

Annual Report 2024



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Editorial

Positive momentum and progress in the areas of innovation, grid expansion and international cooperation



Adrian Bult, Chairman of the Board of Directors, and Yves Zumwald, CEO

Dear readers,

Swissgrid's key responsibility is to ensure the secure and stable operation of the transmission system. We were able to guarantee availability of over 99.9 percent in 2024. However, as already specified in our Strategy 2027, the challenges we face are increasing as the transformation of the electricity system progresses.

In the reporting year, transnational electricity trade in Europe led to more transit, which put a strain on our grid infrastructure. We were increasingly forced to reduce the capacity available at the national borders in order to keep the Swiss grid stable. However, Swissgrid was also repeatedly confronted with major imbalances within Switzerland. The capacities for electricity generation from photovoltaics are now so high that deviations between the forecasts provided by energy producers and their production in real time are having an impact on system frequency. Swissgrid had to request large volumes of control energy at short notice several times during the reporting year in order to keep the grid stable. The relevant costs will be borne by electricity consumers.

Swissgrid is rising to meet these challenges in close cooperation with its partners in the sector and with

innovative solutions. In the «PV-Forecasting» project, for example, Swissgrid prepares forecasts on photovoltaic production several times a day with a high regional and temporal resolution. These forecasts allow any imbalances in the balance groups to be analysed and countermeasures to be defined.

Swissgrid has reached important milestones with its grid infrastructure. We were able to commission a new transformer in the Mettlen substation, while work began at the Lachmatt substation to modernise the 380 kV switchgear and add a coupling transformer. A major step forwards was taken on the Mörel – Ulrichen grid project thanks to the installation of the conductors between Mörel-Filet and Ernen. Swissgrid has also finalised the technical report on the «Strategic Grid 2040» and submitted it to ElCom for review. The transmission grid is the key to a sustainable energy future. However, rapid modernisation is jeopardised by lengthy approval procedures. We therefore welcome the Federal Council's efforts to speed up the procedures with the «Grid express» proposal.

The conclusion of negotiations with the transmission system operators in the «Core» capacity calculation region and the approval of the methodology by the relevant regulatory authorities represented another success. Although this alleviates the situation regarding unplanned load flows on the northern border, it is no substitute for an electricity agreement between Switzerland and the EU. Swissgrid therefore welcomes the successful conclusion of negotiations in this regard.

In the spring of 2024, Swissgrid presented its first integrated Annual and Sustainability Report, improving its rating as a result. We are delighted by this achievement, which motivates us to continue our advances in this area. The topic of sustainability is also firmly established in Strategy 2027. Climate targets are a key part of this strategy. Our defined CO₂ reduction path involves reducing emissions by 50 percent by 2030 and by 90 percent by 2040. Negative emission technologies will also be used.

We continue to face a variety of challenges. Swissgrid has prepared itself accordingly to enable the company to rise to meet these challenges successfully in the future.



Adrian Bult
Chairman of the Board of Directors



Yves Zumwald
CEO

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Year in review

The modernisation of the grid is progressing well. In the reporting year, Swissgrid was able to commission a new transformer system in the Mettlen substation in the canton of Lucerne, for example. Similarly, progress is being made on important grid projects in the canton of Valais. In addition, Swissgrid has finished planning the Strategic Grid 2040. The areas of innovation and digitalisation are also experiencing positive momentum, while Swissgrid is demonstrating a strong commitment to achieving greater integration into European processes.

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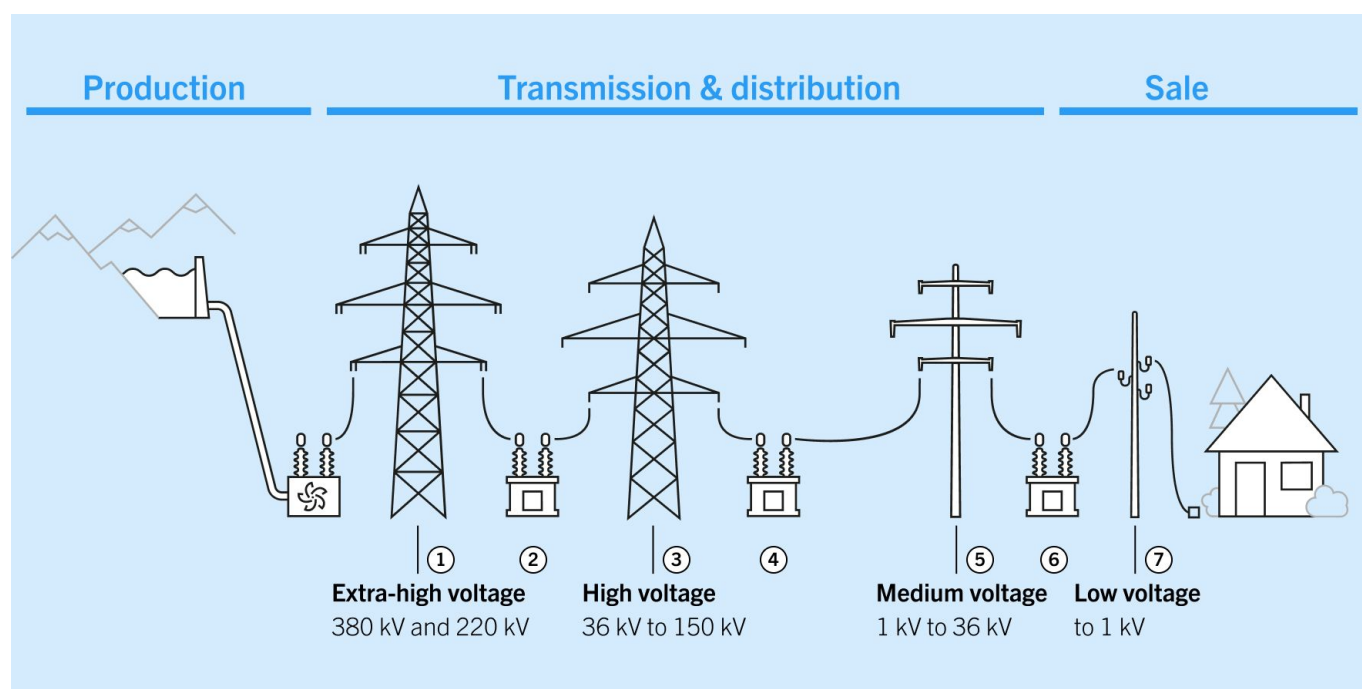
Company

GRI 2-6

Swissgrid is the national grid company and owner of the Swiss extra-high-voltage grid. Its mandate is governed by the Electricity Supply Act (ESA, SR 734.7) and the Electricity Supply Ordinance (ESO, SR 734.71). The Federal Electricity Commission (ElCom) monitors compliance with these regulations. Swissgrid is responsible for the operation, maintenance, renewal and expansion of the Swiss transmission grid. In doing so, the company makes an important contribution to security of supply in Switzerland.

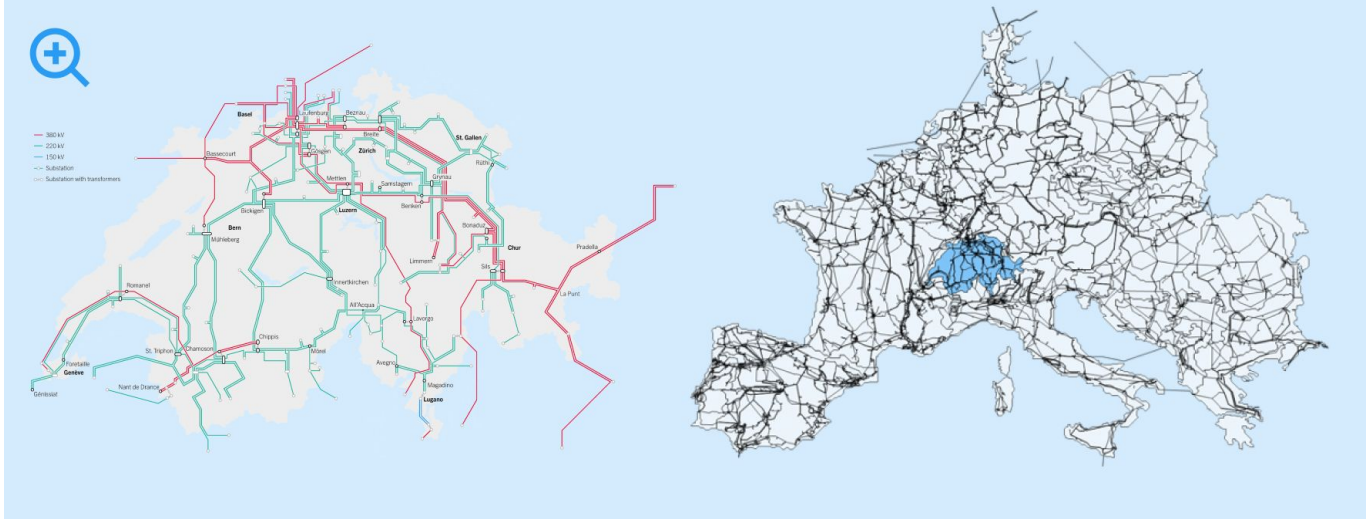
Value chain of the Swiss electricity industry

The Swiss transmission grid is a relevant part of the supply chain for the Swiss electricity system. This is made up of four areas: electricity generation, transmission, distribution and sale. Electrical energy is transmitted and distributed via a total of seven grid levels. These are the extra-high, high, medium (1, 3 and 5) and low-voltage levels (7), and three connecting transformer levels (2, 4 and 6). Immediately after being generated in large power plants, electrical energy is fed into grid level 1, the transmission system. The following grid levels take care of the national, regional and local distribution of electricity as far as the power outlet, and transform it as required. Given the increase in decentralised energy production, the feed-in to the grid, for example of energy from photovoltaic plants, is increasingly taking place via the distribution grids.



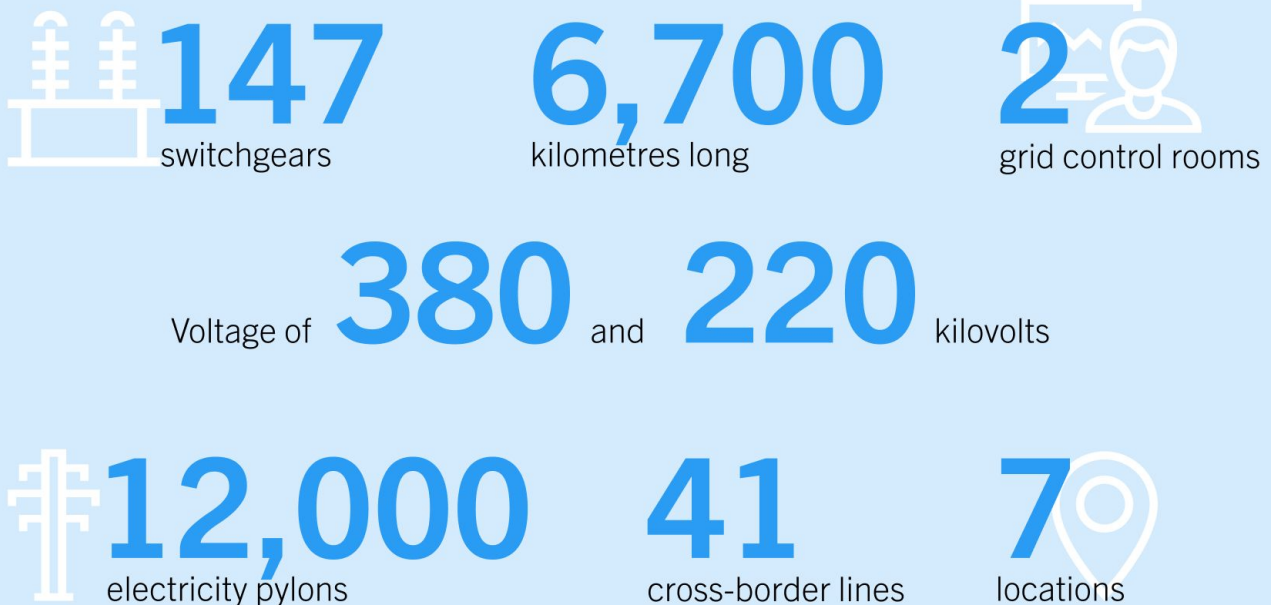
Swissgrid is responsible for grid level 1 and therefore for the secure transmission of large volumes of electrical energy over long distances. The Swiss transmission grid consists of 380 and 220 kilovolt lines extending over a length of 6,700 kilometres and supported by more than 12,000 electricity pylons. For the extra-high-voltage grid to function smoothly, it needs an elaborate infrastructure consisting of perfectly harmonised components. These include the two grid control rooms in Aarau and Prilly, 125 substations with a total of 147 switchgears and 25 transformers, as well as protection and station control technology.

The transmission system in 2024



In addition to the domestic transmission of electricity, the Swiss transmission grid also enables the import, export and transit of energy. With 41 international connection lines, it is closely integrated into the European interconnected grid. The Swiss transmission grid plays an important role in the cross-border transport of electrical energy throughout Europe. Today, the European interconnected grid guarantees a secure supply of electricity for more than 530 million consumers in over 30 countries.

Key figures: the transmission system in 2024



GDI 2-1

The missions of the national grid company

In accordance with the Electricity Supply Act, Swissgrid ensures the non-discriminatory, reliable and efficient operation of the transmission system at all times as an essential basis for the secure supply of electricity in

Switzerland. At the grid control rooms in Aarau and Prilly, the company ensures that the system frequency of 50 hertz is constantly maintained and that electrical energy is transported safely. Swissgrid also coordinates the schedules of Swiss power plant operators and electricity traders, eliminates and minimises congestion and prevents overloads in the grid.

