industry
- FA on Information for and Consultation of Company Workers
- FA of 20 March 1981 on Accident Insurance
- FA on Pipelines for the Transmission of Liquid or Gaseous Heating and Motor Fuels
- FA on the Security of Installations and Technical Equipment
- FA on Pipelines
- FA on the Protection of Waters
- FA on Chemical Products
- FA on the Protection of the Environment
- Ordinance on the Safety of Personal Protective Equipment Directive of the Federal Coordination Commission for Occupational Safety (FCOS 6508)
- Safety Manual (VSE/AES Safety Committee)

\* The original text is the Italian version of the Report. If any questions arise related to the accuracy of the information contained in the translated Report, refer to the Italian version of the Report which is the official version or go to [www.fedlex.admin.ch](http://www.fedlex.admin.ch)

When performing our activities, we liaise both with sectoral bodies involved (VSE/AES<sup>5</sup>, the Swiss National Accident Insurance Fund (SUVA)<sup>6</sup>, the Federal Inspectorate for Heavy Current Installations (ESTI)<sup>7</sup>) as well as other sectoral companies.

[GRI 403-1a]

<sup>5</sup> [www.strom.ch](http://www.strom.ch)

<sup>6</sup> [www.suva.ch/en](http://www.suva.ch/en)

<sup>7</sup> [www.esti.admin.ch/en](http://www.esti.admin.ch/en)

## Employee health and safety

In our capacity as an energy producer and a transmission infrastructure operator, we are classified as a “company exposed to particular hazards” under FCOS Directive 6508<sup>8</sup>. This is because we perform activities such as assembly and construction work involving mechanical, electrical or falling risks.

It is incumbent upon AET, in its capacity as an employer, to adopt preventive measures to protect the health and safety of its employees, to ensure that applicable health and safety rules are disseminated internally and so that effective checks are carried out.

We are therefore responsible for ensuring that works are organised in such a way that takes safety considerations surrounding all activities into account and providing the necessary human and material resources for this purpose. With this in mind, we have adopted the model solution proposed by AES/VSE.

### ACTIVITIES PERFORMED:

- **Quality, security and environment (QSA) integrated management system:** an audit on the renewal of the QSA integrated system was made in October 2023, which confirmed the maintenance of ISO 9001/14001/45001 certifications.
- **“QSA antennae”:** established in the Production and Grid areas, these are staff members with considerable experience in health and safety-related issues, who support colleagues and liaise directly with the AET Health and Safety Manager.

implemented in a manner consistent with company operations, analyses and classifies incidents and hazardous situations (“near misses”), records all relevant data and proposes measures for improving protection for all staff. With the aim of ensuring good governance, internal audits are carried out in various sectors of the company every year. These audits involve an analysis of risks, including a review of how the integrated management system is being applied, following which any corrective action or improvements regarding health and safety, environmental issues or compliance with rules are determined. [GRI 403-1]

### Corporate culture and role of QSA

The promotion of the health and safety of all workers is one of AET’s core values. For this purpose, we have an internal QSA Service which, through communication, cooperation and the adoption of specific measures in response to specific situations, raises awareness concerning the principles of protection of health and safety. Our health and safety policy is defined in the integrated management system which is certified according to ISO 45001. This standard is applied within the company, with maintaining this standard being one of the company’s key objectives.

The QSA Service ensures that the health and safety policy is kept up-to-date and that it remains effective, ensures that it is

### Preventive measures

We refer to the VSE/AES<sup>9</sup> manual as well as internal documentation to ensure respect for occupational health and safety rules.

Specific prevention campaigns are pursued at regular intervals, which are designed either internally or by support partners (Swiss Council for Accident Prevention (UPI)<sup>10</sup>, SUVA).

The QSA Service becomes involved in the event of any incidents, hazardous situations or general instances of non-compliance and systematically analyses the conditions that gave rise to those situations and proposes improvements.

<sup>8</sup> Directive concerning the use of occupational physicians and other occupational safety specialists (MSSL Directive) - EKAS.

<sup>9</sup> [www.strom.ch/it/service/shop/manuale-della-sicurezza](http://www.strom.ch/it/service/shop/manuale-della-sicurezza)

<sup>10</sup> [www.bfu.ch/it/1-upi/upi-chi-siamo/organizzazione](http://www.bfu.ch/it/1-upi/upi-chi-siamo/organizzazione)

### Training and awareness-raising for employees

We place particular attention on raising staff awareness and providing health and safety training for staff. Accident data is constantly monitored and analysed to identify the causes, which allows us to take appropriate action so that causal hazards are reduced or eliminated in accordance with the STOP principle (i.e. seeking to identify measures on the following levels: Systemic, Technical, Organisational and Personnel) and so that specific accident type trends are identified.

In terms of monitoring, the QSA has created a table of hazards accompanied by an analysis of health and safety risks, which is updated after every accident to assess the risks to which staff are subjected. All procedures relating to identifying hazards, assessing risks, conducting audits, analysing causes and implementing measures are carried out according to SUVA standards.

In addition, general health and safety training is delivered based on the annual training plan adopted at area level, and which may be supplemented by any individual requests. Such training is held paid working hours, with employees obliged to participate. [GRI 403-5]

The "ClimAET" staff survey includes a section on health and safety. In addition, employees are required, during annual assessment interviews, to certify that they have the resources needed to work safely, as well as the opportunity to report any hazardous situations and to submit health and safety-related requests.

### Communication and information

The Executive Management receives a quarterly health and safety report containing information on audit management as well as on any incidents or hazardous situations arising during the period in question. Occupational incidents data is released to all employees at information meetings held every six months.

We regularly publish news and specific studies relating to health and safety in company newsletters. Specific internal communications are addressed to all employees when there are situations involving special circumstances or after any significant events. [GRI 403-7]

The trend for accidents involving employees is encouraging. No serious accidents were recorded during the period 2021-2023, while the number of accidents in 2022 fell compared to previous years, dropping even further in 2023.

The data reported only concerns AET employees. [GRI 403-9]

Description	2021	2022	2023
<b>Number of occupational accidents resulting in absence per year</b>	11	4	3
<b>Rate of occupational accidents resulting in absence</b>	3.62	1.30	0.92
<b>Number of hours worked per year</b>	607'509	616'052	654'040

### Policies to promote a "work-life balance"

The success of a business depends on various factors, including qualifications, motivation and the health of its employees. At AET, we recognise the importance of a healthy balance between each staff member's private life and their work. We are committed to protecting this balance.

#### ACTIVITIES PERFORMED:

- **Flexible working hours:** available to all employees, including those working in teams directly in the field.
- **New parents:** two extra days of parental leave are granted in addition to the periods of leave provided for by law.
- **Remote working:** staff have the opportunity to work remotely for up to three days each week.
- **Family Score:** we took part in the "Family Score 2022" survey promoted by "ProFamiglia Svizzera", achieving the ranking of "Family Friendly".

### Promotion of health at work

The World Health Organisation defines health as "a state of complete physical, mental and social well-being". The promotion of health is therefore a modern business strategy that aims to prevent occupational illnesses (including accidents and stress) while also enhancing the health and wellbeing of employees. The aim is to prevent, inform, raise awareness and promote behaviour that is healthy and focused on well-being in general. The action taken by AET for this purpose is embodied in three fundamental concepts:

- **Ongoing professional development:** we bolster our employees' skills.
- **Active participation:** we promote employee participation in issues.
- **Appropriate organisation and working conditions:** we are constantly improving our working conditions.

As such, the promotion of health plays a key role, particularly in terms of managing absences. Recognising the importance of this issue, we have put a health management system in place. This structured and effective management tool has been made available to managers so that employees with actual or emerging health problems are given support. Managers who are responsible for this are encouraged to do everything possible to prevent illnesses and accidents, by addressing rather than simply ignoring a problem, and by taking an active interest in those who work under them.

Outdoor activity and physical exercise are encouraged through the nearness of company premises to recreational areas. Facilities are equipped with showers and changing rooms, which can be freely used by employees. At the Monte Carasso site, staff can use the company e-bikes or use their own bicycles, thanks also to the City of Bellinzona's network of cycle paths. In addition, we provide employees with a number of e-bikes as well as free passes for the "Bike Sharing Bellinzonese" initiative.

[GRI 403-6]

#### ACTIVITIES PERFORMED:

- **Bioimpedance analysis:** acting in conjunction with SUVA, employees have received personal consultations on the state of their health, including advice on how to improve their quality of life.
- **Raising awareness on the prevention of sporting accidents:** with the support of a specialist in sport and the prevention of sporting accidents, staff at Monte Carasso have been made aware of how to prevent hazardous situations.
- **Sleep course:** with the assistance of specialist nurses, some employees have been given information on strategies for managing sleep-related problems, which can lead to emotional problems, memory difficulties or a reduction in working capacity.
- **Anti-heatwave kit:** during the summer period, all employees received a set including sun cream and a flask, along with a guide on how to protect themselves against UV radiation and extreme heat.
- **Food truck:** in 2023, a food truck service was introduced (generally one day a week), enabling employees to consume meals produced from healthy ingredients, with different menus every week as well as vegetarian options.

### Future prospects

- Obtain Level 3 "Safety Culture Ladder" certification.
- Improve analysis of potentially hazardous situations at work.
- Raising staff awareness on nutrition, health and safety.



# Inclusion and social commitment

At AET, we recognise the positive impact that an organised and welcoming working environment can have on our employees and counterparties, business partners and suppliers.

As an employer with a significant presence in the Canton, the company not only rejects all forms of discrimination and intolerance but also seeks to draw as much benefit as possible from the social and cultural diversity of its employees. Individual differences are regarded as added value for the company's well-being and growth, but never as an impediment.

## Harassment and inappropriate behaviour

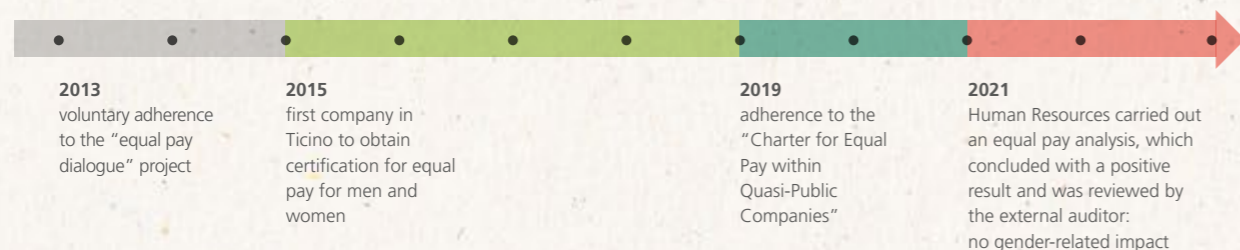
Any type of inappropriate situation or behaviour will not be tolerated. These principles are firmly rooted in our Code of ethics. Employees can use a dedicated platform to report any type of abuse.

## Equal pay

We pursue a policy of non-discrimination and gender equality, which is also relevant when setting salaries for male and female employees. The amended Federal Act on Gender Equality (Legge federale sulla parità di genere), which entered into force in 2020, and provides for the conduct of an internal equal pay analysis for companies with more than one hundred employees. AET set off its own equal pay journey in 2013, which was completed in 2021 with confirmation that

there are no inexplicable differences in pay between men and women at all locations and for all categories of employee. This fact is significant and the results of the equal pay analysis have been communicated transparently to all employees in a dedicated internal communication and within the company newsletter. As it is a legal requirement, the company discloses this fact when AET participates in any public tendering procedures.