The company is responsible for the planning, replacement, expansion, maintenance and repair of the entire extra-high-voltage grid infrastructure. Swissgrid invests not only in the operation and modernisation of the grid to ensure grid-related security of supply, but also in market development. It helps to develop trading platforms for control energy and ensures cross-border capacities for energy exchange.

Due to the close integration of the Swiss transmission grid with the European interconnected grid, Swissgrid has an important role to play in Europe. As Coordination Centre South, it ensures smooth system management with European transmission system operators by monitoring the frequency of the European extra-high-voltage grid in association with the German transmission system operator Amprion (Coordination Centre North). Swissgrid is involved in the coordination of operational security processes and the European exchange of electricity.

It also helps plan pan-European grid expansion. Swissgrid works with foreign transmission system operators and represents Switzerland's interests in the corresponding bodies.

From now on, Switzerland will be included in the capacity calculation for transnational electricity trade in Central Europe. Swissgrid and the transmission system operators in the «Core» region have signed a corresponding agreement, which was approved by the applicable regulatory authorities in the reporting year (see the «Year in review» section).

Establishment as the Swiss transmission system owner

Swissgrid was founded in 2005 in view of the gradual liberalisation of the Swiss electricity market with the aim of harmonising and centrally operating Switzerland's transmission system. Prior to that, different electricity grid companies were simultaneously responsible for power transmission in Switzerland. Since 2008, the Electricity Supply Act (ESA) has stipulated that the transmission system must be owned by the national grid company. As the national grid company, Swissgrid has been in charge of the operation and safety of the extra-high-voltage grid since 2009.

Swissgrid took over ownership of the grid in 2013 and has since been responsible for its maintenance and expansion. Swissgrid's headquarters are located in Aarau, while the redundant site is in Prilly. Swissgrid also operates bases in Castione, Landquart, Laufenburg, Ostermundigen and Uznach.

Business activities in a strictly regulated environment

Swissgrid operates in a strictly regulated environment (see the «Regulatory business model» section). Providing consumers with a secure supply of electricity is in the public interest and requires a reliable and efficient infrastructure. On account of its economic characteristics, the grid also represents a natural monopoly, which is recognised as a legal monopoly under ESA and ESO. Consequently, there is an undisputed need for regulation to ensure a grid infrastructure and grid management that are as efficient as possible. This task is performed by the Swiss Federal Office of Energy SFOE and – as the supervisory authority for the implementation of ESA and ESO – the Federal Electricity Commission (ElCom). In accordance with the law, Swissgrid is established as a public limited company under private law with its registered office in Switzerland. The grid company must also ensure that the majority of its capital and the associated voting rights belong directly or indirectly to the cantons and municipalities (see the «Corporate structure and shareholders» section).

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Mission

As the national grid company, Swissgrid ensures the secure transport of electricity via both the national grid and the transmission grid connected to the European electricity system. This electricity forms the basis for the high quality of life and prosperity in Switzerland and Europe. Thanks to the central role it plays in the energy system, Swissgrid is actively shaping its sustainable transformation.

For more information on the transformation of the energy system, see the [«Energy transition»](#) section. Details of the sustainable development of the transmission grid are given in the [«Environmental protection»](#), [«Biodiversity»](#) and [«Circular economy»](#) sections.

GRI 203-1, 203-2

Security of supply

As a transmission system operator, Swissgrid is responsible for a critical infrastructure. Secure and efficient grids are of vital importance in order to guarantee the supply of electricity. The Federal Office for Civil Protection (FOCP) considers an electricity shortage to be the greatest financial risk for Switzerland. A major, nationwide power failure also ranks in the top ten¹ in the expected damage category. The Swiss transmission grid is closely interlinked with the European interconnected grid and, due to its central location in Europe, plays a key role in the exchange of electrical energy in Europe. An outage or disruption to the grid can therefore have far-reaching consequences that extend beyond Switzerland's borders.

¹Federal Office for Civil Protection, [report on the national risk analysis \(disasters and emergencies in Switzerland 2020\)](#)

Grid-related security of supply – the sum of various components

In order to ensure a high level of grid-related security of supply and to protect the grid from an outage, Swissgrid takes action at various points.

Ensuring grid operations – around the clock

In Swissgrid's capacity as Coordination Centre South, its grid control rooms are responsible for ensuring the permanent balance between electricity generation and consumption to maintain a constant system frequency of 50 hertz – not only for Switzerland, but also for Europe. The grid control rooms also monitor the capacity utilisation of the transmission system and intervene in the event of congestion, impending line overloads or failures of grid elements. When operating its grid, Swissgrid follows the n-1 principle, which is an essential rule for ensuring secure transmission system operation.

This principle states that if any one grid element fails, no other element may be overloaded. Long-term planning is necessary for secure grid operation: this takes into account aspects such as the decommissioning of lines and power plants, as well as the schedules of power plant operators and electricity traders, which include all electricity exchange transactions in Switzerland and abroad. Swissgrid continuously coordinates its planning and real-time operations with the European transmission system operators.

Helping to shape and develop markets – in Switzerland and Europe

Another prerequisite for a high level of grid-related security of supply is the availability of control power to compensate for short-term deviations between production and consumption (balancing measures) and to manage grid congestion. That is why Swissgrid is continuously optimising the Swiss market for control power and cooperating with European transmission system operators.

The transmission system operators are also tasked with providing sufficient capacity on international interconnection lines for international electricity trading. In order to avoid grid congestion and to ensure non-discriminatory access, Swissgrid allocates capacity at the Swiss border by means of auctions. These processes are carried out in close coordination with the neighbouring transmission system operators.

Cooperation with Europe – in all areas

Swissgrid and the European transmission system operators cooperate closely in areas such as grid operations, control power markets and congestion management. The EU regulatory requirements for system operation are implemented to ensure that all grid operators adhere to the same rules in the interconnected grid. Cooperation across Europe is also crucial for the successful integration of increasingly decentralised energy sources into the overall system.

Due to the lack of an electricity agreement between Switzerland and the EU, it is becoming increasingly difficult for Swissgrid to help shape these pan-European developments. This has a negative impact on grid security, and hence on Switzerland's security of supply. The exclusion of Swissgrid from European platforms and coordination processes increases the risk of unplanned load flows in the Swiss transmission grid. Swissgrid is therefore taking various measures to counteract Switzerland's growing isolation (see the [«Stakeholder engagement»](#) section). Swissgrid welcomes the fact that Switzerland was able to successfully conclude negotiations on an electricity agreement with the EU.

Ensuring safety – at all levels

Important prerequisites for grid-related security of supply include a resilient grid infrastructure and the availability of IT and communication systems. To ensure the safe and reliable operation of the Swiss transmission grid, Swissgrid pursues an integral security policy.

This defines the objectives and framework for action for implementing precautions in a consistent and coordinated way according to standardised rules. The purpose of integral security management is, on the one hand, to protect people and the environment from negative influences caused by Swissgrid's activities and, on the other hand, to protect Swissgrid's employees, installations, systems and information from adverse effects.

Swissgrid's integral safety policy

Swissgrid's integral approach to safety management comprises seven security domains: operational security, physical security, information security, integral risk management, crisis management and business continuity management, as well as health protection, occupational safety and environmental protection. The integral safety policy sets out Swissgrid's safety objectives and regulates the essential aspects required for the effective implementation of company-wide integral safety management. These include the principles, the overarching framework conditions and domain-specific requirements, and security organisation.

Operational security

The aim of operational security is to ensure that Swissgrid provides a secure service in every grid state. It is based on the processes and elements of safety risk management, such as the reporting system, event investigation, safety risk analysis, safety culture and clearly defined roles and responsibilities. In particular, operational security aims to ensure that work can be carried out reliably in complex grid and system operations, and that the corresponding processes and instructions function properly. The following specific methods and processes are used, among others:

- Independent, continuous observation of operations with the aim of identifying instructions that are inappropriate or prone to errors, or procedures that deviate from the instructions, and improving them by means of incident analyses.
- The principles of «human factors» for designing a robust working environment that is tailored to people's characteristics.

A competence management system that consistently ensures and documents basic training, the retention of knowledge and skills, the further training of employees (especially in grid and system operations), and the building up of experience.

Physical security

The aim of this security domain is to ensure the physical security of employees, of third parties and of the Swissgrid infrastructure.

Swissgrid has developed its own company-wide standards based on best practice in order to meet the requirements of a critical infrastructure. Among other things, they take into account the ISO/IEC 27002 standard, the industry recommendation of the Association of Swiss Electricity Companies (VSE) and the regulations of the Federal Inspectorate for Heavy Current Installations (ESTI).

Information security

The aim of the «information security» domain is to guarantee the confidentiality, availability and integrity of data and information in physical form or based on Information and Communication Technology (ICT) systems for business and operating technology.

A risk-based information security management system built according to international standards, such as the standards of the ISO/IEC 27000 family, defines the regulations and measures to be applied. This management system supports the entire implementation process from implementation through to review and further development.

The basic measures to be applied and measures specific to the energy sector are derived and implemented from the same family of standards.

Crisis management and business continuity management

Swissgrid's crisis management and business continuity management (BCM) have the common goal of ensuring flexible incident management that is adapted to the situation so that the continuity of critical processes required for Swissgrid's key responsibility can be guaranteed in the event of an incident. Crisis management and BCM serve to continue Swissgrid's mission in accordance with the defined framework conditions, subject to certain restrictions, in the event of deviations from the normal situation. They are based on Swissgrid's mandate in accordance with Art. 20 ESA and Art. 5 ESO, the ENTSO-E requirements set out in the framework agreement between transmission system operators in the continental European synchronous zone on the minimum standards for joint operation of the transmission system, the Transmission Code, the VSE industry document, and the requirements of the Federal Office for Civil Protection.

The existence and proper functioning of crisis management and BCM correspond to the necessary level of basic protection. Swissgrid's business continuity management system, based on the ISO 223xx series, is being continuously developed for this purpose within the framework of a roadmap approved by the Executive Board, including annual targets. Among other things, it describes the creation of BCM specifications, the regular verification of BCM scenarios, and the development, testing and practising of risk-based business continuity plans. Business impact analysis is used to identify the critical processes required for Swissgrid's key responsibility and their requirements for restoring process performance, which are to be taken into account within the BCM framework. At the same time, this determines the corresponding level of protection. This analysis is repeated as necessary and reviewed on a regular basis. In addition, Swissgrid employees are trained to apply the correct conduct in the event of an incident as part of crisis exercises, and the functionality of existing systems and processes is checked. The implemented BCM processes are tested on an ongoing basis.

Every year, additional exercises lasting several days are conducted at the simulation centres in Prilly and Aarau. The aim of these exercises is to simulate a major disturbance or blackout and to practise grid restoration. Swissgrid, all distribution system and power plant operators connected to the transmission system, and the operators of restoration cells participate in these exercises.

In the reporting year, Swissgrid was part of the Federal Office for Civil Protection's general emergency exercise to simulate an emergency event at one of the three nuclear power plants currently in operation in Switzerland.

Swissgrid envisages that, in the event of a major event, personnel will be gathered at decentralised sites in Switzerland in order to carry out the necessary work on site. This procedure is repeated and practised with the involvement of external partners.

The status of BCM implementation and the company's business continuity capability are regularly reported to the Executive Board and the Board of Directors.

The topics of occupational health and safety and environmental protection are explored in greater detail in the [«Occupational health and safety»](#) section.

Key figures for grid-related security of supply

The transformation of the energy system is bringing new challenges for ensuring grid-related security of supply. Swissgrid addresses these challenges in its Strategy 2027 (see the [«Strategy 2027»](#) section). Swissgrid also describes the challenges and framework conditions in detail in the Sustainability Report (see the [«Energy transition»](#) section). Key figures on the energy flow and the use of control energy are also

included in this section.

Despite an increase in the average duration of interruption due to an incident in the canton of Glarus in November 2024, Swissgrid was able to guarantee an availability of the transmission grid of well over 99.9%.

	2024	2023
Number of supply failures in the meshed grid	1	1
Average duration of interruption	94 minutes	40 minutes
Energy not supplied in the meshed grid	2 MWh	113 MWh

«Energy not supplied»: both in the reporting year and in 2023, one line suffered an unplanned outage. However, the load connected to the line was considerably higher in 2023, which is why the volume of «Energy not supplied» was higher in 2023 than in the reporting year.

in GWh	2024	2023
Transported energy	69,609	74,134
Imported energy	25,262	27,017
Exported energy	39,175	32,888
Transit energy	22,155	21,591
Active power losses absolute	985	919
Positive control energy	963	1,033
Negative control energy	556	694
Active power losses of transported energy	1.41%	1.24%
Ratio of «energy not supplied» to transported energy	2.9E-8	1.5E-6

Continuing to ensure grid-related security of supply in the future

The transformation of the energy system is bringing new challenges for ensuring grid-related security of supply. Swissgrid addresses these challenges in its Strategy 2027 (see the [«Strategy 2027»](#) section). Swissgrid also describes the challenges and framework conditions in detail in the Sustainability Report (see the [«Energy transition»](#) section). Key figures on the reliability of the grid, the energy flow and the use of control energy are also included in this section.

GRI 203-1, 203-2

Grid transfer capacity

Swissgrid's aim is to provide a grid infrastructure that offers high availability and capacities, and that meets the requirements of the future energy system. This requires long-term planning, modernisation and optimisation of the grid, as well as ongoing inspection, maintenance and servicing.