### AET and its equal pay journey



AET has been entered into the public register of companies certified by Equal Pay Commitment (Engagement Lohngleichheit, ELEP)<sup>11</sup> and has been included in the "whitelist" of companies on the "Respect 8-3" website<sup>12</sup>. On the latter, it is featured as a "pioneer" company, having completed the equality analysis, verification and voluntary communication to employees by 30 June 2021.

We also performed the equal pay analysis voluntarily in 2022 and 2023. The results in both years confirmed those reached in 2021, namely that there are no inexplicable differences in pay between men and women at all locations and for all categories of employee. [GRI 405-2]



Clearly, these are major achievements, as they place the company on the front line with respect to this key issue and confirm the soundness of its salary policies.

**Future prospects**  
Continue the annual equal pay analysis for men and women, which should be confirmed in future, consolidating over time the results achieved over the last three years.

<sup>11</sup> [www.elep.ch](http://www.elep.ch)  
<sup>12</sup> [www.respect8-3.ch](http://www.respect8-3.ch)

## Support for employees who have suffered damage to their health

AET is committed to identifying workplaces that are suitable for the state of health of their employees. In particular, the company seeks to maintain and guarantee the jobs of any employees who have suffered damage to their health.



(In 2015) the Canton of Ticino Chamber of Commerce and the Institute for Social Insurance (Istituto delle assicurazioni sociali, IAS) awarded our company the Accident Insurance Acting Together (Al Agiamo Insieme) prize. This prize is given to a wide variety of operators, with the aim of recognising companies that have distinguished themselves in workplace reintegration. In our case, the award hinged on the ability of our Human Resources department to not only provide workload organisation support for all staff but also moral support during delicate or complex periods of their lives.



To mark the occasion, the Chamber of Commerce created a video, which we invite you to watch here: <https://youtu.be/ntcyOugaW8E>

## Social commitment

In a similar manner to other energy sector companies, AET has also been pursuing initiatives to foster the company's internal atmosphere, to the full benefit of the company and its employees.

With the aim of promoting internal cohesion and a working atmosphere of solidarity, we actively support the initiatives pursued by the Recreational Group, an internal committee that is made up of employees who organise social, cultural and sporting activities on a voluntary basis. One particularly important event at the company is the annual blood donation initiative, which is organised in conjunction with the Transfusion Centre for Italian-speaking Switzerland (Centro trasfusionale della Svizzera italiana).

In particular, we are prioritising a corporate climate centred on ethics not only to maximise productivity but also to enhance the value of our corporate reputation. The company and its managers are committed and dedicated to making training available at all levels.

In general, the company favours employee involvement in social activities, including both the provision of care to family members as well as active participation in associations or foundations.

**Future prospects**  
Support the Recreational Group's initiatives with social purposes.



Pomeriggio di Teambuilding con i nuovi collaboratori

### Integration of new employees

Various activities have been established to enable new employees to get integrated into the company in the best possible manner:

- presentation tour around the office on the first day at work;
- the “water tour”: it is standard practice for newly appointed employees to complete a day of mandatory training. This serves a twofold purpose. Firstly, it lays the foundations for new employees’ integration and enables them to get to know their colleagues. Secondly, it means that new employees can find out how the “Leventina chain” works, including the main plant for producing hydropower, by visiting the power stations and plants across the Leventina chain;
- an ad-hoc day for new employees: for example, in 2023 a teambuilding initiative was organised so that staff from different areas could get to know and interact with one another. The day-long event involved various activities, including both physical exercise as well as familiarisation with company information.

### Sponsorship

AET has an annual sponsorship budget. The company has its own directive, which sets out the criteria to be applied in pursuing this type of initiative, including:

- types of sponsorship;
- areas for intervention (e.g. sport and art, culture and local events);
- criteria for determining how to classify incoming requests;
- types of contribution to be provided.

The strategy adopted focuses sponsorship on communities affected by the presence of the company’s operations, seeking to achieve a positive effect on the social framework, the promotion of sport, health and the environment. The AET takes into account that these are peripheral regions where other economic actors are rarely present.

On the other hand, sponsorship of initiatives involving the entire Canton offers a vehicle for transmitting AET’s message concerning our social and environmental commitment to the entire population.

#### ACTIVITIES PERFORMED

- In 2023, grants provided to more than 100 local initiatives.
- In 2023, grant given to the National Museum of the St.Gotthard (Museo Nazionale del San Gottardo), including a display section dedicated to the St.Gotthard wind farm and production from renewable sources in Ticino.
- Sponsorship of the cultural promotion project “Keys of Culture (“Chiavi del cultura”)<sup>13</sup>.

<sup>13</sup> [www.chiavicultura.ch](http://www.chiavicultura.ch)

# Developing professional skills and raising public awareness of energy issues

Access to well-trained, professional staff is crucial for companies such as AET that rely on technology: it is a factor that improves company performance and helps to maintain ideal working conditions.

Employees have the opportunity to develop their skills internally, within the company, thereby increasing their motivation and overall well-being. Moreover, by providing support to schools, our company is able to have a positive, lasting impact on the community.

### Ongoing professional development and career support

The process of ongoing professional development is propelled by both external requirements, such as legal provisions or technical standards, and internal requirements, as a consequence, for example, of company targets being set, staffing changes or updates to activity matrices. The resulting annual training plan takes account of the following types of requirements:

- professional, necessary for everyday operations;
- operational, according to targeted requirements, due for example to the allocation of new tasks or specific work;
- security, provided for under legal requirements, such as basic first aid, what to do in the event of an emergency or the application of essential rules (SUVA).

### Apprentices

AET is also a training body which carefully monitors the schooling and professional development of its apprentices. Over the last 20 years, we have trained around hundred young people for the world of work. Approximately twenty of these former apprentices currently work in various roles at the company.

At AET, we welcome young students who apply for apprenticeships without any discrimination between men and women. We also promote apprenticeships in the “AET Informa” half-yearly publication.

A liaison officer or instructor is appointed in departments where an apprentice’s presence is envisaged. These individuals are trained members of staff who have been certified as “apprentice teachers”.

In 2023, we provided 5 instructors for apprentices.

#### Young people trained over the last 10 years (including apprentices from the CFB)

Career	
Automation operators	55
Polymechanics	16
Distribution network electricians	2
Commercial specialists	19
Logistics specialists	5
Maintenance mechanics	2
Forestry operators	2

#### AET apprentices

Career	Anno scolastico	Girls			Boys		
		21-22	22-23	23-24	21-22	22-23	23-24
Distribution network electricians		–	–	–	2	1	1
Commercial specialists		4	4	4	–	–	–
Logistics specialists		–	–	–	2	1	2
Maintenance mechanics		–	–	–	1	1	1
Forestry operators		–	–	–	2	2	1

### Bodio Training Campus

In 2016, the Bodio Training Campus (Campus Formativo Bodio, CFB), an inter-company training centre for apprentices, was established on the initiative of AET and several partner companies active in the Three Valleys area. All of the companies involved in the CFB project have demonstrated a major dedication to the local area in which they operate, accepting responsibility for promoting the development of youth skills, and in doing so, facilitating their future employment prospects.

In parallel to providing training for young people, it has also promoted the redevelopment of part of the Bodio industrial sector (the "Old Biaschina" (Vecchia Biaschina) site), a symbolic location in the Canton's history of industrialisation.

The CFB occupies an area totalling 817 m<sup>2</sup> made available by AET, including a mechanical workshop, an electro-pneumatic laboratory and an electrical laboratory. Around nine hundred thousand Swiss francs of investment was needed to set up the CFB, which we financed with support from the Department of Education, Culture and Sport (Dipartimento dell'Ed- ucazione della Cultura e dello Sport, DECS). The CFB currently provides training to apprentice multi-sector technicians, auto- mation operators, production technicians and mechatronic technicians for cableway transport systems.

#### ACTIVITIES PERFORMED

- In 2023, the CFB provided apprentices with 3 (full-time) instructors.
- During the 2023-24 school year, the CFB provided training to 2 girls and 39 boys.



CFB apprentices	School year	Girls			Boys		
		21-22	22-23	23-24	21-22	22-23	23-24
<b>Automation operators</b>		–	–	–	17	18	<b>18</b>
<b>Polymechanics</b>		2	3	<b>2</b>	12	14	<b>17</b>
<b>Production Mechanics</b>		–	–	–	2	2	<b>2</b>
<b>Mechatronics</b>		–	–	–	–	–	<b>2</b>

### Awareness-raising activity amongst the general public concerning energy issues

Transparency coupled with correct and complete information are the keywords that define our communication activities.

It is against this backdrop that we interpret the duty to raise awareness amongst the general public and, more generally, stakeholders, concerning to electricity supply-related issues, as part of our public mandate. When doing this, we use various online and offline channels in a coordinated manner to generate content about annual results, ongoing projects, corporate strategies, energy policy developments, the use of renewable resources and energy efficiency, to name just some the most important areas.

AET devotes special attention to schools and school pupils to whom we offer free tours of production plants and a range of teaching materials that illustrate the importance of production from renewable sources to the Canton of Ticino.

In addition, part of our communication and awareness-raising activity is aimed at staff, who are the primary ambassadors both of AET and the messages that we wish to divulge. Finally, some awareness-raising activities or information initiatives are developed in conjunction with other entities with similar aims operating in the Canton, such as the association TicinoEnergia and regional tourist organisations (OTR).

The main channels used for our official communications are:

- **AET Informa:** an information sheet distributed to all residents of Ticino.
- **The company website [aet.ch](http://aet.ch):** which includes sections containing information for a broad range of non-specialist users.
- **The website [laviadellenergia.ch](http://laviadellenergia.ch):** which contains teaching materials aimed at schools as well as the wider population.
- **Educational trails and information points** set up nearby our production plants.
- **Free guided visits to plants and the control centre,** available to all schools.
- **The official profiles of AET on the main social media** platforms, which are used to launch messages and for various other official communications.
- **Regular open days** during which AET production plants are open to the public.

#### ACTIVITIES PERFORMED

- The project "La via dell'energia di AET", launched with the aim of promoting AET's overall teaching and information activity for schools and the general public, culminated in 2023 with a partnership with the Organizzazione Turistica Regionale delle Tre Valli.
- We can offer professional guided visits along the educational trail dedicated to the energy transition on the St.Gotthard Pass. This trail is open to all visitors and connects the [wind farm's five wind turbines](#), ending at the National Museum of the St.Gotthard, which features a detailed presentation of the Canton's energy topics.
- The spring social media campaign promoting the use of photovoltaic energy in partnership with the association TicinoEnergia.



The Gotthard Pass nature trail



## Governance

**We contribute to the life of the Canton Ticino by identifying and managing risks and opportunities according to a responsible vision of the present and the future.**

# Implementation of cantonal energy policy

AET acts in partnership with the Canton, providing the technical support required to implement the cantonal and, by extension, the federal energy policy.

The company also promotes implementation of this energy policy via its engagement with public opinion and stakeholders. Over the short to medium term, we plan to reinforce our role in developing renewable energy and the energy transition within the Canton, also by promoting projects with institutions and external partners.

We manage stakeholder relations by referring to a series of planned activities, which include:

- sessions with the Environment, Territory and Energy Committee of the Grand Council;
- meetings with national parliamentary delegations;
- meetings with energy sector companies and partners;
- presentations and contributions during sectoral meetings;
- information sessions with media representatives.



# Economic impacts

Our company has significant effects on the economy throughout the Canton. Moreover, we provide a crucial contribution to the Canton's energy supply, resulting in a positive impact on its sustainable development.