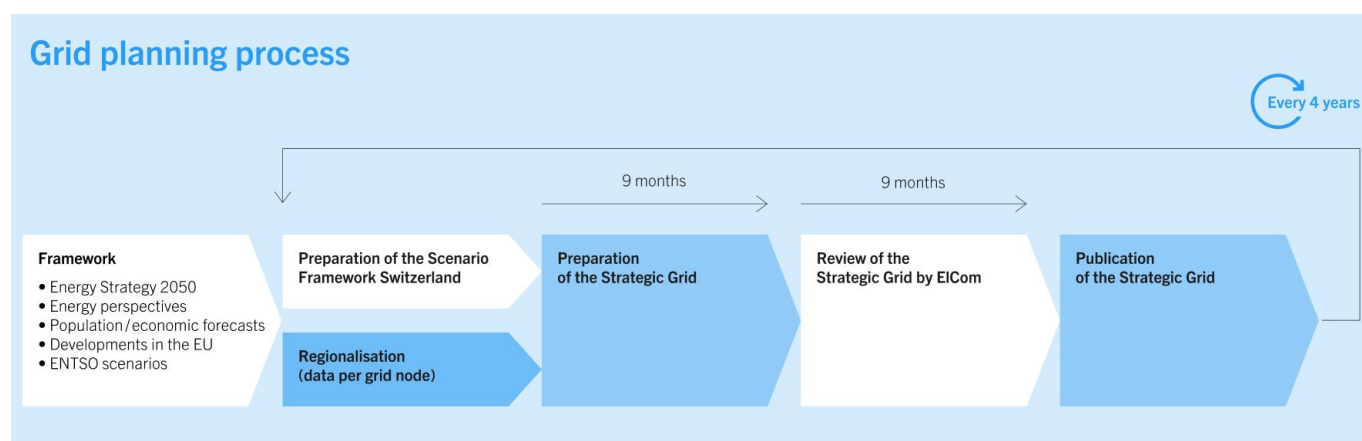
Planning the grid – the Strategic Grid

The requirements placed on the grid have changed significantly in recent years. This trend will intensify in the

coming decades as part of the energy transition. The Swiss Federal Office of Energy has set out these changes in the scenario framework for Switzerland, which contains national target values for each generation technology and consumer group for the years 2030 and 2040.

Swissgrid is developing the Strategic Grid 2040 on the basis of this scenario framework. In addition, Swissgrid receives information on the regional development of production and consumption within Switzerland from SBB and from the distribution system and power plant operators that are directly connected to the transmission system. Swissgrid uses this data to determine grid development requirements.

The process for the Strategic Grid 2040 is already well advanced. In 2024, Swissgrid will finalise the planning and submit it to the Federal Electricity Commission (ElCom) for review. Swissgrid will then publish the strategic grid in spring 2025. For the first time, this planning is based on the legal basis established in the «Electricity Network Strategy». It will be repeated every four years in the future.



Investment in the grid infrastructure – modernisation in line with demand

Swissgrid continuously invests in its grid infrastructure to ensure a secure, efficient grid in line with demand. The current modernisation projects are set out in the Strategic Grid 2025 and represent an investment volume of around CHF 2.5 billion. The grid projects included in the Strategic Grid 2025 are designed to eliminate existing congestion, ensure the transport of energy from large power plants in the Alps to urban centres, and strengthen the connection to the European grid.

Swissgrid has already been able to complete some of the projects from the «Strategic Grid 2025», while others are in the project planning or implementation phase.

Maintenance of a grid that is permanently in use

The Swiss transmission grid is one of the most reliable power grids in the world. To ensure that the grid functions perfectly at all times, it not only needs to be converted and expanded, but must also be continuously inspected, maintained and repaired. Maintenance includes regular cleaning and adjustment of technical systems. If installations are damaged after a storm or avalanche, they must be repaired quickly. Swissgrid also carries out planned repair work, such as the replacement of conductors and insulators, protection against corrosion, the revision of circuit breakers and deforestation. Two-thirds of the Swiss transmission grid, which is over 6,700 kilometres long overall, dates from before 1980. This work is therefore of great importance.

The right grid infrastructure for the transformation of the energy system

The modernisation of the transmission system lays the foundations for a sustainable energy future. At

present, however, the expansion of the grid cannot keep pace with the growth of systems to produce renewable energies. Objections and legal proceedings lead to significant delays in the realisation of grid projects. Swissgrid is committed to ensuring that approval processes are made more efficient and that grid expansion can be driven forward. In the «Grid Transfer Capacity» priority of its «[Strategy 2027](#)», Swissgrid also defines measures to increase the capacity of the grid in line with demand and to implement and operate the grid even more efficiently in the future. Digital solutions play a key role in addition to the Strategic Grid 2040. A completely digitalised grid image provides the basis for establishing data-driven system management.

Innovation and digitalisation

The Research & Digitalisation (R&D) department at Swissgrid plays a key role in the further development of the Swiss extra-high-voltage grid. The department specialists actively drive forward innovation and technology to increase the capacity, security and reliability of the grid. By using state-of-the-art methods such as optimisation procedures and stochastic approaches, the department supports and improves work in all areas of the company. Innovation has a high priority at Swissgrid, which is reflected in its Strategy 2027. The company has set itself the goal of developing into an innovative, highly digitalised company in response to the increasing complexity and volatility of the electricity system resulting from the energy transition and the decentralisation of electricity generation.

To overcome these challenges, Swissgrid is relying on digitalisation as a catalyst for the energy transition. This will enable the company to cope with the growing demands being placed on the grid whilst increasing efficiency in all areas of the company.

By promoting a culture of innovation, for example by means of events such as the «Innovation Days» and «Inspiration Talks», Swissgrid creates an environment in which employees are encouraged to develop and implement new ideas. This is vital, because innovation and digitalisation make an important contribution to ensuring that Switzerland's supply of electricity will remain secure and efficient in the future.

A list of innovation projects is given below:

Use of drones and artificial intelligence

Autonomous drones and artificial intelligence help Swissgrid to optimise the maintenance and operation of the transmission system. Both technologies are digitalising asset management. Drones are used for line inspections to monitor the condition of the grid. In the long term, drones should also be able to quickly assess damage during initial inspections following disturbances and subsequently initiate repairs. The inspection images from the drones are generally scrutinised by experts. To optimise this process, Swissgrid is working with other grid operators to develop AI algorithms that can automatically detect potential damage. Drones ensure safe access to locations that are otherwise difficult to reach, as well as reducing the carbon footprint in relation to conventional methods such as helicopter flights. Following a preliminary study, Swissgrid has been working on a two-year pilot phase since mid-2023 as the basis for a possible broader roll-out.

Internet-of-Things sensors on pylons

Three years ago, Swissgrid launched the «Pylonian» Internet-of-Things project. This involved placing sensors on pylons to measure variables such as pylon vibrations, pylon inclination, temperature and solar radiation. At the end of the reporting year, Swissgrid installed additional types of sensors, particularly weather stations, to help forecast renewable energy production. Swissgrid also implemented «Sensorian», a telecommunication and sensor-independent platform that can host any type of sensor data on the Swissgrid data platform in a scalable, secure and flexible manner. In addition, experiments were conducted to simulate real events in order to link the data collected with potentially dangerous situations. This will allow the system to predict possible dangers so that Swissgrid employees can initiate measures at an early stage to prevent damage to the pylons.

Greater efficiency in grid operations

Forecast of production from photovoltaics

The «PV Forecasts» project aims improve grid stability by creating precise forecasts of solar power generation. To achieve this, the company relies on the use of publicly available data regarding the production capacity of the photovoltaic plants installed and on the collection of detailed sunshine information. These measures are essential for overcoming the challenges of increasing and fluctuating solar power production in the Swiss electricity grid whilst optimising the costs of control energy.

Closer cooperation between transmission and distribution system operators

The expansion of photovoltaics, heat pumping technology and electric vehicles requires closer coordination between grid operators in order to ensure secure grid operation. In association with Equigy, Swissgrid and distribution system operator carried out a pilot project to distribute the use of decentralised energy resources in a coordinated manner in order to provide ancillary services. More information can be found in the [«Year in review»](#) and [«Energy transformation»](#) sections.

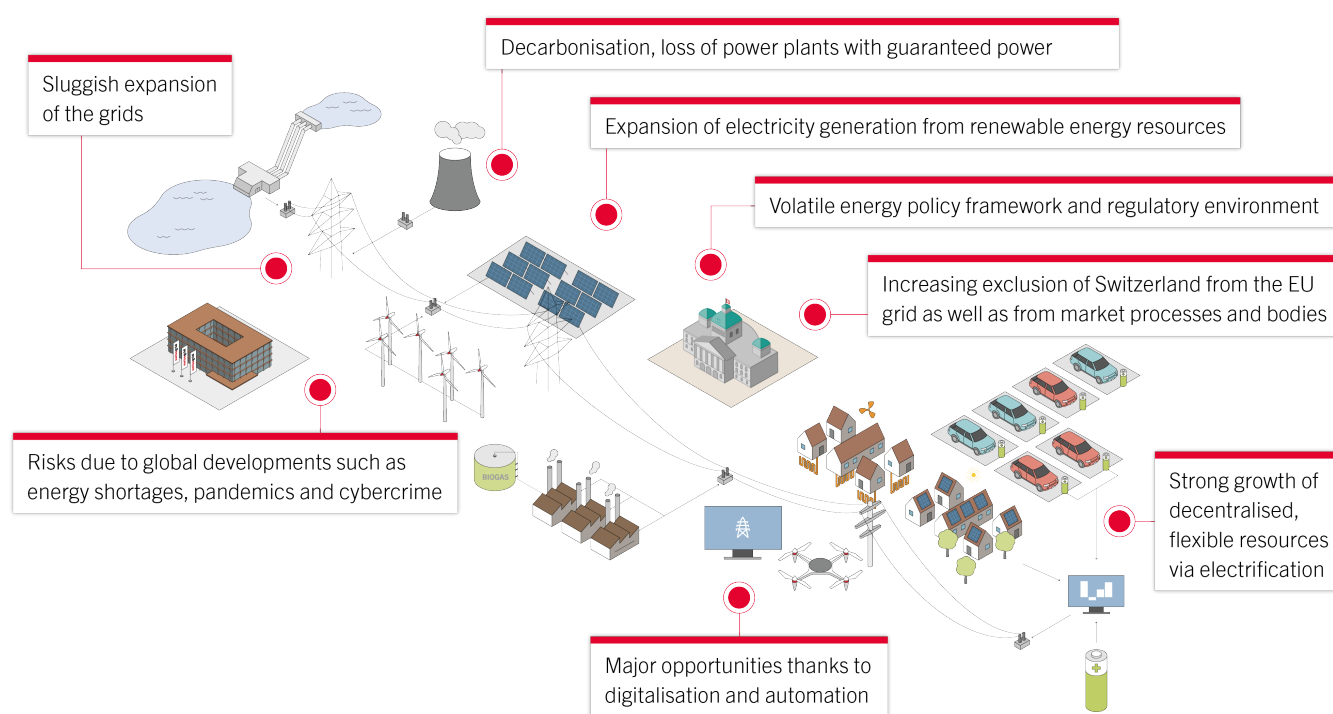
Innovation and digitalisation as a new priority in Strategy 2027

The new «Innovation and Digitalisation» priority was included in Strategy 2027 in order to develop Swissgrid into an innovative, highly digitalised company (see the [«Strategy 2027»](#) section). A comprehensive package of measures creates the prerequisites at the data, technological and personnel levels so that the desired digital transformation can be successfully implemented in the company. The focus is also on developing a culture of innovation. To this end, Swissgrid organised innovation initiatives, during which employees were able to explore exciting topics for the future and receive incentives, and where ideas and interaction were promoted (see the [«Attracting, retaining and developing skilled workers»](#) section).

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2027 Strategy

In 2022, Swissgrid launched its Strategy 2027 and entered a new five-year strategy period. The company defined five closely linked priorities, four of which were carried over from the previous strategy period and adapted to the current framework conditions. A new focus on «Innovation and Digitalisation» was also added.



After a long period of stability, the electricity industry is now in a state of flux. Fundamental change was triggered by the EU's decision to integrate the European power markets and to decarbonise the energy industry. Pressure to accelerate the transformation of the energy system and decarbonisation has increased more and more due to the newly formulated climate targets within the framework of the «European Green Deal».

These developments affect grid operators in several ways: the expansion of renewable energy production leads to significant changes in production patterns and volatile electricity flows. This poses major challenges for power system control, which are accentuated for Swissgrid by the lack of an electricity agreement between Switzerland and the EU. Switzerland is increasingly excluded from important EU market mechanisms. This results in a greater risk of unplanned electricity flows, a lack of consideration in security-relevant system processes and a reduction in import capacities.

Grid operators face challenges not only due to the changes in the energy system, but also on account of global developments. Threats such as the consequences of climate change for the grid infrastructure or cybercrime make it clear that operators of critical infrastructures must have an exceptionally high level of

protection and readiness.

Digitalisation offers a response to the increasing complexity of the grid operators' environment. For example, the desired digital transformation will make it possible to integrate many of the new, flexible resources profitably into system operation. End-to-end digital processing of the value chain will also open up opportunities for efficiency gains within the company.