As such, we take part in the creation of framework conditions that are conducive to cantonal economic development. Our operations generate cash flows for the Canton, such as water usage fees, interest on endowment capital, other cantonal taxes, profit distribution and payments made to municipalities.

As well as making direct payments to public authorities, AET generates supply chain activity thanks to its staff salary payments and its purchasing of goods and services within the Canton. We are mindful that our success is also the fruit of the resources invested in our staff and in the community.

## Water fees

Swiss law regulates water as a public asset. The use of water within a hydropower plant constitutes a special use, for which fees are payable to the public body that owns the waters. Water usage fees are the most important fees imposed when it comes to using water resources in Switzerland.

Therefore, AET is also committed paying the fee for water usage: in recent years, the Group has paid CHF 15.2 mio annually in direct payments to the State\*.

### Economic effects

GRI	Description	Unit	2021	2022	2023
<b>Own indicator</b>	Personnel expenses	CHF million	33.1	31.8	<b>34.8</b>
	Salaries and other compensation	CHF million	27.0	25.4	<b>28.0</b>
<b>Payments to the Canton</b>	■ AET - Dividend to the State	CHF million	3.0	-	-
	■ AET - Interest on the endowment capital	CHF million	3.2	3.2	<b>3.2</b>
	■ AET - Water fees	CHF million	12.9	12.9	<b>12.9</b>
	■ AET - Payment to the RES Fund	CHF million	3.3	3.5	-

\* AET alone paid CHF 12.9 million. Additional information on the Annual report 2023, page 73

# Digital innovation, cybersecurity and protection of privacy

Technological innovation and digitalisation have brought improvements to all areas of the company's operations, increasing the efficiency and quality of employees' work, boosting the resilience of our infrastructure and improving the competitiveness of the products and services that we offer.

However, the increase in flexibility also brings with it potential vulnerabilities: technical faults or cyber-attacks at all levels are becoming increasingly widespread and may have significant consequences in operational terms. A successful attack may have serious consequences for company operations and could even bring them to a halt for extended periods of time. Responsibility for cybersecurity is not therefore limited to IT departments alone but is relevant throughout all areas within the company: an IT risk management system must also include robust management plans for operational continuity.

Guaranteeing data and information security, and protecting the privacy and personal data of employees, customers and business partners are fundamental principles for AET which are rooted in our Code of ethics. This means that every member of staff must comply with them.

In order to ensure all cybersecurity issues are rigorously managed, we regularly complement investment in ongoing training for staff on all levels focusing on the responsible internet and IT equipment use with dedicated awareness-raising initiatives.

## Access to IT resources and digital innovation

The digital transformation is a tangible reality at AET. We intend to keep abreast of this rapid evolution, both in order to maintain qualitative and technical competitive standards but also so that we can make best use of our resources.

The company promotes using IT resources that enable all employees to carry out their work. At AET, we are mindful of the fact that IT resources are used by a large number of users performing a variety of activities.

The internal IT Service regulates access to IT infrastructure. The Service not only provides access to staff but also ensures that equipment and network security function correctly in order to prevent external attacks. Employees who work remotely have VPN<sup>14</sup> access software on their laptops, enabling them to access the company network and all internal IT services. Security is important, and staff must also abide by the following correct rules of conduct set out in AET's regulations when working from home.

In view of the increase in its workload, in 2023 the IT & Digitalisation Service was expanded and now has ten members of staff, who are able to provide appropriate services throughout all areas of the company.

Digital innovation is a major issue for AET: with the aim of promoting transparency, speed and immediacy of information, a number of useful instruments are currently being developed, both internally and by third parties.

Instruments enabling optimal management of plants and energy transportation are of fundamental importance. Likewise, so are those instruments that the Trade Area can use to interface with customers. These include software programs that facilitate the management of internal reporting or display details of energy portfolios of distributors or end customers on the free market.

## Cybersecurity

With a view to boosting its resilience, AET aims to achieve a holistic vision of overall IT security, defining and implementing emergency scenarios that will enable the company to act quickly in the event of a crisis, reducing potential harm as far as possible. Cybersecurity management is based on federal ITC standards as well as internally defined strategies. The ultimate objective is to enable an adequate, effective response to IT attacks thereby avoiding serious incidents.

Dedicated audits are carried out over the course of the year, which enable the main areas for intervention to be assessed, while also ensuring that critical infrastructure is properly aligned with best practices. All devices connected to the company network are monitored by a hardware and software system that manages events using automatic, real-time monitoring and blocks all potentially harmful activities.

In 2023, AET was subject to just under 250'000 attempted attacks, which generated 39 alerts. These were analysed in detail, resulting in a number of false positives being identified. The year ended without any breaches or data losses.

[GRI 418-1b]

We are implementing a series of appropriate measures to prevent customer and staff privacy breaches.

## Privacy protection

We ensure that the personal data of employees, customers and business partners are managed lawfully and in a responsible manner, in accordance with European, federal and cantonal laws. In order to oversee that commitment, we have appointed a Data Protection Officer (DPO) and a Data Protection Advisor (DPA). The new Federal Act on Data Protection came into force on 1 September 2023. This legislation provides for greater protection for the personality and rights of natural persons, including within the context of progressive digitalisation. Although it is not directly applicable to the company, we have chosen to comply with all provisions in this new legislation.

### ACTIVITIES PERFORMED

- In 2022, AET offered a variety of demanding training modules relating to new IT instruments to all employees involved, whilst in 2023 specific training in new information sharing systems was designed for the members of the Executive Management.
- Simulated phishing attacks and awareness-raising campaigns are regularly conducted to sensitise employees to cybercrime.
- All staff attend regular compulsory webinars on IT security.
- In 2023, ad hoc IT security training was introduced for all new employees.

<sup>14</sup> Virtual Private Network

# Supply chain involvement

(responsible procurement)

The procurement policy is a core part of our company strategy. Thanks to careful supplier management, the company ensures the proper administration of supplies and services procured.

Under the company's internal policy, supplies are made with the best possible cost effectiveness in mind, aiming to achieve ongoing improvement within the supply chain, as well as a contribution to quality, product innovation and logistical management, with a particular focus on minimising risks.

Procurement decisions are made based on familiarity with and ongoing monitoring of markets, as well as their economic and political development.

The Purchasing Office is primarily responsible for the entire supplier selection and classification process. Suppliers are selected taking account relevant information concerning their organisation in terms of processes and security, market orientation, economic and financial soundness, as well as their approach to social, economic and environmental issues. At AET, we prefer to work with materials and services suppliers that are competitive but also mindful of their social and environmental responsibility. Compliance with these criteria is reviewed at regular intervals according to a self-certification system.

Suppliers are chosen using a standardised assessment system, in accordance with ISO standards. This system also includes a pre-qualification procedure, which is necessary to establish the operational and structural suitability of each supplier. Going forward, the maintenance of a supplier's classification depends on an annual rating process, which is conducted using parameters that are provided by the management system and by user feedback concerning the level of service provided.

A supplier's quality system is also taken into account, which – alongside product and service quality – must also cover employee safety, the environmental compatibility of products and services as well as social commitment.

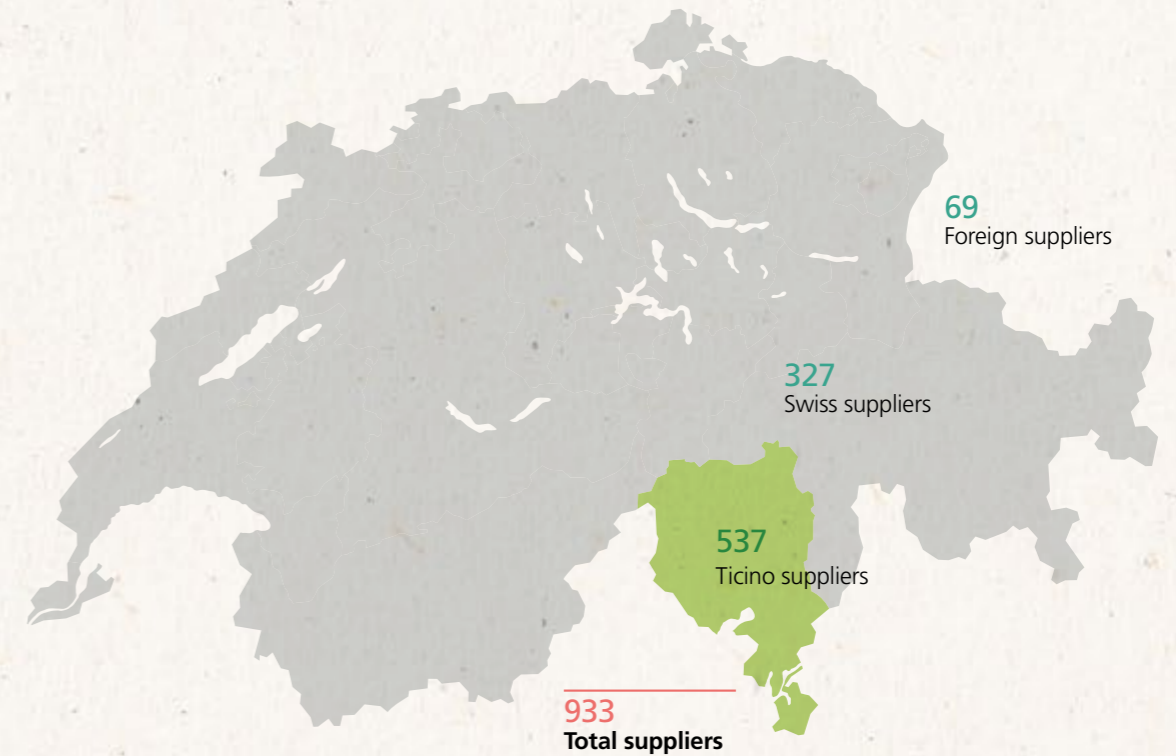
Goods and services are purchased in all instances in accordance with applicable health and safety standards, including, in particular, ISO 45001, the EU Directive 2006/42/EC ("Machinery Directive"), as well as procedures for managing chemical substances. Health and safety rules are also complied with internally, while logistical activities are carried out in full accordance with ISO 45001.

We recognise the importance of corporate social responsibility. In terms of managing orders subject to the Canton of Ticino Act on Public Procurement (Legge sulle commesse pubbliche, LCPubb) or the Intercantonal Agreement on Public Procurement (Concordato intercantonale sugli appalti pubblici, CIAP), we promote effective competition among bidders in accordance with legislation and implementing regulations. This guarantees equal treatment among them as well as equal treatment for men and women. In this context, mention should be made of the recent amendment to the LCPubb, which now includes corporate social responsibility as an (optional) award criterion, a change that allows any contracting authority to evaluate bids taking into account companies' commitment to economic, social and environmental sustainability. With regard to the application of these legislative changes, AET intends to follow the practice adopted by the Canton.