Five priorities for Strategy 2027

«Security of Supply»

Strategy 2027 focuses on «Security of Supply» with measures to ensure grid-related security of supply in the long term, regardless of the degree of integration into EU processes, while at the same time supporting the Confederation's energy strategy. Networking and cooperation with Europe are crucial for ensuring a high level of security of supply. As Swissgrid is increasingly marginalised in EU processes due to the lack of an electricity agreement, the company is committed to achieving the highest possible level of integration at a technical level.

To increase the controllability of the grid, Swissgrid is taking structural measures, changing operational processes and using digital solutions for data-driven decision-making in system operation. This package of measures will also help Swissgrid to cope with rising system security risks if Switzerland were to be further excluded from European processes.

Swissgrid wants to harness the potential of all the decentralised resources in the energy system more effectively in the future: it plans to create market platforms in association with the industry, to make these platforms easier to access by means of digital solutions, to better coordinate their flexibility and to use them profitably for grid operations.

«Grid Transfer Capacity»

The transformation of the energy system can only succeed if the grid infrastructure is adapted to the new framework conditions. To this end, Swissgrid is planning the Strategic Grid 2040. The aim of expanding the grid is to adjust its capacities to meet demand and to reduce congestion. Swissgrid will implement more construction projects and put them into practice more quickly by standardising and optimising processes and by using digital solutions for planning and construction.

Maintenance is being automated in many areas, for example by using drones. A completely digitalised grid image – a digital twin of the physical grid – will provide the basis for establishing data-driven plant management in the future. This will allow the status of plants to be monitored more precisely over the entire life cycle and enable the grid to be operated in a more risk-based and efficient manner.

«Innovation and Digitalisation»

Digitalisation is the common denominator of the first two priorities. With its new «Innovation and Digitalisation» priority, Swissgrid is laying the foundations for the desired digital transformation throughout the company.

Firstly, this concerns technological and data-related conditions, such as automation tools and the systematisation of data management. And secondly, it refers to an increase in implementation strength, partly thanks to the more widespread use of agile working methods. In addition to digitalisation, the focus is on the development and implementation of innovations. In order to open up the innovation process, an ecosystem is being built as a collaborative network in which innovations are driven, developed and shared

with partners. In addition, a culture of innovation is being established to promote the skills and potential of employees whilst actively and sustainably pushing ahead with digitalisation ideas and transformation projects within the company.

«Operational Excellence»

In order to successfully implement Strategy 2027, the culture and skills within the company must keep pace with future requirements and continue to be developed. As part of the «Operational Excellence» priority, identified skills gaps are closed by means of programmes tailored to individual needs. Thanks to these and other measures, Swissgrid is simultaneously increasing its attractiveness as an employer, attracting the talent it needs and strengthening the identification of existing and future employees with the company.

Swissgrid is also becoming even more sustainable. It now groups together all areas of sustainability management under «Corporate Social & Environmental Responsibility». Among other things, a targeted selection of UN goals – the Sustainable Development Goals – is being addressed, and comprehensive sustainability reporting is being developed according to the standards of the Global Reporting Initiative.

«Safety & Security»

Security is a top priority for Swissgrid, as the operator of a critical infrastructure. The company is strengthening the resilience of its core processes as part of the «Safety & Security» priority. To do so, Swissgrid is continuously adapting to meet the changing demands placed on companies' security arrangements, emergency response measures, crisis management and business continuity management.

This includes raising the level of protection in substations by means of structural and organisational measures and installing safety systems. In the area of business continuity management, Swissgrid is developing additional solutions to safeguard its key responsibility in the event of an incident. As far as cybersecurity and crisis management are concerned, the focus is on implementing further measures to achieve the desired goals.

Financial Report

Management Report

This Management Report covers both the requirements pursuant to Art. 961c CO (Code of Obligations) in connection with the statutory financial statements and the provisions on the «Annual Report» relating to the financial statements in accordance with Swiss GAAP FER (Swiss GAAP FER framework concept, paragraphs 7 and 34).

Regulatory business model

Legal and regulatory environment

The electricity industry's value chain can basically be divided into the following areas: electricity generation, electricity transmission, electricity distribution and electricity consumption. As the owner and operator of Switzerland's extra-high-voltage grid, Swissgrid is responsible for electricity transmission.

The high investments for the construction of the transmission system, rising economies of scale (in view of falling marginal costs) and high irreversible costs result in a natural monopoly in the area of electricity transmission. This has been structured as a legal monopoly by the legislator based on the Electricity Supply Act (ESA) and the Electricity Supply Ordinance (ESO). To strengthen the supply of electricity in Switzerland, the Winter Reserve Ordinance (WResO) was also enacted in 2023.

The Federal Electricity Commission ElCom oversees compliance with ESA, ESO and WResO. ElCom is the independent state regulatory authority in the electricity industry and is allowed to issue rulings where necessary, against which there is a right of appeal to the Federal Administrative Court with an ultimate possibility of appeal to the Federal Supreme Court. Given the public interest in the secure national supply of electricity, the resulting legislation and relevant supervision by the regulator, Swissgrid's business activities are overwhelmingly subject to strict regulation.

Business activity

As the National Grid Company, Swissgrid is responsible for the non-discriminatory, reliable and efficient operation of the transmission grid, as well as its sustainable and efficient maintenance. The renovation and demand-driven expansion of Switzerland's extra-high-voltage grid are also considered amongst the company's most important tasks.

Swissgrid provides additional services, such as balance group and congestion management or ancillary services (AS), as part of European and Swiss interconnected operations. In addition to representing national interests, Swissgrid makes an important contribution to ensuring the secure supply of electricity for Switzerland.

Cost-plus regulation

Swissgrid's legal mandate and business activities expose the company to costs that can be passed on to the lower grid levels and end consumers in the form of tariff revenues if the regulator deems the costs to be chargeable. ElCom has the right to verify ex post the chargeability of Swissgrid's costs for tariff-setting purposes.

Chargeable costs include the operating and capital costs of maintaining a secure and efficient grid. The chargeable costs according to ESA and ESO also include an adequate operating profit. As a result, this is referred to as «cost-plus» regulation: «cost» stands for the cost recovery principle and «plus» stands for the operating profit. The cost recovery principle applies to the chargeable costs according to WResO.

Chargeable operating and capital costs

Chargeable operating costs include the costs for services directly related to the operation of the grid. Examples include costs for maintaining the grid, costs for providing ancillary services, personnel expenses, costs for materials and third-party supplies, and direct income taxes.

Chargeable capital costs include depreciation/amortisation and imputed interest. The amount of imputed interest for ESA activities is directly dependent on the assets required to operate the grid (invested operating assets (IOA)) and the applicable regulatory interest rate ($WACC_{t+0}$). $WACC_{t+0}$ means that the WACC specified for this year also applies to the current financial year. By contrast, interest on the assets required for orders regulated by the WResO is calculated using the borrowing cost rate $_{t+0}$ included in $WACC_{t+0}$.

In particular, IOA consist of transmission grid assets (including construction in progress), intangible assets and net current assets determined on a monthly basis.

Volume- and tariff-related timing differences

Swissgrid calculates the required tariff revenues ex ante based on budgeted costs (operating and capital costs). Volume and price differences between the «actual» situation for a year and the «budgeted» situation for the same year regularly lead to differences between the actual costs and actual income for a year. These differences are referred to as volume- and tariff-related timing differences and are rectified over the coming years. If effective costs exceed the tariff revenues for the same year, this results in a deficit. This deficit can be eliminated over subsequent years by increasing the tariff. By contrast, if tariff revenues exceed effective costs for the same year, this results in a surplus, which must be used to reduce tariffs over subsequent years.

From the 2024 financial year, the new Article 18a of the Electricity Supply Ordinance (ESO) will apply for the first time to the interest on all volume- and tariff-related timing differences. The volume- and tariff-related timing differences arising from the 2024 financial year onwards will be subject to interest at the borrowing cost rate $_{t+2}$ included in $WACC_{t+2}$. In accordance with ElCom directive 03/2024, volume- and tariff-related timing differences resulting from ESA activities up to and including the end of the 2023 financial year remain subject to interest calculated at $WACC_{t+2}$ until they have been fully eliminated. As previously, no interest is calculated on the volume- and tariff-related timing differences resulting from WResO activities up to and including the end of the 2023 financial year until they have been fully eliminated.

Profit regulation

EBI (earnings before interest) from Swissgrid's regulated business area is calculated by multiplying the invested operating assets from ESA activities by the weighted average cost of capital rate $WACC_{t+0}$, multiplying the assets required for orders regulated by the WResO by the borrowing cost rate $_{t+0}$ included in $WACC_{t+0}$, and multiplying the interest on all volume- and tariff-related timing differences by the borrowing cost rate $_{t+2}$ included in the weighted average cost of capital rate $WACC_{t+2}$. The volume- and tariff-related timing differences resulting from ESA activities up to and including the end of the 2023 financial year remain subject to interest at $WACC_{t+2}$ until they have been fully eliminated, which also has an impact on EBI. Additional profits may arise from Swissgrid's unregulated business area.

The EBI is then used to compensate Swissgrid's stakeholders via interest on liabilities and return on equity (dividends and/or profit retention). The regulatory requirements therefore lead to a return equal to the capital

cost rates to be applied.

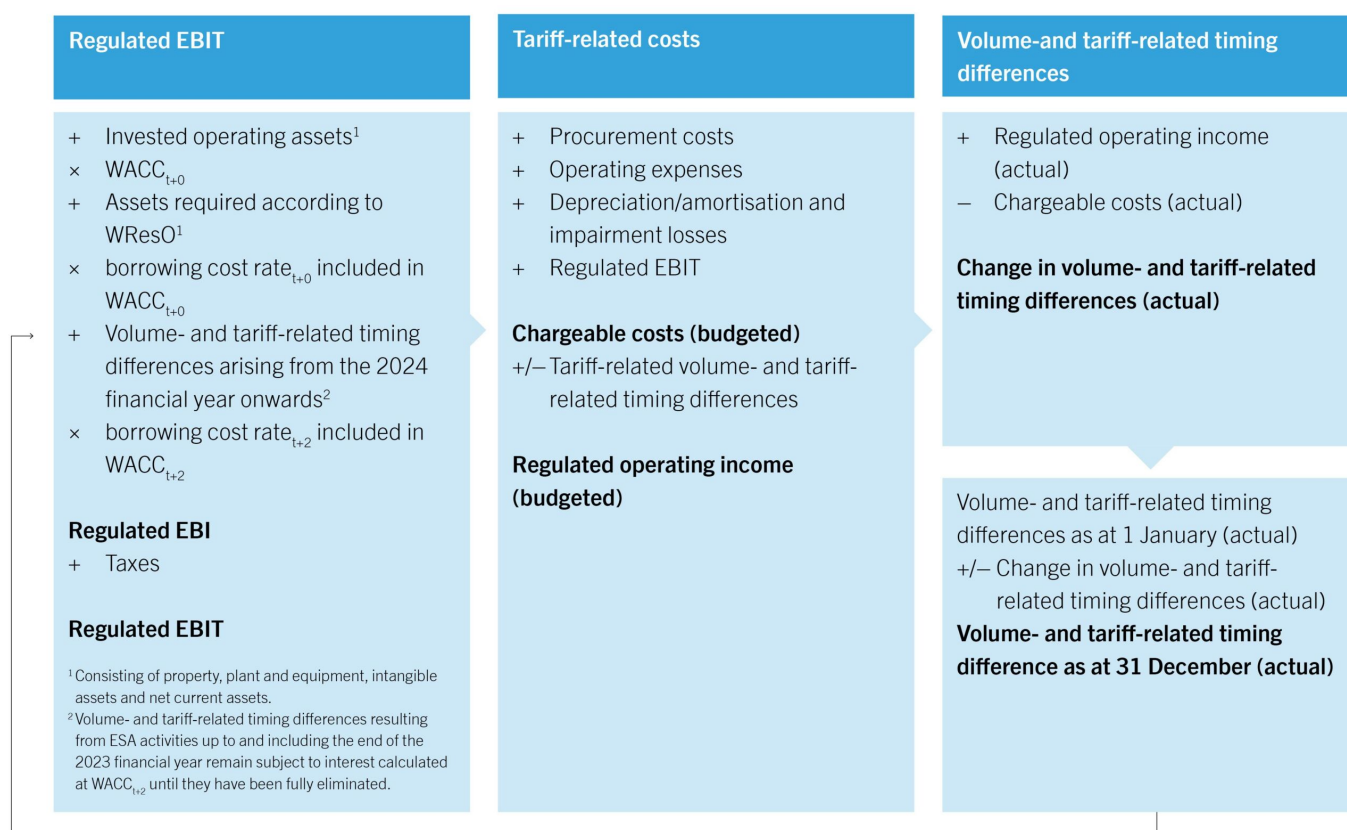
Imputed capital cost rate (WACC)

The WACC is an imputed interest rate defined annually based on the electricity supply legislation. It applies equally to all grid operators.

The WACC is calculated methodically taking account of the current best practice guidelines provided by the Federal Department of the Environment, Transport, Energy and Communications (DETEC). The methodology was developed specifically for the regulation of electricity grid operators and intends to ensure security of investment for these operators. With regard to the financing structure, the WACC calculation assumes an equity share of 40% and a borrowed capital share of 60%. Specific thresholds apply for the individual capital cost parameters.

As the WACC represents an imputed interest rate for the electricity industry, Swissgrid's actual capital costs are not included in the tariff calculation. On the other hand, this means that Swissgrid is responsible for determining how the imputed interest received via the tariffs is distributed to shareholders and lenders.