**Number of suppliers over the period 2021-2023 broken down according to region**

	2021	2022	2023
<b>Total turnover (CHF mio)*</b>	32	34.5	<b>35</b>
<b>Total suppliers (Swiss and foreign)</b>	845	889	<b>933</b>
<i>Foreign suppliers</i>	49	57	<b>69</b>
<i>Swiss suppliers (excluding suppliers from the Ticino region)</i>	316	320	<b>327</b>
<i>Ticino suppliers</i>	480	512	<b>537</b>

\* estimated values





## Environment

**We are committed to having a positive impact on cantonal territory by balancing company objectives against the desire to respect resources and ecosystems.**



# Energy, supply, climate protection and water use

## Environmental compliance

When it comes to the environment, we also use the same approach as already described in the area of occupational health and safety compliance (page 26)

The main reference legislation is listed below [where a federal act (FA) is cited, it is implicit that the respective ordinance is also included\*, whilst any cantonal act is referred to as a CA]:

- FA on the Reduction of CO<sub>2</sub> Emissions (CO<sub>2</sub> Act)
- FA on the Use of Hydraulic Power
- FA on Energy
- FA on Electricity Supply
- FA on the Protection of the Environment
- FA on the Protection of Waters
- FA on Fish and Fisheries
- Ordinance on Chemical Risk Reduction
- CA on Water Usage
- CA on Groundwater
- CA on Energy

\* The original text is the Italian version of the Report. If any questions arise related to the accuracy of the information contained in the translated Report, refer to the Italian version of the Report which is the official version or go to [www.fedlex.admin.ch](http://www.fedlex.admin.ch)

In this field, we interface with sectoral entities (such as the Swiss Federal Office of Energy (SFOE)<sup>15</sup>, the Federal Office for the Environment (FOEN)<sup>16</sup>, the Federal Electricity Commission (ElCom)<sup>17</sup>, the Department for the Territory of the Canton of Ticino), neighbouring cantons and the respective local authorities.

### Facts

- In 2023, we did not identify any instances of non-compliance with environmental laws and regulations. [GRI 2-27]
- In 2023, we received no reports of pollution or other sources of nuisance caused by work on ongoing projects. in corso. [GRI 2-25]



<sup>15</sup> <https://www.bfe.admin.ch/bfe/en/home.html>

<sup>16</sup> [www.bafu.admin.ch/bafu/en/home/office.html](http://www.bafu.admin.ch/bafu/en/home/office.html)

<sup>17</sup> <https://www.elcom.admin.ch/elcom/en/home.html>

Climate change is a global driver of risks and opportunities. Companies involved in the production and distribution of energy are also exposed to impacts, which are often difficult to predict.

The last two years have highlighted the fragility of the European and Swiss hydro-geological system. Droughts and high temperatures have compromised the production capacity of hydropower power stations as well as thermal power stations that need water to operate their cooling systems.

The international energy sector has been confronted with major challenges – in part as a result of non-natural events – which have forced the actors involved to rethink the objectives and strategies adopted over the last decade. War, drought, production unavailability, price volatility and fears of energy shortages have undermined the public's trust in the sector as a whole.

Mild temperatures in 2023 fed through to reduced energy consumption, averting the spectre of energy shortages, whilst wholesale prices have returned to stabler levels. Despite this, rising global temperatures, a lack of snow and the relentless melting of glaciers – as sources of thermal regulation and primary water reserves – are progressing at a steady rate. The year 2023 was the hottest year on record, reaching 1.4°C above the pre-industrial average (1850-1900) as a result of greenhouse gas emissions originating from human activities.<sup>18</sup>

Within such a complex framework, AET is resolutely promoting the use of renewable sources. Thanks to our own cantonal resources and our prudent approach, we are contributing both to achieving supply stability for the public at large and to reducing local greenhouse gas emissions.

### Energy and emissions reduction

By signing the Paris Climate Agreement of 2015 and the COP28 Joint Statement, the Swiss Confederation has committed to reducing CO<sub>2</sub> emissions to zero by 2050. Achieving this target will require a major effort by all actors involved. As such, in aligning with PEC-2013, the Canton is also focusing on an energy and climate plan that can guarantee climate neutrality, energy independence and the flexibility needed to respond to climate change.

<sup>18</sup> Source: World Meteorological Organisation (WMO)

Mindful of our role as a leader in the production of local renewables and as a company that can have a major impact on cantonal territory, we pursue the same objectives as those set by the Canton and the Confederation.

Thanks also to the positive impetus resulting from the publication of our first Sustainability Report, we have launched the "emissions reduction" project, which entails a launch phase that involves:

- recording and analysing current emissions and classifying according to type;
- setting targets for reducing our carbon footprint;
- identifying measures for reducing emissions;
- applying measures and reporting on results.

### ACTIVITIES PERFORMED

In 2023, we launched our emissions reporting analysis, determining first and foremost some key principles:

- **Collection method for Scope 1, 2 and part of Scope 3:** the Simplified Greenhouse Gas Emissions Calculator<sup>19</sup> (hereinafter "Calculator") provided by the CSR Ticino project to calculate GHG was used ([csr-ticino.ch](http://csr-ticino.ch)).
- **Analysis method for CO<sub>2</sub> factors:** we decided to follow the information provided by the Calculator, while we also used information provided by Pronovo for measuring CO<sub>2</sub> factors of our energy label.
- **Systematic collection:** for example, employees were given a questionnaire for collecting data on employees' emissions when travelling between work and home.

### Future prospects

The data collected from August 2022 onwards relates to the period 2021-2023. Progress made in analysis, setting targets, determining action and reporting on results as well as any corrective measures will be published in the next Sustainability Report.

### Scope 1

These are direct emissions of greenhouse gases (GHG) produced by the company and its subsidiaries. The Scope 1 calculation takes account of the stationary combustion, the mobile sources, the purchased gases (SF<sub>6</sub>) as well as the grid losses.

### Scope 2

These are the indirect emissions resulting from the purchase, consumption or production of electricity, steam and heat.

### Scope 3

Scope 3 emissions come from company operations from sources that are not in full control by AET. Data was collected regarding emissions by minority stakeholders in the Lünen fossil fuel plant, in relation to employee mobility emissions and in to our own waste.

### CO<sub>2</sub> emissions

	2021	2022	2023
<b>Scope 1 Emissions [CO<sub>2</sub>-eq (t)]</b>			
Stationary Combustion	919	1024	1'044
Mobile Sources	156	147	149
Purchased Gases	420	93	150
Grid losses <sup>A</sup>	283	550	243
<b>Location-base Scope 2 Emissions [CO<sub>2</sub>-eq (t)]</b>			
Purchased and Consumed Electricity	92'206	71'637	58'178
Purchased and Consumed Steam	4'052	3'669	3'710
<b>Scope 3 Emissions [CO<sub>2</sub>-eq (t)]</b>			
Employee Commuting <sup>B</sup>	-	-	165
Waste <sup>C</sup>	35	29	51
Upstream Transportation and Distribution	2	1	1
Investments <sup>D</sup>	399'909	424'982	250'235
<b>Total Location-base emissions [CO<sub>2</sub>-eq (t)]</b>			
Scope 1	1'778	1'814	1'587
Scope 2	96'258	75'306	61'888
Scope 3	399'947	425'012	250'452
<b>Total</b>	<b>497'982</b>	<b>502'132</b>	<b>313'927</b>

[GRI 305-1, GRI 305-2, GRI 305-3]

- <sup>A</sup> In order to calculate losses, we used the data published in the carbon footprint for the construction sector ([www.kbob.admin.ch/kbob/it/home/themen-leistungen/nachhaltiges-bauen/oekobilanzdaten\\_baubereich.html](http://www.kbob.admin.ch/kbob/it/home/themen-leistungen/nachhaltiges-bauen/oekobilanzdaten_baubereich.html)).
- <sup>B</sup> Only valid for 2023: the questionnaire was not distributed to employees in previous years.
- <sup>C</sup> Waste from the disposal of Eternit, wastewater, oils and paints are not included in the count. This is because the conversion coefficients are not verifiable. Corrections and adjustments will be made in the next Sustainability Report.
- <sup>D</sup> The investments category only includes data on the Lünen power plant (ref the: Annual report 2023, page see p. 86 "Production Participations").

### Future prospects

We have made commitments in various areas with the aim of pursuing the objective of reducing emissions.

- Refine data collection, improving granularity.
- Reduce the environmental impact of the fleet of light company vehicles.
- Energetic renovation of outdated properties.

<sup>19</sup> The Calculator uses specific inter-sectoral emissions factors for Switzerland and the Canton of Ticino. Many industrial sectors also have sources of emissions related to processes that are specific to their respective sector, such as in particular the emissions factors used for the national greenhouse gas inventory for the Swiss Confederation, which was published by the Federal Department of the Environment, Transport, Energy and Communications in January 2023 and which relates to 2022 ([www.bafu.admin.ch](http://www.bafu.admin.ch)). For mobility and transport, the Calculator uses emissions factors from the Mobitool initiative, version 3.0 ([www.mobitool.ch](http://www.mobitool.ch)).

### Sourcing, supply and consumption of renewable energy

One of our main strong points is certainly our efficient and diversified production infrastructure. As well as operating plants, we are drawing up projects for new and old plants (overhaul projects). At AET, we manage our own production as well as that of subsidiaries in which we hold a majority interest

### Supply and consumption of certified renewable energy

Each year, AET supplies significant quantities of electricity, with more than 2'000 GWh supplied in Ticino alone. Most of this electricity is supplied to local distribution companies, although a small percentage – around 10% – is supplied directly to end customers. These include AET itself: for several years now, we have been covering all our electricity consumption with the *tiacqua* product, which guarantees that it comes from renewable sources in Ticino and is certified with the *naturemade* label.

### Energy consumption within the organization from renewable sources

	2021	2022	2023
<b>Consumption (in MWh)</b>			
AET Administration	644	641	765
AET Grid	1'788	2'333	1'770
AET Grid losses	13'764	13'628	12'845
AET Production	3'415	3'055	2'375
<b>Total</b>	<b>19'611</b>	<b>19'656</b>	<b>17'755</b>
<b>Information on own consumption (in kWh)</b>			
Photovoltaic systems installed in the AET area	47'233	17'697	18'391

[GRI 302-1]

### Future prospects

Promote the use of renewable energies by creating new products (e.g. photovoltaic).

The quality of the remaining supplies is defined by customers themselves: some choose renewable products, whereas others opt for cheaper fossil-fuel-based solutions. We engage in dialogue with customers so that we can raise their awareness and encourage them to switch to a more environmentally friendly energy combination, amongst other things through "electricity labelling". As is the case for every supplier in Switzerland, at AET we are required to inform end customers at the end of each year about the origin of the energy that they consume. AET's labelling information is published on our [website](#).

Our objective is to constantly increase the supply of certified renewable energy, both to end customers and to local distribution companies.

### 2023 AET's labelling

	% Total	% Switzerland
<b>Renewable energies (1)</b>	<b>60.61</b>	<b>24.08</b>
Hydropower	53.65	17.12
Other RES	<b>0.96</b>	<b>0.96</b>
- Solar energy	0.96	0.96
- Wind power	0.0	0.0
- Biomass	0.0	0.0
- Geothermal energy	0.0	0.0
Electricity benefiting from support measures*	<b>6.0</b>	<b>6.0</b>
<b>Non-renewable energies (2)</b>	<b>39.39</b>	<b>11.63</b>
Nuclear energy	0.0	0.0
Fossil energy carriers	<b>39.39</b>	<b>11.63</b>
- Oil	0.0	0.0
- Natural gas	0.0	0.0
- Coal	27.76	0.0
- Waste	11.63	11.63
<b>Total (1+2)</b>	<b>100</b>	<b>35.7</b>

\* Electricity benefiting from support measures: 53.4% hydropower, 18.2% solar energy, 4.3% wind energy, 20.6% biomass, 3.5% renewable municipal waste, 0.0% geothermal energy.