Illustration of the regulatory business model



GRI-201-1

Business performance (values pursuant to Swiss GAAP FER)

Procurement costs

At CHF 684.5 million, procurement costs were CHF 215.4 million lower than the previous year's figure of CHF 899.9 million. This decrease is due to a reduction in costs of CHF 186.1 million and CHF 48.3 million respectively in the general ancillary services and active power loss segments. The reduction in the general

ancillary services segment is attributable to lower costs for control power provision. The decrease in the active power loss segment is due to lower procurement costs for the energy required to compensate for active power losses. By contrast, higher national redispatch costs in the grid usage segment led to an increase of CHF 29.1 million in procurement costs. Costs in the reactive energy segment remained at the previous year's level.

Operating expenses and depreciation/amortisation

Operating expenses rose by CHF 11.9 million year on year, from CHF 293.8 million to CHF 305.7 million. The consistent implementation of Strategy 2027 resulted in an increase in personnel expenses. The average number of full-time equivalents in 2024 amounted to 784.1 FTE (previous year: 704.3 FTE).

The scheduled depreciation/amortisation on property, plant and equipment and intangible assets amounted to CHF 160.9 million in the reporting year, up CHF 14.8 million on the previous year due to the rise in non-current assets.

Revenue and volume- and tariff-related timing differences

For the 2024 financial year, net turnover across all segments amounted to CHF 1,825.1 million. This represents an increase of CHF 605.9 million in relation to the previous year's figure of CHF 1,219.2 million. The rise is mainly attributable to the CHF 417.8 million and CHF 156.2 million increase in net turnover in the general ancillary services and active power loss segments respectively. Both segments recorded higher tariff income and were allocated higher pro rata auction income to cover the chargeable costs of the transmission system. The increase in tariff income is due to the regulatory requirement to reduce the deficit from previous years. In addition to higher tariff income and auction income, higher revenue from balance group balancing energy in the general ancillary services segment also led to a rise in net turnover.

In the 2024 financial year, the operating business activities reported net surpluses (cumulative surpluses less cumulative deficits) of CHF 582.8 million (previous year: net deficits of CHF 216.4 million). The general ancillary services and active power loss segments in particular recorded surpluses of CHF 438.7 million and CHF 132.0 million respectively due to higher net turnover. The initial recognition of tariff income in the power reserve segment in the reporting year led to a decline in deficits from the intermediary transactions in this segment by CHF 441.2 million compared to the previous year. As at 31 December 2024, there were deficits totalling CHF 343.3 million (previous year: deficits totalling CHF 1,367.3 million) across all segments combined.

EBIT, financial income and net income

Earnings before interest and taxes (EBIT) from Swissgrid's regulated business area are calculated by multiplying the invested operating assets from ESA activities by the weighted average cost of capital rate $WACC_{t+0}$, multiplying the assets required for orders regulated by the WResO by the borrowing cost rate r_{t+0} included in $WACC_{t+0}$, and multiplying the interest on all volume- and tariff-related timing differences by the borrowing cost rate r_{t+2} included in the weighted average cost of capital rate $WACC_{t+2}$. The volume- and tariff-related timing differences resulting from ESA activities up to and including the end of the 2023 financial year remain subject to interest calculated at $WACC_{t+2}$ until they have been fully eliminated, which also has an impact on EBIT.

The weighted average cost of capital rate ($WACC_{t+0}$) defined by DETEC for the 2024 financial year is 4.13%, and the borrowing cost rate r_{t+0} included in $WACC_{t+0}$ is 2.25%. The weighted average cost of capital rate for 2026 ($WACC_{t+2}$) applicable for the 2024 financial year is 3.43%, and the borrowing cost rate r_{t+2} included in $WACC_{t+2}$ is 2.0%. EBIT therefore stood at CHF 139.1 million in the reporting year, on a par with the previous year's level (CHF 138.2 million). Net income for 2024 amounted to CHF 103.8 million, up CHF 3.8 million on

the previous year's figure of CHF 100.0 million.

Balance sheet and cash flow statement

Total assets (excluding fiduciary positions) decreased by CHF 430.4 million compared to the previous year to CHF 3,789.2 million due to the reduction in deficits. The absolute equity base was further strengthened by the positive net income less dividends paid. Adjusted for the balance sheet items held on a fiduciary basis and volume- and tariff-related timing differences, the equity ratio on 31 December 2024 amounted to 37.6%, as compared to 32.1% on 31 December 2023.

A positive cash flow from operating activities of CHF 1,125.7 million was recorded in the reporting year (previous year: negative cash flow of CHF 505.9 million). The change is due to the increase in net turnover and the tariff income generated for the first time from the intermediary transactions for the power reserve.

With a gross investment volume of CHF 317.5 million, Swissgrid again realised more investments than in the previous year (CHF 279.5 million). Unlike in the previous year, no auction income was used for the maintenance or expansion of the transmission grid during the reporting year, in accordance with ElCom's instructions. Cash flow from investing activities therefore totalled CHF –316.8 million (previous year: CHF –40.5 million).

Due to the high cash flow from operating activities, financial liabilities totalling CHF 510.0 million were repaid in the reporting year. After deduction of the dividend and interest paid, cash flow from financing activities stood at CHF –565.6 million in 2024 (previous year: CHF 484.2 million).

Risk assessment

Risk management is an integral part of effective and prudent corporate management for Swissgrid. It covers the entire organisation, not including its subsidiaries and holdings, and is based on the established ISO 31000 standard.

Swissgrid's risk management meets the requirements of corporate governance, as well as the requirements under Swiss law.

Objectives

The Risk Management unit assists employees at all levels in consciously dealing with risks. This includes expedient and transparent reporting, as well as managing an appropriate risk management system. Swissgrid fosters the deliberate management of risks at all levels of the company.

Organisation

The Board of Directors has defined the governance requirements for risk management and delegated its implementation to the CEO. The Risk & Resilience team manages the risk management process, provides the methods and advises the operating units on risk management.

Process

The risk assessment takes place twice a year. The key risks are identified and assessed as part of a multi-stage process that includes the evaluation of risks based on the probability of their occurrence and the extent of their impact, as well as the definition of strategies to manage said risks.

Risk monitoring, including the effectiveness and level of implementation of the measures taken, is performed

as part of regular risk updates. The Executive Board and the Board of Directors receive the results of the risk assessment and the risk updates twice a year in the form of a standardised report.

Risk situation

The high availability of French nuclear power stations, high reservoir levels and well-filled gas storage facilities in the European Union alleviated the risk of a potential electricity shortage during the winter months. The European energy markets have steadied and price levels are stable as a result. However, the effects of the tense geopolitical situation, extreme climate events (persistent dry weather and a «Dunkelflaute» in Europe, i.e. a period without any wind or photovoltaic production) or cumulative outages of large power plants can still accentuate the risk again. This is especially true in the winter months, when Switzerland is dependent on electricity imports.

The effects of the energy transition are also leading to increasing risks. Exceptionally high load flows from Europe (due to increasing volatility in energy production) and inaccurate forecasts by market partners, particularly in combination with the decommissioning of infrastructure elements (maintenance or project expansion), are creating grid situations with reduced resilience. A variety of topological measures and the use of national and international redispatching measures and control energy are necessary to ensure grid operations. The use of these measures in turn leads to higher costs for Swissgrid.

In addition to the risks concerning grid-related security of supply, other risks remain relevant for Swissgrid. These risks are driven by natural influences, the national and international political and regulatory environment, and human and technical aspects. Digitalisation is enabling more efficient operation of the transmission grid, but also involves risks to grid and system security and therefore to security of supply, given the growing dependence on complex and networked ICT systems and their susceptibility to cyber risks.

The key risk factors are:

European and regulatory environment

The Swiss transmission grid is part of the continental European interconnected grid and is connected to neighbouring countries via 41 cross-border lines. The close meshing of the electricity system and cooperation with European partners to date make a significant contribution to Switzerland's security of supply. Swissgrid's role remains challenging at a national and international level. The Federal Council resumed negotiations on a framework agreement in 2024. In parallel, Swissgrid launched an internal «Electricity Agreement» project in 2024 to prepare for possible scenarios.

The negotiations were formally concluded at a political level on 20 December 2024. The consultation process is expected to start in the second half of 2025. Consequently, parliamentary debates will not start until the beginning of 2026 at the earliest.

Switzerland needs an electricity agreement with the EU. An electricity agreement would strengthen Switzerland as a business location whilst increasing security of supply and grid stability. In addition, an electricity agreement would give Swiss players access to the European electricity market and lead to lower costs. Switzerland would gain legal certainty and be able to help shape the further development of the European electricity market. Until an electricity agreement is implemented, higher unplanned electricity flows may continue to flow via the Swiss grid, impairing system stability and import capability. Swissgrid's alternative in order to find technical solutions during the transition period is to conclude contracts under private law with other transmission system operators to ensure grid stability. Swissgrid is dependent on political support in this regard. Success is not guaranteed as there are aspects to resolve at a political level that fall outside the control of Swissgrid. Private-law agreements between transmission system operators are

only a medium-term stopgap until an electricity agreement comes into force.

Security of supply

A wide-scale supply outage would cause enormous economic damage. Consequently, Swissgrid must keep the transmission system available for the supply of electricity at all times. It is therefore essential to have an intact grid infrastructure and to secure the availability of IT and communication systems. Meeting these prerequisites can be jeopardised by, for example, technical problems, natural disasters, operating errors and criminal actions. Among other measures, Swissgrid mitigates these risks by implementing redundancies and standardised processes to eliminate faults in grid systems and in system operations. Adequate training and development of personnel ensures that employees respond appropriately.

Security of supply also depends on the availability of control and redispatch power to balance short-term deviations between production and consumption, and to control grid congestion. The shift from large thermal power plants (nuclear and coal-fired power plants), which supply constant and deterministic electrical energy, to decentralised, volatile solar and wind power plants as part of the energy transition is making it increasingly difficult to meet these conditions. Swissgrid is therefore continuously optimising the Swiss market for ancillary services and cooperating with Swiss industry partners and transmission system operators in neighbouring countries to increase market liquidity.

Swissgrid takes precautions to protect the infrastructure against physical attacks. The project to physically protect substations is one of the main activities in this area and involves securing the relevant buildings and plants, as well as access control and monitoring. In 2024, Swissgrid took part in a corresponding exercise organised by the Swiss Armed Forces. The aim of the training was to practise cooperation between the army and civilian authorities.

The threat of cyber attacks is steadily rising due to the speed at which technology changes (which potential attackers also exploit), the countless possible modes of attack, as well as growing system integration across companies. To reduce this risk, Swissgrid is continuously developing its processes and systems to detect cyber threats early and defend itself against them.

Swissgrid has emergency procedures and structures in place in the highly unlikely event that infrastructures or systems fail over an extended period or the grid can no longer be controlled. Exercises with authorities and industry partners also took place again in 2024, such as practising OSTRAL procedures and carrying out regular grid restoration exercises with distribution system operators and foreign transmission system operators. In 2024, several drills were organised to ensure the proper functioning of emergency procedures, including the overall emergency drill «Uranus» to test cooperation between the emergency organisations at the Gösgen nuclear power station, ENSI, the relevant federal, cantonal and municipal authorities and Swissgrid.

Grid capacity

Planning for the further development of grid capacity is based on scenarios that consider future target values for generation technologies and consumer groups, taking into account the transformation of the energy system with regard to the energy transition. Important strategic grid expansion work continues to be affected by lengthy approval procedures due to large numbers of objections. This makes it more difficult to eliminate grid congestion. As far as approval processes are concerned, Swissgrid relies above all on dialogue with affected parties. However, given that the acceptance of overhead lines is often low, Swissgrid still has to factor in objections and delayed approval processes. The «Grid express» proposal (revision of the Electricity Act), which the Federal Council submitted for consultation at the end of June 2024, is a particularly positive development. The corresponding dispatch should be referred to Parliament in the spring of 2025. The revision is intended to speed up approval processes for the renovation and expansion of the grids. This new

provision should also be welcomed in the interests of a needs-based, environmentally friendly and economically efficient high-voltage and extra-high-voltage grid.

The progressive ageing of existing components represents another risk to grid capacity. Swissgrid therefore systematically records the condition of its plants and plans modernisation measures accordingly.

Personnel safety

Swissgrid's operation and maintenance of the extra-high-voltage infrastructure involves risks to personnel safety. People can be seriously injured while performing their work. To minimise this risk, Swissgrid systematically identifies present dangers, implements targeted protective measures, trains its own employees and instructs contractor employees so they can independently identify the dangers posed at plants and respond accordingly. Systematic local inspections help to ensure compliance with safety precautions on building sites. «Safety first» is the guiding principle. Swissgrid is therefore investing heavily in this area. At the beginning of 2024, Swissgrid received confirmation of its «Safety Culture Ladder» (SCL) certification. Thirteen Swissgrid service providers have also confirmed their «Safety Culture Ladder» certification, and others are in the certification phase. In addition, the third edition of the «Safety and Security Days» was held in 2024 to raise awareness among all Swissgrid employees. Information was provided on a variety of safety-related topics.

Financial risks

Swissgrid's activities mean that it is exposed to various financial risks. These include liquidity, foreign currency, interest rate and counterparty risks.

Depending on the financial volume and timing, the proper financial implementation of operational business activities and the additional tasks transferred to Swissgrid by the federal government may mean that Swissgrid has to provide interim financing for these resources, which are to be funded via downstream tariff revenues. Swissgrid anticipates developments on an ongoing basis and takes measures at an early stage to ensure liquidity at all times by means of intensified continuous planning, close monitoring of the funding requirements, an increase in minimum liquidity levels and the provision of confirmed bank credit facilities.

Foreign currency risk is reduced through natural hedging and forward exchange transactions. The hedging strategy is reviewed periodically and updated as needed.

The risk of interest rate changes is reduced by staggering the maturities and establishing a balanced financing mix. Derivative financial instruments are deployed for further mitigation if necessary.

Financial counterparties and balance groups are constantly reviewed, assigned individual limits and monitored. Counterparty risks are monitored on a regular basis.

At its meeting on 12 February 2025, the Federal Council approved an amendment to the Electricity Supply Ordinance which modifies the calculation of the WACC. The new calculation method (in particular the elimination of lower and upper limits) increases volatility depending on the general interest rate situation; this results in a lower WACC, particularly in low-interest phases. Swissgrid had rejected an adjustment to the calculation methodology during the consultation process. As well as leading to a reduction in Swissgrid's net income, which can be in the mid double-digit million range in the event of a low-interest phase, the other main effect of the new calculation method will be to make investments in the grid infrastructure less attractive in the future.

Future prospects

Strategic outlook

The electricity industry is undergoing a transformation which is significantly modifying the framework conditions for transmission system operators. In Switzerland and Europe, the volume of electricity being fed into the grid from new, renewable sources is rising. This production is decentralised and more difficult to plan than production from large power plants with a stable output. This is resulting in new requirements for grid operations. Swissgrid's Strategy 2027 addresses these challenges. It focuses on investing in the digitalisation of grid operations and in the development and integration of data-based technologies in order to incorporate the integration of decentralised, renewable energy sources into grid operations as effectively as possible.

If an electricity agreement is concluded between Switzerland and the EU, the challenges described above will be much easier to resolve. This is particularly the case because Switzerland would then be fully integrated into the European electricity market, which would make the procurement of control energy more efficient and cost-effective, as well as solving capacity problems at the border. The Swiss political process for the electricity agreement is expected to start in the summer of 2025, and Swissgrid is actively striving to inform its stakeholders about the benefits of the agreement for grid operations.

The «Grid express» is another important political proposal for Swissgrid. It essentially calls for an acceleration of the Transmission Lines sectoral plan (SÜL). To prevent the grids from becoming the bottleneck of the energy transition, it is crucial for them to be modernised and, where necessary, expanded to keep up with increasing production levels.

Swissgrid continuously develops the transmission system as part of the grid planning process and adapts it to changing framework conditions and challenges. In the summer of 2024, Swissgrid finalised the target grid for 2040 and submitted it to ElCom for review.

Although the expansion of PV electricity production in Switzerland is progressing, the availability of PV data and forecasts from market partners is lagging behind. This affects grid stability and can force Swissgrid to use cost-intensive control energy to compensate for imbalances. Swissgrid has launched various projects in association with industry partners to improve forecasting accuracy in relation to PV energy and to use renewable resource elements (e.g. PV systems, heat pumps and electric vehicles) for secure grid operation.

The Board of Directors approved Swissgrid's climate targets at the beginning of 2025. They specify a net-zero emissions target to be achieved by 2040. In the current year, Swissgrid is focussing on the development of specific targets for indirect emissions (Scope 3) in the area of sustainability.

Research and development

Swissgrid cooperates with national and international research institutions to make sure that it can continue to fulfil its tasks safely and cost-effectively in the future. Its project portfolio is aligned with its strategic goals, and consists of internal activities and projects being conducted in cooperation with universities and other Swiss partners.

Financial outlook

Grid investments

Investment volumes are expected to remain high due to the need to achieve a sustainable energy future and carry out the measures defined in the «Strategic Grid 2025» report. Permits for power line construction and modification continue to pose a major challenge. The budget has therefore been assigned a lower likelihood of realisation in order to properly reflect delays. Consequently, investments in the grid are expected to

increase by between CHF 250 million and CHF 330 million a year over the medium term.

Operating costs

In 2023, Swissgrid launched its Strategy 2027 and entered a new five-year strategy period. Strategy 2027 is enabling Swissgrid to address the challenges posed by the fundamental transformation of the energy system. In addition to an increase in investments, the implementation of these measures is also leading to an increase in operating costs.

EBIT and net income

In line with the regulatory business model, EBIT is directly dependent on the level of IOA and WACC or the borrowing cost rate of WACC. The WACC for 2025 communicated by DETEC is 3.98%, and the borrowing cost rate included in WACC is 2.0%. Consequently, an EBIT or net income in line with 2024 is expected for 2025.

In accordance with the dividend policy approved by the Board of Directors, the income generated will be retained in the long term on a pro rata basis depending on the equity ratio and the financing situation. This safeguards Swissgrid's long-term financial stability.

Financial statements Swiss GAAP FER

Income statement

In millions of CHF	Notes	2024	2023
Net turnover	4, 5	1,825.1	1,219.2
Other operating income	4, 6	18.7	19.9
Change in volume- and tariff-related timing differences	4, 15	-582.8	216.4
Capitalised self-constructed assets		29.2	22.5
Total operating income		1,290.2	1,478.0
Procurement costs	4, 5	684.5	899.9
Gross profit		605.7	578.1
Cost of materials and third-party supplies	7	120.1	123.8
Personnel expenses	8	145.4	131.1
Other operating expenses	9	40.2	38.9
Earnings before interest, income taxes, depreciation and amortisation		300.0	284.3
Depreciation on property, plant and equipment	13	137.0	126.5
Amortisation on intangible assets	13	23.9	19.6
Earnings before interest and income taxes (EBIT) ¹	4	139.1	138.2
Financial income	10	3.6	2.0
Financial expenses	11	19.2	20.8
Earnings before income taxes		123.5	119.4
Income taxes	12	19.7	19.4
Net income		103.8	100.0

¹ Corresponds to net income before financial income, financial expenses and income taxes (EBIT).

Earnings per share

CHF	2024	2023
Net income	103,767,254	100,021,265
Weighted average number of shares outstanding	334,495,151	334,495,151
Non-diluted earnings per share	0.31	0.30
Dilution from the conversion of the convertible loans	0.00	-0.01
Diluted earnings per share	0.31	0.29

Financial statements Swiss GAAP FER

Balance sheet

Assets

In millions of CHF	Notes	31.12.2024	31.12.2023
Property, plant and equipment	<u>13</u>	2,397.4	2,274.4
Intangible assets	<u>13</u>	140.2	106.6
Financial assets	<u>14</u>	5.0	6.1
Long-term deficits arising from volume- and tariff-related timing differences	<u>15</u>	134.0	643.6
Non-current assets		2,676.6	3,030.7
Assets held on a fiduciary basis	<u>16</u>	98.1	33.9
Short-term deficits arising from volume- and tariff-related timing differences	<u>15</u>	209.3	723.7
Inventory		2.5	0.9
Trade accounts receivable	<u>17</u>	414.1	222.3
Other receivables	<u>18</u>	19.2	19.0
Prepaid expenses and accrued income	<u>19</u>	112.7	111.9
Cash and cash equivalents		354.8	111.1
Current assets		1,210.7	1,222.8
Assets		3,887.3	4,253.5

Equity and liabilities

In millions of CHF	Notes	31.12.2024	31.12.2023
Share capital		334.5	334.5
Capital reserves		431.2	431.2
Retained earnings		660.9	587.1
Total equity		1,426.6	1,352.8
Non-current financial liabilities	<u>20</u>	1,620.9	2,026.1
Non-current provisions	<u>21</u>	31.5	33.5
Non-current liabilities		1,652.4	2,059.6
Liabilities held on a fiduciary basis	<u>16</u>	98.1	33.9
Current financial liabilities	<u>20</u>	405.2	510.0
Trade accounts payable		179.3	172.8
Other liabilities	<u>22</u>	27.3	13.5

In millions of CHF	Notes	31.12.2024	31.12.2023
Accrued expenses and deferred income	<u>23</u>	98.3	110.8
Current provisions	<u>21</u>	0.1	0.1
Current liabilities		808.3	841.1
Total liabilities		2,460.7	2,900.7
Equity and liabilities		3,887.3	4,253.5

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Cash flow statement

In millions of CHF, excluding balance sheet items held on fiduciary basis	Notes	2024	2023
Net income		103.8	100.0
Financial expenses	<u>11</u>	19.2	20.8
Financial income	<u>10</u>	–3.6	–2.0
Current income taxes	<u>12</u>	21.7	21.6
Depreciation and amortisation	<u>13</u>	160.9	146.1
Change in inventories		–1.6	0.2
Change in provisions	<u>21</u>	–2.0	–2.2
Change in trade accounts receivable		–191.8	12.3
Change in other receivables		–0.2	40.2
Change in prepaid expenses and accrued income		–0.8	16.7
Change in volume- and tariff-related timing differences	<u>15</u>	1,024.0	–619.6
Change in trade accounts payable		6.5	–220.6
Change in other current liabilities		13.8	12.8
Change in accrued expenses and deferred income		–3.5	–12.2
Interest received		2.0	0.6
Income taxes paid		–22.7	–20.6
Cash flow from operating activities		1,125.7	–505.9
Gross investments in property, plant and equipment		–287.3	–254.1
Congestion proceeds received for grid investments		–	216.6
Government grants	<u>28</u>	6.2	–
Net investments in property, plant and equipment	<u>13</u>	–281.1	–37.5
Gross investments in intangible assets		–36.4	–25.4
Congestion proceeds received for grid investments		–	21.9
Net investments in intangible assets	<u>13</u>	–36.4	–3.5
Dividends received		0.7	0.5
Cash flow from investing activities		–316.8	–40.5
Change in current financial liabilities		–510.0	248.9
Change in non-current financial liabilities		–	100.0
Issuing of bonds		–	200.0
Interest paid		–25.6	–16.5
Dividends paid		–30.0	–48.2

In millions of CHF, excluding balance sheet items held on fiduciary basis	Notes	2024	2023
Cash flow from financing activities		–565.6	484.2
Foreign currency translation effect on cash and cash equivalents		0.4	0.5
Change in cash and cash equivalents		243.7	–61.7
Composition			
Cash and cash equivalents at beginning of period		111.1	172.8
Cash and cash equivalents at end of period		354.8	111.1
Change in cash and cash equivalents		243.7	–61.7

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Statement of changes in equity

In millions of CHF	Share capital	Capital reserves	Retained earnings	Total equity
Balance at 31.12.2022	334.5	431.2	535.3	1,301.0
Dividends paid	–	–	–48.2	–48.2
Net income 2023	–	–	100.0	100.0
Balance at 31.12.2023	334.5	431.2	587.1	1,352.8
Dividends paid	–	–	–30.0	–30.0
Net income 2024	–	–	103.8	103.8
Balance at 31.12.2024	334.5	431.2	660.9	1,426.6

The share capital consisted of 334,495,151 (previous year: 334,495,151) fully paid-up registered shares with a par value of CHF 1 per share. As at 31 December 2024, Swissgrid had conditional share capital of a maximum of CHF 112,939,487, divided into 112,939,487 registered shares with a par value of CHF 1 per share (previous year: CHF 112,939,487, divided into 112,939,487 registered shares with a par value of CHF 1 per share). The non-distributable portion of retained earnings and capital reserves amounted to CHF 167.25 million (previous year: CHF 167.25 million).

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Notes

1. Accounting principles

General

The 2024 financial statements of Swissgrid Ltd (hereinafter: Swissgrid) have been prepared in accordance with Swiss GAAP FER. The financial statements provide a true and fair view of the company's assets, financial position and results of operations.

Change in accounting principles

As at 1 January 2024, Swissgrid applied the new Swiss GAAP FER 28 standard «Government grants» for the first time.

Conversion of foreign currency items

The accounting records are maintained in the local currency (Swiss francs, CHF). All monetary assets and liabilities recognised in foreign currencies are converted at the exchange rate as of the balance sheet date. Transactions in foreign currencies are converted at the exchange rate on the day the transaction took place. Foreign exchange gains and losses resulting from transactions in foreign currencies are recognised in the income statement and are presented in the same item as the underlying transaction.

Cash flow statement

«Cash and cash equivalents» form the basis for the presentation of the cash flow statement. The cash flow from operating activities is calculated using the indirect method.

Revenue recognition

The revenue and procurement items result from the activities defined in the Electricity Supply Act (ESA) and include services for the non-discriminatory, reliable and efficient operation of the transmission grid, in particular ancillary services and balance and congestion management.

Revenue is recognised in the income statement upon performance of Swissgrid's obligations. For ESA activities, the measurement of performance is mainly based on energy volumes measured directly on the transmission grid or reported by downstream grid levels. For certain revenue and procurement items, initial billing values are available six weeks after delivery at the earliest, thereby rendering accruals based on historical and statistical data, as well as on estimates necessary for the revenue recognition of these items.

The activities defined in the Ordinance on the Establishment of a Hydropower Reserve (WResO) are intermediary transactions in accordance with the accounting regulations, which is why only the value of the services provided by the company itself is reported in the power reserve segment.

Activities according to ESA/WResO

Volume- and tariff-related timing differences (surpluses and deficits)

According to Art. 14 of the Electricity Supply Act and the Winter Reserve Ordinance, grid usage costs must be allocated to users on a user-pays basis. The tariffs for a financial year are determined based on planned costs. Due to price and volume deviations, actual expenses and income vary from the tariff calculation on both the revenue and procurement side. This results in surpluses or deficits, i.e. the tariff revenues from a financial year are higher or lower than the actual expenses incurred during the same period. These volume- and tariff-related timing differences are transferred to the balance sheet and taken into account in cost and revenue

calculations for future tariff periods. The expected reduction in volume- and tariff-related timing differences within twelve months of the balance sheet date is recognised as short-term surpluses or deficits in the balance sheet.