<b>Total cancellation (in MWh)</b>	<b>327'425</b>
<b>Total CO<sub>2</sub> (t)</b>	<b>131'392</b>

AET calculated its own CO<sub>2</sub> emissions for the 2023 labelling to end users (end users including AET itself) based on the sum of the cancelled Guarantees of Origin and the KEV quota using the respective CO<sub>2</sub> factors provided by Pronovo.

## Production plants

### Hydropower

The Federal Government's energy strategy foresees an end to the use of energy from fossil fuel sources by 2050 alongside the gradual phasing out of nuclear power stations (but with no timeframe specified). The missing energy will be made up for in part through efficiency and energy-saving measures and partly replaced by energy from renewable sources.

Hydropower is the key pillar of the country's electricity supply: flexibility in terms of production and storage capacity guaranteed by high-altitude basins which ensure continuity and security of supply, especially during the winter months.

#### Production data for AET's plants in GWh

	2021	2022	2023
<b>Biaschina</b>	414	218	<b>271</b>
<b>Piottino</b>	289	184	<b>152</b>
<b>Tremorgio</b>	10	5	<b>3</b>
<b>Stalvedro</b>	59	27	<b>38</b>
<b>Ponte Brolla</b>	11	5	<b>11</b>
<b>Lucendro</b>	118	78	<b>52</b>

In the new Cantonal Energy and Climate Plan, both the Federal Government and the Canton of Ticino envisage an increase in hydropower production as well as rise in the accumulation capacity of basins.

In July 2023, work began on overhauling the Piottino plant, which has been in operation for 90 years, to improve its efficiency and to boost production and flexibility. The total investment for work on both the hydraulic and electro-mechanical parts of the plant, as well as the historic building, amounts to more than CHF 70 million. Production groups will be replaced over the coming years.

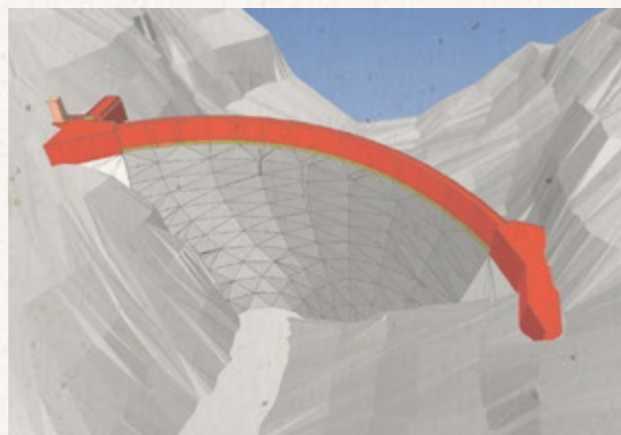


Overhaul of the Piottino plant

In June 2021, the Grand Council of Ticino voted to approve returning ownership of the Peccia, Cavigno and Verbano plants (currently owned by OFIMA<sup>20</sup>) to AET from 2036. In view of this fact, we are working on some long-term projects in partnership with OFIMA.

Out of all of these projects, increasing the height of the Sambuco dam was particularly significant. This is one of the 15 projects deemed to be of priority importance in terms of increasing winter production, as identified by the Federal Government-promoted "Roundtable on Hydropower". The height of the dam will increase by 12-15 metres.

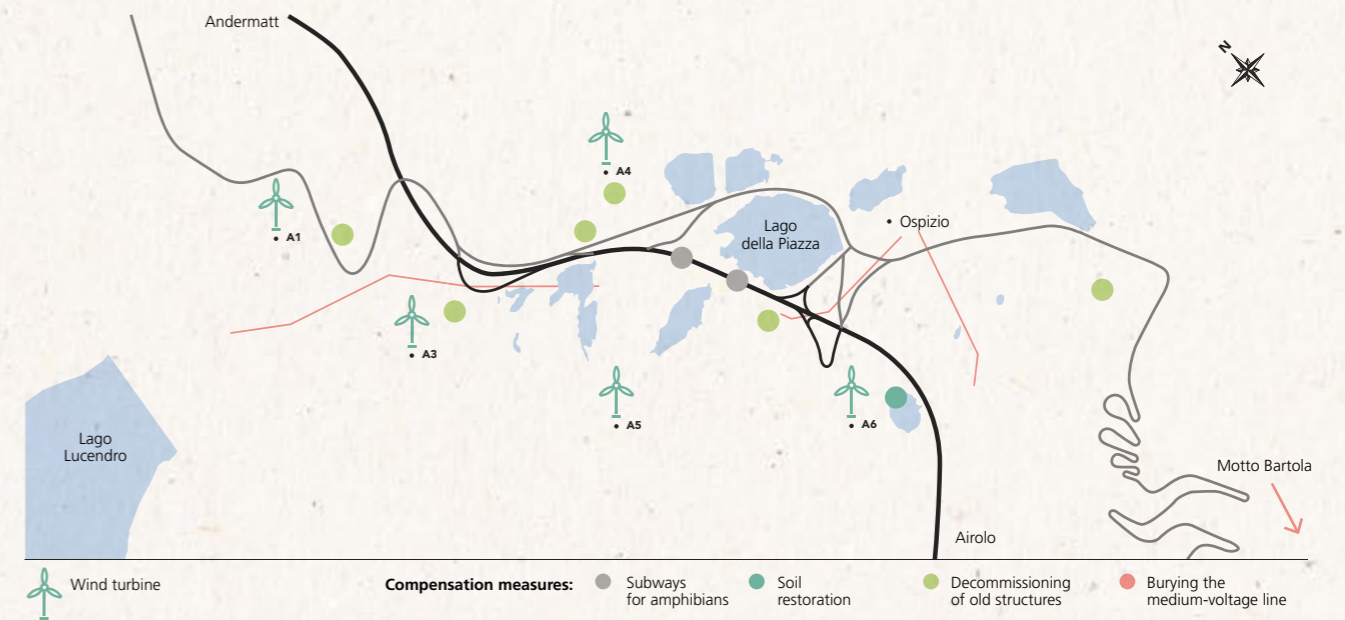
In parallel, the Peccia plant will be completely overhauled and will be fitted with two new production groups and two new pumps. The Peccia exchange basin will be expanded to increase the efficiency operations via increased pumping and storage capacity.



Increase in the height of the Sambuco dam

### Wind energy

At a short distance from the cantonal boundary and the historic Tremola road, 5 wind turbines came onstream in 2021 with a rated capacity of 11.75 MW. The St.Gotthard wind farm is perfectly aligned with the Federal Government's 2050 energy strategy, and, respectively, the framework set out in the Cantonal Energy Plan. The project will make a significant contribution to using local resources for electricity production and for covering electricity needs using local renewable resources.



Annual production figures in GWh are set out below, once self-consumption to operate internal services has been taken into account.

	2021	2022	2023
<b>Annual production</b>	10.8	12.4	<b>13.4</b>
<b>Proportion of AET production (70%)</b>	7.6	8.7	<b>9.4</b>

The completion of the wind farm represents the culmination of a process that has been ongoing for almost 20 years, during which the Swiss energy sector and the general public's awareness of energy issues have profoundly changed.

As is the case for any human intervention in the natural world, the wind farm has also had an impact on the surrounding land and environment.

To mitigate these impacts, the Canton has asked Parco eolico del San Gottardo SA to implement environmental offsetting measures, such as:

- reinstating the dip at the former military shooting range;
- cleaning up the Lago dei Bench landfill for inert waste, which also took account of wild fauna and amphibians by creating two tunnels for them underneath the main road (with respective animal entry points) in order to enable them to cross it;
- Restoration to their natural state of the ancient accesses to the Piazza lake, the entrance to the Alpe Fortunei and a square in the San Carlo area;
- various works in the vicinity of the Lucendro dam;
- burying the suspended lines linking the Lucendro dam to the power station at the St.Gotthard Hospice, from where they are relayed to the valley floor;
- restoring bats habitat: the appropriate area identified is not on the Gotthard but on the valley floor, in particular in the woods near Osogna. Having reached agreement with the landowners, the work is scheduled to be carried out by the end of 2024.

<sup>20</sup> [www.ofima.ch](http://www.ofima.ch)

In addition to the nature and landscaping work, Parco eolico del San Gottardo SA has engaged in cultural and social initiatives; it has financed a CHF 150'000 grant for the renovation of an octagonal stable dating back to 1775, which is regarded as a historic building in the St.Gotthard area; it has paid a CHF 50'000 grant for the renovation of the National Museum of the St.Gotthard; and it has also built an educational trail, frequently used by both schools as well as Swiss and foreign visitors, linking together the renewable energy production plants in the St.Gotthard area (ref: pages 32 and 35 of this Report).

The wind farm is a modern, innovative project with cutting-edge systems, including:

- ice and defrosting detection for blades;
- optimal functioning of machinery as low as -30°C;
- noise reduction thanks to the use of blades with a serrated profile;
- installation of radar for protecting bats and birdlife, which stops the blades when birds are passing through;
- visibility at night guaranteed by infra-red lights, which make the towers visible to aircraft.



**Hours of machinery stoppage each year for the purpose of fauna protection**

	2021	2022	2023
<b>Hours of machinery stoppage</b>	5'501	6'370	<b>6'554</b>

In 2023, an in-depth study on the expansion of the wind farm was launched. The preliminary feasibility study identified potential new sites for the installation of new wind turbines. Detailed studies of technical and financial aspects are ongoing.

### Photovoltaic

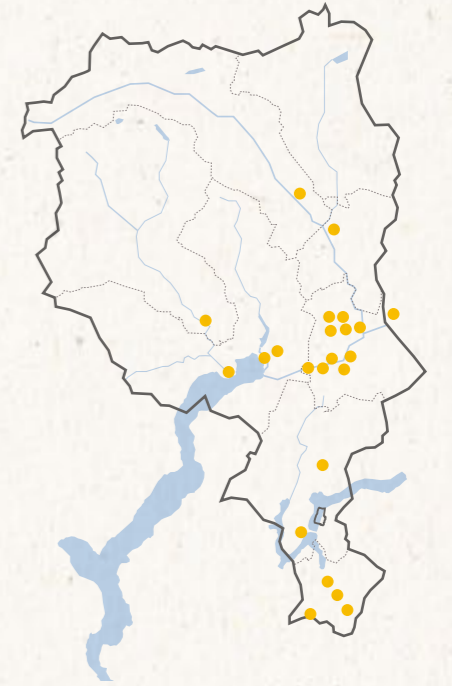
AET is investing in the development of company photovoltaic installations.

<b>Annual production (AET's own share) in GWh</b>	<b>4</b>
<b>Installed power in MWp</b>	<b>3.8</b>
<b>Number of plants</b>	<b>26</b>

In parallel, AET is purchasing energy fed into the grid by plants that have received the single subsidy from the Renewable Energies Fund of the Canton of Ticino, rising from 27 GWh in 2021 to 42 GWh in 2022 (therefore representing an increase of 55%). Further growth of around 50% is anticipated in 2023, resulting in an estimated overall volume of 63 GWh.

We are establishing a partnership with the Canton to promote the development of photovoltaic energy generation on buildings owned by the Canton.

The aim is to use the photovoltaic potential offered by building roofs and to enable the Canton to cover part of its own electricity needs through self-consumption. The partnership will enable an increase in the proportion of local renewable energy produced, reflecting the energy plans endorsed by the Canton and AET (100% renewable supply).



AET will be responsible for designing, constructing and maintaining the plants, and will bear the investment burden of this. On the other hand, the company will use any excess energy produced by the installations constructed and will benefit from the respective guarantees of origin.