EBIT regulated under ESA

Earnings before interest and taxes (EBIT) from ESA activities are defined in Article 15 of the Electricity Supply Act (ESA) for chargeable costs, and are now defined in Article 18a of the Electricity Supply Ordinance (ESO) for interest on volume- and tariff-related timing differences arising from the 2024 financial year onwards. EBIT corresponds to the interest on invested operating assets (IOA) at the weighted average cost of capital rate for the current reporting year ($= WACC_{t+0}$), the interest on the volume- and tariff-related timing differences arising from the 2024 financial year onwards at the borrowing cost rate $_{t+2}$ included in $WACC_{t+2}$ and taxes. In accordance with ElCom directive 03/2024, volume- and tariff-related timing differences up to and including the end of the 2023 financial year remain subject to interest at $WACC_{t+2}$ until they have been fully eliminated, which also has an impact on EBIT.

Invested operating assets consist of net current assets calculated on a monthly basis, as well as the property, plant and equipment and intangible assets as at the end of the financial year. The weighted average cost of capital rate is based on the current international practice of the capital cost concept with reference to the Capital Asset Pricing Model (CAPM). Besides considering the findings of financial market theory, the regulatory framework conditions in Switzerland and the current situation in the money and capital market are also taken into account. The weighted average cost of capital rate for 2024 ($WACC_{t+0}$) determined by the authorities on the basis of this calculation method is 4.13%, and the borrowing cost rate $_{t+0}$ included in $WACC_{t+0}$ is 2.25%. The weighted average cost of capital rate for 2026 ($WACC_{t+2}$) applicable for the 2024 financial year is 3.43%, and the borrowing cost rate $_{t+2}$ included in $WACC_{t+2}$ is 2.0%.

EBIT according to WResO

From the 2024 financial year, the chargeable costs for the power reserve are calculated in the same way as ESA activities in accordance with Article 15 ESA. However, interest on the assets required for the power reserve is calculated according to the borrowing cost rate $_{t+0}$ included in $WACC_{t+0}$. In accordance with Article 18a ESO, interest on the volume- and tariff-related timing differences arising since 1 January 2024 is calculated at the borrowing cost rate $_{t+2}$. As previously, no interest is calculated on the volume- and tariff-related timing differences up to and including the end of the 2023 financial year until they have been fully eliminated. EBIT in accordance with WResO is calculated from the interest on the assets required for the power reserve and the volume- and tariff-related timing differences arising since 1 January 2024.

Chargeability of operating and capital costs

ElCom has the right to verify ex post the chargeability of Swissgrid's operating and capital costs for tariff-setting purposes. In case of an ex post cost adjustment, an appeal can be lodged with the Federal Administrative Court with an ultimate possibility of appeal to the Federal Supreme Court. A cost adjustment impacting Swissgrid's operating result is applied whenever no appeal is lodged, or whenever an appeal's prospects for success are judged to be less than 50% on the basis of a reappraisal, or whenever a legally binding ruling is issued.

Property, plant and equipment

Property, plant and equipment are recognised at the cost of acquisition or production less accumulated amortisation and any impairment losses. Significant spare parts which are likely to be used for a longer period and whose use only takes place in connection with a non-current asset item are recognised in non-current assets and depreciated over the remaining useful life of the relevant asset.

Depreciation/amortisation is calculated using the straight-line method on the basis of the estimated useful technical and economic service life. The service life is within the following ranges:

- Lines: 15 to 60 years
- Substations: 10 to 35 years
- Buildings and expansions: 5 to 50 years
- Other property, plant and equipment: 3 to 8 years
- Construction in progress and properties: only applicable in the case of an impairment loss

Intangible assets

Intangible assets are recognised at the cost of acquisition or production less accumulated amortisation and any impairment losses. Depreciation/amortisation is calculated using the straight-line method on the basis of the estimated useful technical and economic service life.

The service life is within the following ranges:

- Rights of use: contract term
- Software: 3 to 5 years
- Intangible assets under development: only applicable in the case of an impairment loss

The rights of use include easements and rights of use to mixed-use assets that were compensated once before 1 June 2019.

Impairment losses

The value of property, plant and equipment and intangible assets is reviewed annually. If there is an indication of an impairment loss, the book value is reduced to the realisable value and an impairment loss is charged to the results of the period.

Construction in progress/intangible assets under development

Construction in progress and intangible assets under development are non-current assets that are not yet completed or not yet operational. All items of property, plant and equipment and intangible assets, including self-constructed assets, are classified as non-current assets. As of each balance sheet date, a review is performed to determine whether any construction in progress or intangible assets under development have to be impaired. These are recognised as impairment losses in the year of completion. Ordinary depreciation or amortisation of these assets begins once they are completed or are ready for operation.

Financial assets

Financial assets are measured at acquisition costs less any impairment losses. These include shareholdings with a capital share of over 20%, but which do not have a significant impact on the financial statements, as well as shareholdings with a capital share of less than 20%. Employer contribution reserves without conditional renounced use are also recognised in financial assets.

Inventory

Inventory includes waste material for maintaining the grid systems. Inventory is measured at the lower of acquisition cost or market price.

Accounts receivable

Accounts receivable are reported at their nominal value less any impairment losses required for business

reasons.

Cash and cash equivalents

Cash and cash equivalents include cash in hand, cash at banks and deposits at banks maturing in 90 days or less. They are recognised at their nominal value.

Bonds

Bonds issued on the capital market are recognised at their nominal value. Deviations from the nominal value in the case of below- or above-par issues are recognised as accruals and deferrals and are reversed on a straight-line basis over the term of the bond.

Liabilities

Liabilities are recognised at their nominal value.

Provisions

Provisions are recognised if there is a probable obligation based on an event that took place prior to the balance sheet date, the amount and/or due date of which is uncertain but capable of being estimated.

Contingent liabilities

Contingent liabilities are measured as of the balance sheet date. A provision is reported if a cash outflow without a usable countervalue is probable and assessable. Otherwise, contingent liabilities are disclosed in the notes to the financial statements.

Interest on borrowed capital

Interest on borrowed capital is recognised as an expense in the period in which it arises.

Employee pension plan

Swissgrid is a member of an industry-wide retirement benefit plan (PKE Vorsorgestiftung Energie). This is a legally independent pension fund. All permanent employees of the company are included in this pension fund from 1 January of the year after they turn 17. Members of the Board of Directors are also to be insured in the pension fund under the conditions defined in the pension regulations of PKE Vorsorgestiftung Energie. All persons affiliated to the pension fund are insured for disability and death. From 1 January of the year after they turn 24, employees are also covered by retirement insurance.

Economic benefits arising from a pension fund surplus (e.g. in the form of a positive impact on future cash flows) are not capitalised, since the prerequisites for this are not met and the company does not intend to use such benefits to reduce employer contributions. Any benefits arising from freely available employer contribution reserves are recognised as an asset.

An economic obligation (e.g. in the form of negative effects on future cash flows due to a pension fund deficit) is recognised if the prerequisites for the creation of a provision are met. Accrued contributions for the period, the difference between the annually calculated economic benefit from pension fund surpluses and obligations, as well as the change in the employer contribution reserves are recognised in the income statement as personnel expenses.

Transactions with related parties

Related parties are organisations and persons that can have a significant influence, either directly or indirectly, on Swissgrid's financial or operational decisions. Shareholders holding at least 20% of the voting rights in Swissgrid, either alone or together with others, are considered to be related parties. As regards shareholders, other criteria in addition to the proportion of voting rights held are also taken into account

(including representation in committees and the possibility of exerting influence due to the shareholder structure). Subsidiaries of related shareholders and partner plant companies whose shares are 100% owned by related shareholders or which are controlled by a related shareholder, are also considered to be related parties. Related parties also include companies over which Swissgrid exercises a significant influence. Members of the Board of Directors and of the Executive Board are also considered to be related parties. Provided they exist and are significant, relations with related parties are disclosed in the notes to the financial statements. All transactions are conducted at arm's length.

Segment information

Segmentation is based on tariff groups as defined in the Electricity Supply Act (ESA), the power reserve segment (WResO) and other activities, and is aligned with Swissgrid's internal reporting structure.

Income taxes

Current income taxes are calculated based on the taxable results on an accrual basis. The annual accrual of deferred taxes is based on a balance sheet perspective (balance sheet method) and considers all future income tax effects (comprehensive method).

Derivative financial instruments

Swissgrid may use derivative financial instruments to hedge against currency and market price risks. If the conditions are met, Swissgrid will apply hedge accounting to hedge expected future cash flows. The instruments used for this purpose will be disclosed in the notes to the financial statements until the underlying transaction is realised.

Government grants

As part of the modernisation and maintenance of the grid, Swissgrid may receive government grants that are related to assets or related to income. Government grants related to assets are offset against the asset at the time of receipt. Government grants related to income are recognised in the income statement. The type and amount of government grants recognised are disclosed in the notes to the financial statements.

2. Estimation uncertainty

Financial-statement reporting requires estimates and assumptions to be made that may have a significant impact on Swissgrid's financial statements. With respect to assets and liabilities recognised in the balance sheet, accruals and deferrals (prepaid expenses and accrued income/accrued expenses and deferred income) and volume- and tariff-related timing differences in particular are based on various assumptions and estimates that may necessitate significant adjustments. This is due to specific volumes not being available for certain revenue and procurement items when the financial statements are prepared, as well as regulatory uncertainties. The volume- and tariff-related timing differences are also influenced by estimates in the allocation of operating expenses to the segments.

More information is given in the sections on «Revenue recognition» and «Activities according to ESA/WResO» in [Note 1](#), as well as in the following section.

3. Legal proceedings

Swissgrid's legal mandate and business activities expose the company to costs that can be passed on to the lower grid levels and end consumers in the form of tariff revenues if ElCom deems the costs to be chargeable. ElCom has the right to verify ex post the chargeability of Swissgrid's costs for tariff-setting purposes.

At present, ElCom has not initiated any proceedings to examine Swissgrid's chargeable costs. Swissgrid's Board of Directors and Executive Board believe that all costs were incurred within the framework of Swissgrid's legal mandate and should therefore qualify as chargeable. Based on this assessment, Swissgrid has treated all operating and capital costs as chargeable and consequently recognised them in full in the volume- and tariff-related timing differences. If, contrary to Swissgrid's assessment, the costs claimed are ruled to be non-chargeable, this would be reflected in future financial statements.

Third-party proceedings

The financial impact of third-party proceedings in which Swissgrid is involved are included in Swissgrid's financial statements if the Swiss GAAP FER criteria for recognition have been met. However, they have no direct impact on Swissgrid's results as they are included in the volume- and tariff-related timing differences.

4. Segment reporting

For segment reporting, the costs of capitalised self-constructed assets are deducted from operating expenses and are therefore not included in total operating income.

Eliminations: active power losses are a separate internal balance group. As a result, internal transactions occur between the general ancillary services/balancing energy and active power loss segments.

Congestion management is included in the other activities.

Segment report 2024

In millions of CHF	Total	Grid utilisation	General ancillary services/balancing energy	Active power losses (individual ancillary services)	Reactive energy (individual ancillary services)	Eliminations	Total activities according to ESA	Power reserve	Further activities
Net turnover	1,825.1	550.7	930.7	323.5	17.3	-14.6	1,807.6	17.5	-
Other operating income	18.7	1.9	0.3	-	-	-	2.2	0.1	16.4
Change in volume- and tariff-related timing differences	-582.8	-2.0	-438.7	-132.0	-2.1	-	-574.8	-8.0	-
Total operating income	1,261.0	550.6	492.3	191.5	15.2	-14.6	1,235.0	9.6	16.4
Procurement costs	-684.5	-44.0	-460.5	-180.9	-13.7	14.6	-684.5	-	-
Gross profit	576.5	506.6	31.8	10.6	1.5	-	550.5	9.6	16.4
Operating expenses	-276.5	-227.6	-23.7	-3.1	-0.7	-	-255.1	-7.6	-13.8
Depreciation/amortisation and impairment losses	-160.9	-152.7	-4.9	-0.5	-0.2	-	-158.3	-0.4	-2.2
Earnings before interest and income tax (EBIT)	139.1	126.3	3.2	7.0	0.6	-	137.1	1.6	0.4

Volume- and tariff-related timing differences: negative figures represent surpluses, and positive figures deficits.

Movement in volume- and tariff-related timing differences per segment

In millions of CHF	Total	Grid utilisation	General ancillary services/balance energy	Active power losses (individual ancillary services)	Reactive energy (individual ancillary services)	Eliminations	Total activities according to ESA	Power reserve	Further activities
Net turnover	1,825.1	550.7	930.7	323.5	17.3	-14.6	1,807.6	17.5	-
Other operating income	18.7	1.9	0.3	-	-	-	2.2	0.1	16.4
Procurement costs	-684.5	-44.0	-460.5	-180.9	-13.7	14.6	-684.5	-	-
Operating expenses	-276.5	-227.6	-23.7	-3.1	-0.7	-	-255.1	-7.6	-13.8
Depreciation/amortisation and impairment losses	-160.9	-152.7	-4.9	-0.5	-0.2	-	-158.3	-0.4	-2.2
Imputed interest and income taxes (EBIT)	-139.1	-126.3	-3.2	-7.0	-0.6	-	-137.1	-1.6	-0.4
Change in volume- and tariff-related timing differences	582.8	2.0	438.7	132.0	2.1	-	574.8	8.0	-

Volume- and tariff-related timing differences: positive figures represent surpluses, and negative figures deficits.