Cantonal partnership  
Goal 2035

20 MW<sub>p</sub>  
nominal capacity

CHF  
40 mio  
investment

20 GWh  
annual production

Various projects involving buildings owned by the Canton were launched in 2023:

Location	Power output (kWp)	State
Provisional Cantonal High School (Viganello)	150	in operation
Barbengo Middle Schools Gym	124	built, in grid connection phase

Alongside the distribution companies AIL and SES, in 2023 AET established the "Solar 120" Consortium to participate in the tendering process launched by the Federal Roads Office (FEDRO) for the installation of photovoltaic panels on anti-noise barriers and rest areas along Swiss motorways. The tendering process was launched following the Federal Government's adoption of urgent measures aimed at guaranteeing energy supply in the short term by using solar energy as far as possible on Federal Government-owned infrastructure deemed to be appropriate.

The Solar 120 Consortium won the tender for the batch of acoustic barriers along the motorway in Ticino. An agreement will be signed with FEDRO which will guarantee the reservation of spaces allocated over a three-year period, by which time the plants should have come into operation. The Solar 120 Consortium will take care of the design, installation and connection grid and maintenance for the plants, using the energy generated and benefiting from the guarantees of origin.

AET also participates in works performed by cantonal subsidiaries. In 2023, the company provided advice on a project for installing a photovoltaic plant on a dam owned by Ritom SA.



Project for the installation of a photovoltaic system on the Ritom dam

**Examples of installations on buildings of public significance carried out by AET**



**Provisional Cantonal High School Viganello**

150 kWp  
Installed power  
173 MWh  
Annual production  
100%  
AET involvement

**Scuola d'Arti e Mestieri Bellinzona**

78.57 kWp  
Installed power  
86 MWh  
Annual production  
100%  
AET involvement

**Sede Amministrativa Monte Carasso**

56.90 kWp  
Installed power  
61 MWh  
Annual production  
100%  
AET involvement

**District heating, conventional thermal energy and nuclear power**

AET's subsidiaries include the companies TERIS Teleriscaldamento del Bellinzonese SA and Calore SA, which are involved in the production and distribution of thermal energy (district heating).

The production methods mainly involve renewable energy sources, as well as the use of thermal energy produced by waste incineration. Use of conventional oil or gas-powered production systems is exclusively envisaged in order to satisfy spikes in demand and to deal with any downtime at the main plants due to faults or for maintenance. This is a winning strategy in environmental terms; indeed, it has received state subsidies thanks to the reduction in CO<sub>2</sub> emissions.

Recent building regulations, which are becoming ever-more attuned to environmental considerations, coupled with the increase in general awareness in the reduction of CO<sub>2</sub> emissions, are heightening interest in this type of service.

The two companies plan to make major investments over the short to medium term:

- TERIS Teleriscaldamento del Bellinzonese SA is working on building a new woodchip-fuelled power station in Castione which sets out to provide thermal energy produced from renewable sources in the northern sector of the Bellinzona agglomeration (a similar project is being developed and promoted in Mendrisio).
- On the other hand, Calore SA is about to expand its district heating network in the Locarno area, at the same time as it is building a new power station to generate thermal energy using electricity-driven heat pumps.

**Conventional thermoelectric power**

AET also has stakes with a share of less than 50% in other companies active in the thermal energy. In 2010, we bought a stake in the coal-fired thermal power station in Lünen, North Rhine-Westphalia. At the time, the aim was to diversify sources and secure base-load energy. In 2011, the Ticino electorate approved the stake, requiring its divestment by 2035. In January 2020, the German Government announced plans to close all coal-fired power stations by the end of 2038 (including both hard coal and lignite); the current plan is to close Lünen by 2035. The Federal Government's 2050 energy strategy envisages the gradual abandonment of fossil-fuel sources, including coal.

**Nuclear**

Since 1973, we have held a minority stake (7%) in AKEB<sup>21</sup> (Aktiengesellschaft für Kernenergie-Beteiligungen Luzern), a company incorporated in Lucerne during the aforementioned year, which invests in nuclear power stations, as well as an indirect sub-participation in the Leibstadt power station (KKL).

**Production of participated in MWh**

	2021	2022	2023
<b>AKEB (7% share)</b>	285'295	283'820	<b>317'551</b>
<b>KKL (0.15% share)</b>	6'827	14'740	<b>14'517</b>

Since 2016, under the terms of the amended LAET, AET is no longer allowed to directly or indirectly purchase participation interests in nuclear and coal-fired electricity power stations in Switzerland or abroad.

In addition, since 1 January 2018, the Swiss Confederation no longer grants licences for the construction of new nuclear power stations or for large-scale alterations to existing power stations. Power stations can continue to operate for as long as the ENSI guarantees their safety.

<sup>21</sup> AKEB has supplies from the drawing rights of the Bugey and Cattenom nuclear power plants in France and Leibstadt in Switzerland.

## Climate protection measures

### Renewable Energies Fund

Our company contributes to the financing of the Fund for Renewable Energy (FRE) through a levy on production at the Lünen power plant, as compensation for our participation in it. The FRE was established to promote the production of electricity from renewable sources in Ticino and to finance municipal activities, research and consultancy in the field of energy efficiency and energy saving. The FRE is funded by the Canton through additional levies on consumption.

#### How the Fund works:

#### Production withdrawal

0.6 cts/kWh on AET production in Lünen  
**approx. CHF 4-5 mio**

Allocated to production and energy efficiency



#### Withdrawal 1 on consumption

0.2 cts/kWh on cantonal consumption  
**approx. CHF 4 mio**

Allocated to production and energy efficiency

#### Withdrawal 2 on consumption

1 cts/kWh on cantonal consumption  
**approx. CHF 20 mio**

Allocated to communal activities in the field of energy efficiency and energy saving

### SF<sub>6</sub> gas

SF<sub>6</sub> gas is a greenhouse gas with insulating properties, which is used in medium- and high-voltage electrical plants. Alternative technologies with the same technical, economic and environmental properties do not exist yet. AET also uses plants that operate on SF<sub>6</sub> gas, and, at the same time, the company closely monitors developments in technology and the information released by umbrella associations that are actively conducting research into better solutions.

Considering its significance, specialist internal staff receive appropriate training to ensure that plants are operated properly, thereby preventing accidents and gas leaks.

AET has equipped itself with the instruments necessary in order to control the quality of SF<sub>6</sub> gas present at its plants. Given the strong greenhouse effect (1kg of emissions have an effect equivalent to that of around 22.8 tonnes of CO<sub>2</sub>) and the fact that the gas remains in the atmosphere for extended periods of time, SF<sub>6</sub> must be handled with great care. Gas degradation analysis is carried out internally in full accordance with sectoral legislation.

AET applies the sectoral directives drawn up by VSE/AES applicable to these measures and is obliged to report information on leaks. AET staff are certified in handling these gases in line with Swiss and European standards.

#### SF<sub>6</sub> leakage measured at AET plants

	2021	2022	2023
<b>Total AET plants + reserve [kg]</b>	5,387	5,259	<b>5,089</b>
<b>Quantity of SF<sub>6</sub> used [kg] *</b>	18.4	4.1	<b>6.6</b>
<b>Quantity of SF<sub>6</sub> used* (%)</b>	0.34%	0.08%	<b>0.13%</b>

\* The term "Quantity of SF<sub>6</sub> used" refers to the quantity of the gas SF<sub>6</sub> added to plants throughout each individual year, taking account of the tolerances for proper operation stipulated for each plant. This figure must not be considered solely as an effective loss during the given year, but rather as the quantity of gas used to ensure proper operation over the years. 18.4 kg of SF<sub>6</sub> were topped up in 2021, which should be regarded as gas added while ordinary maintenance in order to offset losses accumulating over a number of years, although in all instances within the tolerance range.

### Electric mobility

We are gradually renewing the fleet of light vehicles with electric models in order to reduce CO<sub>2</sub> emissions. At the same time, we are enhancing the charging infrastructure. Charging points are 100% powered by hydropower produced in Ticino (tiacqua) with naturèmade basic certification<sup>22</sup>. In 2016 we installed the first rapid charging point on Ticino's

motorway network. At present, there are 13 rapid charging points in operation bearing the AET logo. In 2016, we started to equip our sites with slow charging points, which can be used to charge both company cars and employees' private cars; by the end of 2023, there were a total of 25 such charging points.



### Future prospects

Rapid charging: further enhance motorway infrastructure in accordance with the agreement in place with the Canton.

Slow charging: enhance the slow charging infrastructure at company sites by progressively expanding it in line with needs.



### Slow mobility and the promotion of alternative measures

We promote a variety of alternative measures to the use of vehicles with combustion engines. Subsidies are available for purchasing an "Arcobaleno" travel card (valid either for a specific zone or throughout the entire Canton of Ticino), as well as for using "Bike Sharing Bellinzonese". AET staff can benefit from incentives to purchase electric bicycles and electric cars.

AET also participates in the "Bike to Work" initiative promoted by Pro-velo, which enables interested employees to group together into teams and to "challenge one another" in a fun, healthy way, spurring each other to travel as many kilometres as possible by bicycle – either using a regular push bike or e-bike – in order to get to work.

#### Results of the Bike to Work challenge 2023

<b>Groups</b>	<b>5</b>
<b>Employees</b>	<b>18</b>
<b>Number of km travelled in a month</b>	<b>3'110</b>
<b>Kg CO<sub>2</sub> saved</b>	<b>448</b>

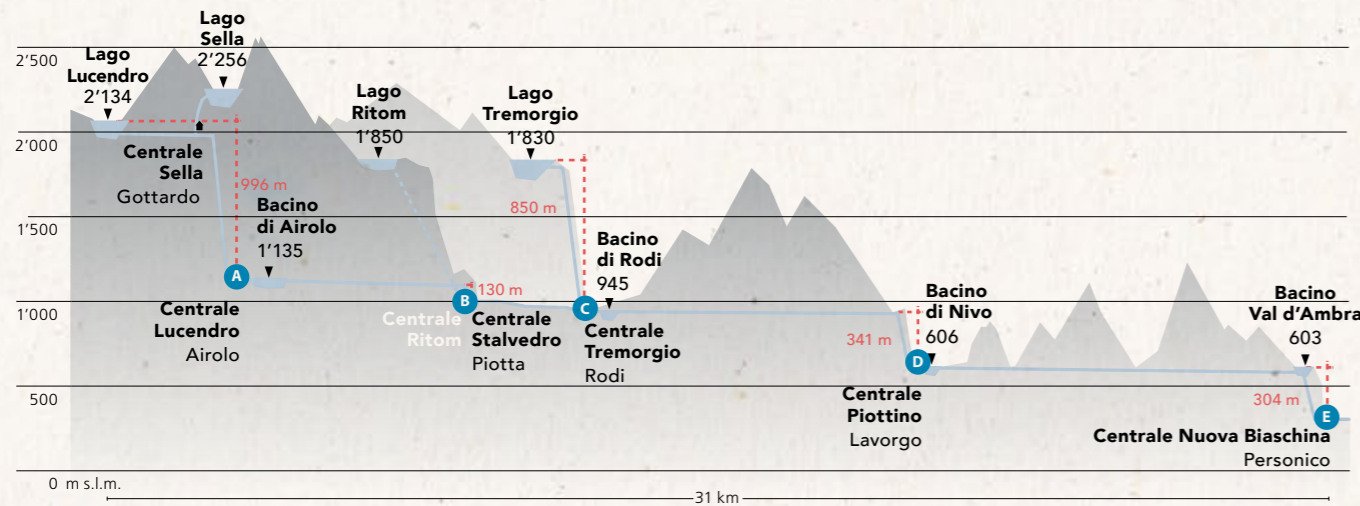
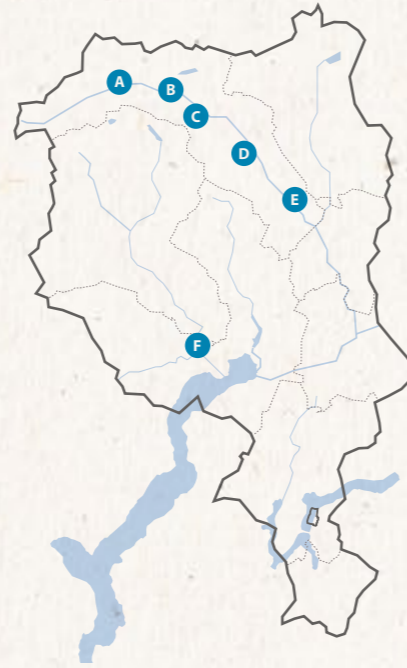
<sup>22</sup> [www.naturemade.ch/en](http://www.naturemade.ch/en)

## Water use

Water is the primary resource used by AET for producing energy. It is a precious resource that we have an interest in protecting, preventing any form of waste or pollution.

The water bodies – under cantonal ownership – used by the company are the river Ticino, which hosts the plants comprising the “Leventina production chain”, and the Ponte Brolla plant on the River Maggia.

The first link in the Leventina Valley production chain is the Lucendo plant, which is powered by the waters of the Ticino and to a lesser extent by urban waters. The entire chain covers a distance of around 30 km, and is made up of the following five power stations: Lucendo, Stalvedro, Tremorgio, Piottino and Nuova Biaschina.



Profile of the AET Leventina production chain

Continuity of production depends on the construction and maintenance of complex integrated systems such as pressure pipelines, pumping stations, turbines that help move the water into adduction tunnels, and power stations with large turbines that release the water.

During the course of the generation process, power stations do not impair the quality of water, with the result being that no post-production treatment is required.

To prevent accidents and dangerous situations, we have adopted both protective and control measures to prevent, analyse, monitor and mitigate residual risks resulting from the use of water-based technical installations. The regular nature of control cycles enables also environmental risks to be effectively minimised, while the quality of the products used ensure that any environmental damage is limited in the event of any oil spills.

Human error can also have a negative impact on hydro-resources. In this sense, employee training and awareness-raising have vital roles to play.

In the event of any incidents or hazardous situations, once the event has been resolved or contained, an analysis of the causes is carried out in order to identify the sources of the problems and to pre-empt or prevent any future risk. In addition, any anomalies in the operation of plants that could become more serious and cause damage to the water are flagged and dealt with promptly.

Thanks to the control and monitoring of plants, we also oversee water quality, reporting any critical issues to the Cantonal Hunting and Fishing Office as well as fishers' associations. Since the chain is close to the heart of the cantonal population, alerts and input are also received from members of the public or the above-mentioned associations, which means there is always a guarantee that attention will be paid to water quality.

### Number of reportable incidents that resulted in damage to cantonal waters

	2021	2022	2023
Incidents	0	0	0

Mindful of the impact that our buildings and staff have on cantonal land, we monitor water consumption at the sites used by our employees, which are equipped with the necessary meters.

### Water consumption in m<sup>3</sup> at company sites\*

	2021	2022	2023
Water consumption	4'204	3'047	2'645

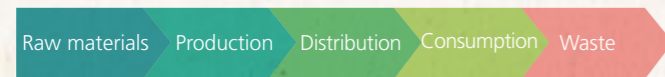
\* Some data will be collected during the second half of 2024, and corrections will be incorporated into the next Sustainability Report

# Circular economy, use of materials and resources

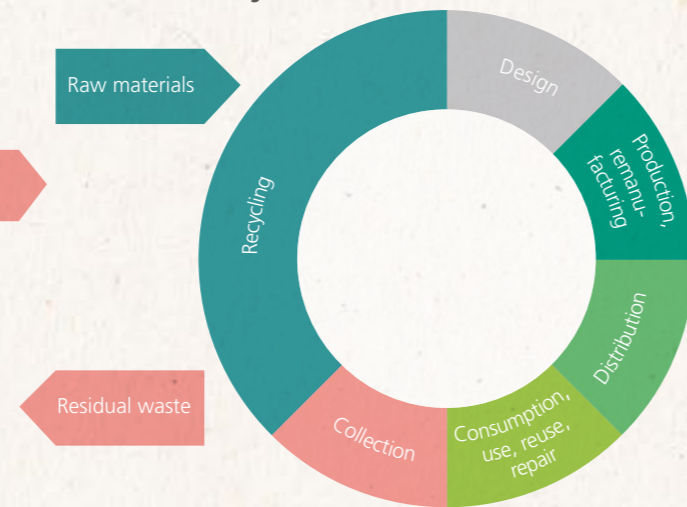
## Circular economy

The circular economy is a new way of designing, producing and using goods that generates positive impacts on society and the planet's ecosystems. In contrast to the dynamic operating for the linear economy (which is characterised by the logic of 'take/produce/dispose'), the principles of the circular economy are based on the concept of 'regeneration' with the objective of conserving the value of products and materials used for as long as possible, thereby preserving natural resources.

## Linear economy



## Circular economy



Within this framework, we are aware that waste and waste disposal can cause damage to the environment and to communities. As a result, we have drawn up rules of proper practice, which each member of staff must comply with.

To limit solid urban waste, offices are equipped with separate bins in order to ensure that paper is recycled and separated from other waste. PET is collected in dedicated containers that are located in company kitchens and in the dining hall. Glass bottles sold at automatic vending machines are returned to dedicated containers for empty bottles and are collected by suppliers. Coffee machines use cups made from glass or recyclable paper.

As we carry out a large number of administrative activities, according to the principles set out in our Environmental Guidelines, we encourage all employees to limit paper consumption. Wherever possible, we also urge all staff to send and share documents digitally, only printing them where necessary. When staff do print, we urge them to use both sides of the paper, using black and white ink and opting for either recycled or FSC-certified paper.

As far as the materials used in plants are concerned (such as copper, iron, mineral oils, construction materials, biomaterials etc.), these are disposed of via ISO certified professional recyclers. AET also follows good practice when it comes to using non-polluting materials within production processes, removing or replacing products and substances that pose a risk to health or the environment.

All employees are responsible for applying any internal and external directives applicable to their work, specifically in the field of occupational health and safety and environmental protection. The QSA service monitors the proper application of the ISO standards implemented at the company. Audits and regular checks are carried out to prevent errors within company processes and potential adverse impacts. All kinds of waste are traced internally following a management system, and externally via documents produced by waste disposal professionals.

Specialist companies process special or particularly hazardous waste. The internal staff involved in this receive appropriate training and are subject to awareness-raising measures.

Since the early 2000s, we have been working to identify any areas at our installations containing asbestos, monitoring them and liaising with SUVA as regards health and safety arrangements.

We have conducted studies and analysis at the Nuova Biaschina plant since the insulation in the machine room vault contained asbestos sprayed onto concrete, which had solidified into a flocked finish. This practice is typical in buildings dating back to the 1970s.



Restoration work on the vault of the Nuova Biaschina power station

Assisted by specialist operators, during a thermal overhaul of the plant carried out in 2023, we started work on cleaning up the vault at the Nuova Biaschina plant, removing the asbestos originally contained in the vault's insulation materials. The cleanup work will be completed during the first half of 2024; by the end of the year the property will be removed from the RetelInfo Amianto (Asbestos Information Network) catalogue<sup>23</sup>.

If there are any mistakes regarding managing materials, we analyse the causes and take appropriate corrective action, involving the competent authorities.

<sup>23</sup> RetelInfo Amianto - RetelInfo Amianto (TICH) - Republic and Canton of Ticino  
<sup>E</sup> The increase is related to projects that have the potential to generate larger volumes of material for disposal each year (demolition, aggregates and mixed soils).  
<sup>F</sup> During the year there were no disposals of other materials such as ceramics, concrete piles, asphalt crusts, which were recorded in other years. These are materials related to multi-year projects that do not have a regular impact on values.

In order to monitor effective management, we select environmental data during ISO certification processes and assess this annually. These processes are often updated in line with the results of audits, or in the event of any regulatory or statutory changes.

## Quantity of waste by type and disposal method [GRI 306-4; 306-5]

	2021	2022	2023
<b>Recycling (t)</b>	260	125	<b>147</b>
<b>Hazardous waste (t)</b>			
Other disposal operations	131	93	<b>105</b>
<b>Non-hazardous waste (t)</b>			
Incineration (with energy recovery)	77.9	54.8	<b>59.7</b>
Landfilling	109.6	129.3	<b>134.6<sup>F</sup></b>
Other disposal operations	34.5	- <sup>F</sup>	<b>18.5</b>



### Use of materials and resources

At AET, we apply federal and cantonal legislation on building waste and the use of recycled construction materials with the aim of using the available resources efficiently. There are various ongoing projects which will have a positive impact on the Canton and its surrounding areas.



#### The Bodio project

Over the last five years, activities relating to this hub has led AET to promote a project involving the reconfiguration of this industrial area, with the twofold purpose of guaranteeing efficient, state-of-the-art services for users whilst, at the same time, showcasing historical heritage.

The initiative, executed on the outskirts of an industrial area characterised by landscape that is not particularly attractive and is partially degraded, aims to improve the urban environment and quality of life for site users.

The area hosts three inter-company centres (the CFB, the ESI training centre and the AMETI training centre<sup>25</sup>). The central square will help to give it the air of a "campus", promoting inter-penetration among these entities. Particular attention has been given to landscaping, as well as materials recovery and the use of environmentally sustainable materials. Particular efforts will be made to use wood, along with a focus on water management, with the dispersion across surfaces of rainwater, etc. The Minergie energy standard will be applied to the new centre<sup>26</sup>. The area is already served by a recently built district heating plant, which is powered by water-to-water heat pumps.

<sup>24</sup> [www.elettricita.ch](http://www.elettricita.ch)

<sup>25</sup> [www.ameti.ch](http://www.ameti.ch)

<sup>26</sup> [www.minergie.ch](http://www.minergie.ch)

# Biodiversity, environmental protection

(ionisation and radiation)

**Biodiversity is essential for preserving the natural environment and maintaining the balance within vital, productive environments.**

Any activity carried out by humans on the environment can have an impact, not only on biodiversity but also on the landscape. With this in mind, we take the utmost care when planning and executing different works, so that the impact on ecosystems and the local area is kept to a minimum.

### Corporate culture

When it comes to consideration for and the protection of biodiversity and the environment, forging a corporate culture is of fundamental importance. The QSA acts proactively and preventively: each year, internal audits are carried out based on a specific risk analysis to ensure that the integrated management system, which is updated and improved from time to time, is working properly. The QSA also provides support in collecting, analysing and implementing proposed improvements and promotes awareness-raising on the environmental issues.

### Emergency management

At AET, we carefully consider emergency management. We regularly hold simulations of critical scenarios involving potential consequences for the environment so that we can assess the efficacy of our internal procedures as well as the adequacy of our emergency response materials. These tests also give us an opportunity to provide training to staff involved in this.

### Biodiversity and waters

The hydropower plants along the River Ticino were designed to guarantee optimal water usage for the production of energy in accordance with the laws applicable at the relevant time. In view of this fact, AET must also modernise its plants on a regular basis so that they comply with legal requirements on minimum outflow, the modulation of discontinuous outflow, watercourse revitalisation, sediment transport and the free migration of fish fauna to maintain a stable fluvial ecosystem by protecting birdlife.

We are currently examining various ecological revitalisation projects, some of which are summarised below.

#### Airolo, Stalvedro and Piotta sections

The canton has identified the Stalvedro plant, with its Airolo basin, as an obstacle to the free migration of fish in the cantonal watercourse. The renovation project for the plant includes the construction of structures to allow fish to migrate back and forth. It also includes the adjustment of the minimum flow in accordance with the new legislation - as stipulated in the concession for the renewal of the Ritom plant and the closure of the Garegna intake - in favour of a better restoration of the Ticino. Renaturation measures include the demolition of part of the dams downstream of the Airolo weir and their reconstruction using less monotonous environmental techniques that do not impede the free movement of fish. Similarly, in the Stalvedro and Piotta sections, some areas of the Ticino have been structured with clusters (groups of blocks and pebbles in the riverbed), "groynes" anchored to the embankments, selective widening and meandering to promote as "natural" a structure as possible, thus providing refuges, resting and spawning areas.

#### Lavorgo and Rodi sections

The project plan focuses on the adjustment of minimum flows, the restoration of free fish migration and the transport of solids. In these sections, it is also planned to structure and modify the watercourse profile using environmental techniques, in parallel with the partial raising of the embankments



Renaturation of the embankment of the Airolo section

in order to protect the flood-prone areas in the event of major floods. The Lagasca stream will be completely restructured, giving it a much more “natural” and environmentally sustainable appearance, with almost complete coverage of the bed and banks.

All projects include the use of monitoring systems to assess the effectiveness of the work carried out. As far as fauna is concerned, we adopt measures to protect both fish species (e.g. char, trout, etc.) and benthic organisms, with the proviso that their applicability is subject to respect for the life cycle, from feeding to reproduction, trout, etc.) and benthic macroinvertebrates (*macrozoobenthos*).



Ponte Brolla hydroelectric power station

**The Ponte Brolla hydropower plant**

built at the start of the eighteenth century, uses waters from the final stretch of the Maggia River. The plant was overhauled in 2009, in full compliance with environmental requirements.

The work saw the erection of a pneumatic barrier, which can be inflated to different levels in order to capture and release water, depending on the level of the River Maggia. During periods of high-water levels, the barrier is lowered to enable improved water throughflow and sediment transport.

In addition to the barrier, a fish ladder has been built, guaranteeing the free migration of fish fauna.



Pneumatic barrier



Details of the fish ladder

**Biodiversity and the soil**

AET contributes to soil protection and the prevention of damage and accidents. Employees receive specific training depending on the roles that they perform (such as foresters and grid operators). The company’s Minergie-certified headquarters are equipped with a biotope with native and migratory animal species and a variety of aquatic plants.



**Impact analysis**

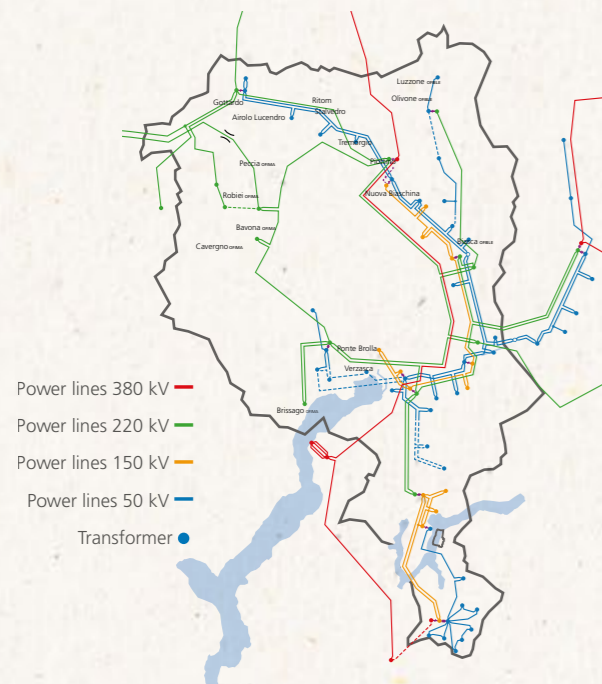
In 2023, we analysed the impact that certain works had on fauna protection zones, in relation to the Piottino plant in Nivo and the extraction point from the Piumogna River, as these facilities fall within the boundary of a protected area. We found that there was no impact on the wild fauna protection site because of our installations.

The map outlines in red the area that is designated by the Federal Government for species conservation. The Federal Government defined the protected area in the Ordinance on Areas Subject to a Federal Ban on Hunting (Ordinanza sulle bandite federali, OBAF) in the 1990s, after the installations in question were built. The FOEN has designated the area as a wild fauna protection site, meaning that practising winter sports outside the marked tracks and paths, and using drones, are prohibited.

### Biodiversity and the air

Planning and implementing projects relating to the electrical grid are subject to strict regulations. These legal provisions seek to minimise the impacts that these activities may have on biodiversity and the environment. Although AET implements protection and offsetting measures, some direct impacts on biodiversity cannot be completely avoided, specifically in relation to sub-stations, as well as when it comes to medium- and high-voltage lines located outside population centres.

### Ultra-high and high voltage electrical grid in Ticino and Mesolcina



### Distribution grids, sub-stations and cabins owned by AET

	2021	2022	2023
<b>Level 3 grid</b> (high voltage between 36kV and 150kV)	278 km	275 km	<b>270 km</b>
<b>Level 5 grid</b> (medium voltage between 1kV and 36kV)	224 km	228 km	<b>235 km</b>
<b>Level 7 grid</b> (low voltage <1kV)	7.3 km	6.9 km	<b>11.3 km</b>
<b>Sub-stations</b> (under joint ownership)	19 (8)	19 (8)	<b>19 (8)</b>
<b>Transformer cabins</b>	130	131	<b>138</b>

As far as possible, we work with suppliers who take account not only technological considerations but also company biodiversity requirements.



### One example is the project for the future construction of the new 50 kV sub-station in Manno.

The impact on the surrounding landscape is mitigated by rolling out natural elements. Reusing soil excavated during sub-station construction incorporates the building into the land, guaranteeing environmental continuity between the mountain's slope and the plain. A key element of the project is the biodiversity corridor as a connecting element with the landscape, which will be created in accordance with the following principles:

- integration of the building into the landscape through natural modelling of the land;
- valorisation of biodiversity;
- botanical choices guided by air quality parameters, with types of flower species which are capable of improving performance by absorbing polluting agents produced by vehicular traffic and industrial activities (CO<sub>2</sub> storage, absorption of particulate matter, sulphur and ozone) and facilitating the pollination cycle;
- sustainable maintenance;
- environmental continuity with green cover.

### Electromagnetic fields

At AET, we comply with the Ordinance on Protection against Non-ionising Radiation (Ordinanza sulla protezione dalle radiazioni non ionizzanti, or ORNI) as and when it is applicable. Where necessary or required, we are capable of simulating the electromagnetic fields necessary to get approval for ESTI plans, and also to provide the simulation service to third parties.

Below are two examples of electromagnetic field simulations of a 50 kV substation (image 1) and a 50 kV underground power line (image 2).

The green line indicates the installation limit (1 µT) within which no sensitive use locations (LAUS) can be found.

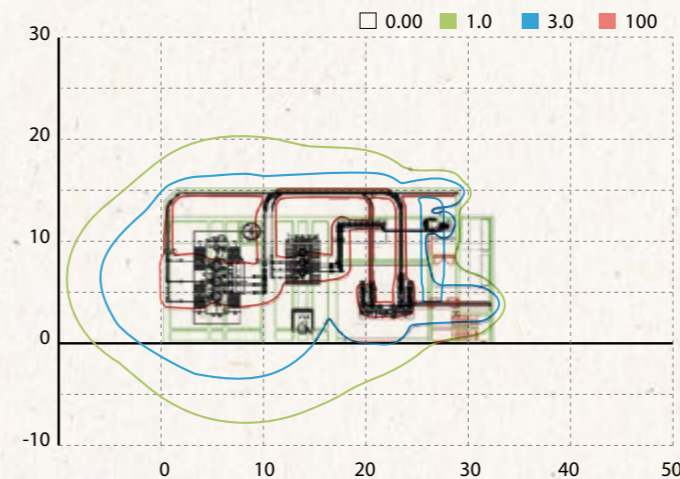


Image 1: electromagnetic field simulations of a 50 kV substation

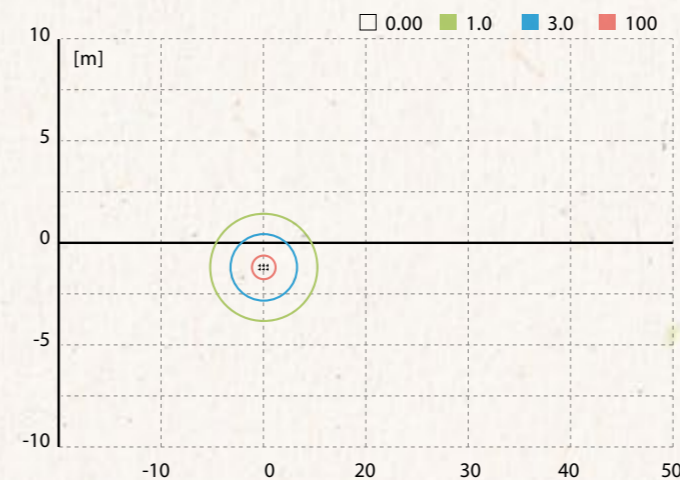


Image 2: electromagnetic field simulations of a 50 kV underground power line

### Noise pollution

Particularly regarding the noise generated by high-voltage power lines and power transformers, we make sure that we comply with, and hence do not breach, the maximum levels specified for the respective zone under the applicable legislation. For residential areas, noise levels must be lower than 55 dB during the day and 45 dB at night. If any critical issues arise, we identify technical solutions on a case-by-case basis that could be implemented to avoid the problem.

No instances of non-compliance with biodiversity legislation were recorded during the period 2021-2023.

[GRI 304-2]

# GRI Index

## Statement of use:

AET has reported the information cited in this GRI content index for the period from 1 January 2023 to 31 December 2023 with reference to the GRI standards.

## Utilizzo GRI 1:

GRI 1: Foundation 2021

## Standard di settore GRI pertinenti:

Not applicable

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## Recognised ESG performance

In 2023 we were awarded the “EcoVadis Silver Medal”, marking an improvement on our score compared to previous years.



EcoVadis is one of the most internationally-renowned suppliers of corporate sustainability assessments. Its methodology enables the impact of a company to be assessed from a sustainability perspective based on tangible data. The assessment involves specific information being collected about a company, which is subsequently analysed according to international standards such as the Global Reporting Index (GRI), ISO 26000 and the principles of the UN Global Compact. In 2020, AET started testing sustainability processes, eventually receiving the silver medal in 2023. This recognition is testament to our ongoing efforts to improve all processes from a sustainability perspective.

## AET Certifications



ISO 9001:2015  
ISO 14001:2015  
ISO 45001:2018

## Contact information

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This Sustainability Report is the result of a collective effort and a major commitment by everyone involved. AET would like to give special thanks to Giovanna, the coordinator of the working group, along with everyone else who contributed to it: Alessia, Andrea, Claudio, Flavio, Gianni, Gionata, Kruno, Marco, Michel, Nicola, Pietro, René e Stefano.

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