Segment report 2023

In millions of CHF	Total	Grid utilisation	General ancillary services/balance energy	Active power losses (individual ancillary services)	Reactive energy (individual ancillary services)	Eliminations	Total activities according to ESA	Power reserve	Further activities
Net turnover	1,219.2	525.7	512.9	167.3	21.0	-7.7	1,219.2	-	-
Other operating income	19.9	3.0	0.6	-	-	-	3.6	-	16.3
Change in volume- and tariff-related timing differences	216.4	-37.2	170.9	77.2	-2.7	-	208.2	8.2	-
Total operating income	1,455.5	491.5	684.4	244.5	18.3	-7.7	1,431.0	8.2	16.3
Procurement costs	-899.9	-14.9	-646.6	-229.2	-16.9	7.7	-899.9	-	-
Gross profit	555.6	476.6	37.8	15.3	1.4	-	531.1	8.2	16.3
Operating expenses	-271.3	-223.5	-21.8	-2.9	-0.5	-	-248.7	-8.2	-14.4
Depreciation/amortisation and impairment losses	-146.1	-141.3	-2.6	-0.4	-0.1	-	-144.4	-	-1.7
Earnings before interest and income tax (EBIT)	138.2	111.8	13.4	12.0	0.8	-	138.0	-	0.2

Volume- and tariff-related timing differences: negative figures represent surpluses, and positive figures deficits.

Movement in volume- and tariff-related timing differences per segment

In millions of CHF	Total	Grid utilisation	General ancillary services/balancing energy	Active power losses (individual ancillary services)	Reactive energy (individual ancillary services)	Eliminations	Total activities according to ESA	Power reserve	Further activities
Net turnover	1,219.2	525.7	512.9	167.3	21.0	-7.7	1,219.2	-	-
Other operating income	19.9	3.0	0.6	-	-	-	3.6	-	16.3
Procurement costs	-899.9	-14.9	-646.6	-229.2	-16.9	7.7	-899.9	-	-
Operating expenses	-271.3	-223.5	-21.8	-2.9	-0.5	-	-248.7	-8.2	-14.4
Depreciation/amortisation and impairment losses	-146.1	-141.3	-2.6	-0.4	-0.1	-	-144.4	-	-1.7
Imputed interest and income taxes (EBIT)	-138.2	-111.8	-13.4	-12.0	-0.8	-	-138.0	-	-0.2
Change in volume- and tariff-related timing differences	-216.4	37.2	-170.9	-77.2	2.7	-	-208.2	-8.2	-

Volume- and tariff-related timing differences: positive figures represent surpluses, and negative figures deficits.

The individual expense and income positions assigned to the four segments within ESA activities are listed in [Note 5](#), as are services provided by the company itself in the power reserve segment.

Grid usage

The grid usage segment is predominantly financed by various charges for use of the grid. This segment is also assigned the income from auctioning bottleneck capacities at the national borders to cover the chargeable costs of the transmission system, provided that this purpose is approved by ElCom. This segment also includes part of the compensation for international transit flows (ITC); the other part is recognised in the active power loss segment.

Net turnover in this segment amounted to CHF 550.7 million in the 2024 financial year, CHF 25.0 million above the previous year. The rise is attributable to the increase of CHF 60.3 million in auction income to cover the chargeable costs of the transmission system allocated to this segment. By contrast, tariff revenues for grid usage decreased by CHF 33.6 million, and income from ITC fell by CHF 1.7 million. Following higher costs for national redispatch, procurement costs in the reporting year amounted to CHF 44.0 million, CHF 29.1 million above the previous year's figure of CHF 14.9 million.

Revenue exceeded costs in the reporting year, resulting in a surplus of CHF 2.0 million. This meant that the existing deficits could be reduced.

General ancillary services/balancing energy

Net turnover in this segment rose by CHF 417.8 million compared to the previous year. The increase is due to the higher tariff revenues and income from the unintentional deviation of CHF 155.1 million, higher revenue from balance group balancing energy of CHF 199.6 million, and a CHF 63.1 million rise in auction income to cover the chargeable costs of the transmission system allocated to this segment.

The largest expense item for this segment is control power provision, i.e. the reservation of power plant capacity in the interests of balancing energy consumption and energy feed-in, as well as the costs for ancillary

services (AS) energy and the proportional voltage maintenance costs payable by this segment. The procurement costs in this segment totalled CHF 460.5 million, down CHF 186.1 million on the previous year (CHF 646.6 million). This change is primarily due to the CHF 379.1 million reduction in costs for control power provision and the CHF 181.4 million increase in procurement costs for AS energy.

Net turnover exceeded costs in the 2024 financial year, resulting in a surplus of CHF 438.7 million. This meant that the existing deficits could be reduced.

Active power losses (individual ancillary services)

This segment reports expenses and income for active power losses in the transmission grid. In addition to tariff revenues, part of the auction income to cover the chargeable costs of the transmission system and income from ITC is recognised in this segment.

The procurement of energy to compensate for active power losses takes place via anticipatory tenders and on the spot market. At CHF 323.5 million, net turnover in this segment was CHF 156.2 million above the previous year's figure (CHF 167.3 million). The increase is due to the higher tariff revenues of CHF 92.2 million and the higher auction income to cover the chargeable costs of the transmission system allocated to this segment of CHF 68.4 million. By contrast, income from ITC decreased by CHF 4.4 million. Procurement costs for active power losses totalled CHF 180.9 million in the reporting year (previous year: CHF 229.2 million).

Net turnover exceeded costs in 2024, resulting in a surplus of CHF 132.0 million. This meant that the existing deficits could be reduced.

Reactive energy (individual ancillary services)

The supply of reactive energy to maintain the required operating voltage is ensured by means of contractual agreements with several power plants and distribution system operators.

Net turnover in this segment decreased by CHF 3.7 million year on year to CHF 17.3 million due to lower tariff revenues. Procurement costs totalled CHF 13.7 million, CHF 3.2 million below the previous year's figure of CHF 16.9 million. This decrease is due to the lower pro rata voltage maintenance costs payable by this segment.

Revenue exceeded costs in 2024, resulting in a surplus of CHF 2.1 million. This meant that the existing deficits could be reduced.

Power reserve

This segment handles the orders regulated by the WResO for the use of the hydropower reserve and reserve power plants, pooled emergency power groups and combined heat and power plants (CHP plants). In accordance with the accounting regulations, these activities are intermediary transactions, which is why only the value of the services provided by the company itself (operating and capital costs) and the associated net turnover are reported in the power reserve segment.

The expenses resulting from the intermediary business amounted to CHF 186.5 million in the reporting year (previous year: CHF 403.2 million). In addition, tariff income of CHF 645.2 million was received for the first time in 2024. The tariffs also take into account the regulatory reduction in the deficits from previous years. For this reason, a decrease in deficits of CHF 449.2 million was recorded in this segment (including services provided by the company itself).

5. Net turnover and procurement costs according to ESA/WResO

In millions of CHF	Segment	2024	2023
Tariff income for grid utilisation	A	473.0	506.6
Net income from ITC	A/C	35.7	41.8
Income from auctions for the reduction of chargeable grid costs	A/B/C	324.8	133.0
Tariff income for general ancillary services (AS) and income from unintentional deviation	B	412.0	256.9
Income from balance group/balance energy	B	372.5	172.9
Tariff income for active power losses	C	186.9	94.7
Tariff income for reactive energy	D	17.3	21.0
Tariff income power reserve (excl. intermediary business)	E	17.5	–
Eliminations		–14.6	–7.7
Net turnover		1,825.1	1,219.2
Expenses for national redispatch	A	44.0	14.9
Expenses for AS control power provision and unintentional deviation	B	115.3	494.4
Expenses for automatic start-up/island operation capability	B	1.4	1.4
Expenses for grid enhancement	B	17.3	8.1
Expenses for AS energy	B	266.0	84.6
Expenses for compensation of active power losses	C	180.9	229.2
Expenses for reactive energy/voltage maintenance	B/D	74.2	75.0
Eliminations		–14.6	–7.7
Procurement costs		684.5	899.9

Letters used for segment allocation:

A = Grid usage

B = General ancillary services/balancing energy

C = Active power losses (individual ancillary services)

D = Reactive energy (individual ancillary services)

E = Power reserve

Segment reporting is provided in [Note 4](#).

Income from ITC consists of the following:

- Compensation for grid usage (A) CHF 3.0 million (previous year: CHF 4.7 million)
- Compensation for active power losses (C) CHF 32.7 million (previous year: CHF 37.1 million)

The ITC compensation for grid usage and active power losses corresponds to net income. Supervision charges paid to ElCom and to the Swiss Federal Office of Energy (SFOE) amounting to CHF 6.1 million

(previous year: CHF 4.9 million) were deducted from the gross income of CHF 3.5 million for grid usage (previous year: CHF 5.3 million) and CHF 38.3 million for active power losses (previous year: CHF 41.4 million) on a pro rata basis.

Auction income to cover the chargeable costs of the transmission system is broken down as follows:

- Grid usage (A): CHF 74.7 million (previous year: CHF 14.4 million)
- General AS (B): CHF 146.2 million (previous year: CHF 83.1 million)
- Active power losses (C) CHF 103.9 million (previous year: CHF 35.5 million)

The tariff income from the power reserve includes the share of tariff income received in the reporting year for services provided by the company itself.

Expenses for reactive energy / voltage maintenance are broken down as follows:

- General AS (B): CHF 60.5 million (previous year: CHF 58.1 million)
- Reactive energy (D): CHF 13.7 million (previous year: CHF 16.9 million)

Eliminations: active power losses are a separate internal balance group. As a result, internal transactions occur between the general ancillary services/balancing energy and active power loss segments.

6. Other operating income

In millions of CHF	2024	2023
Congestion management clearing	16.2	16.3
Other	2.5	3.6
	18.7	19.9

7. Materials and third-party supplies

In millions of CHF	2024	2023
Grid maintenance	23.9	25.1
Grid system control	0.5	0.4
Other services in the grid area	19.4	23.5
Expenses for projects, advisory and non-cash benefits	58.0	56.9
Hardware/software maintenance	18.3	17.9
	120.1	123.8

Other grid-related services consist of remuneration for easements, including easement management services performed by third parties and operating expenses for mixed-use plants.

8. Personnel expenses

Personnel expenses

In millions of CHF	2024	2023
Salaries, bonuses, allowances	116.9	105.5
Employee insurance	23.3	20.8
Other personnel expenses	5.2	4.8
	145.4	131.1
Headcount at 31.12.		
Permanent employment		
Number of employees	838.0	774.0
expressed as full-time equivalents	791.0	734.8
Fixed-term employment		
Number of employees	21.0	19.0
expressed as full-time equivalents	15.4	13.5

Other personnel expenses include, in particular, the costs of training and further education, recruitment, lump-sum expenses, as well as contributions to external catering for employees.

Executive Board remuneration

In millions of CHF	2024	2023
Fixed remuneration (incl. lump-sum expenses)	1.82	1.83
Variable remuneration	0.72	0.81
Pension benefits ¹	0.50	0.50
Total remuneration to the Executive Board	3.04	3.14
Of which to the highest-earning member of the Executive Board		
Fixed remuneration (incl. lump-sum expenses)	0.52	0.52
Variable remuneration	0.23	0.25
Pension benefits ¹	0.15	0.15
Total remuneration to the highest-earning member of the Executive Board	0.90	0.92

¹ Pension benefits include employer contributions to social security and the employee pension plan.

Further information on the members of the Executive Board can be found in the Corporate Governance Report.

9. Other operating expenses

In millions of CHF	2024	2023
Rental and occupancy costs	11.9	10.1
Ground rents	4.7	4.2
Rental costs for communication equipment/telecommunication expense	2.3	3.4
Board of Directors' fees and expenses incl. social costs	0.9	0.8
Actual expenses for travel and subsistence for employees and third parties	2.5	2.4
Fees, dues and licences	4.9	4.8
Insurance	2.5	2.4
Other administrative costs	10.5	10.8
	40.2	38.9

Other administrative costs included borrowing costs of CHF 6.2 million (previous year: CHF 6.1 million), which were incurred in connection with the additional tasks transferred to Swissgrid by the federal government in the power reserve segment and represent chargeable costs in accordance with Art. 22 WResO.

Board of Directors' fees and expenses represent fixed gross remuneration including the deduction of any employee contributions to the employee pension plan. The remuneration paid to the Chairman of the Board of Directors amounted to CHF 250,000, including lump-sum expenses (previous year: CHF 250,000). The remaining members of the Board of Directors received remuneration of between CHF 57,500 and CHF 77,500 pro rata temporis for 2024, including lump-sum expenses (previous year: between CHF 57,500 and CHF 77,500).

Further information on the members of the Board of Directors can be found in the Corporate Governance Report.

10. Financial income

In millions of CHF	2024	2023
Interest income on time deposits	2.0	0.6
Other financial income	1.6	1.4
	3.6	2.0

Other financial income included a dividend of CHF 0.7 million (previous year: CHF 0.5 million) received from Holding des Gestionnaires de Réseau de Transport d'Électricité SAS (HGRT).

11. Financial expenses

In millions of CHF	2024	2023
Bond interest	15.9	14.0
Loans and convertible loans interest	0.6	5.5
Commitment fees	0.7	0.6
Other financial expenses	2.0	0.7
	19.2	20.8

At the beginning of the 2024 financial year, a further partial repayment of convertible loans amounting to CHF 30.0 million was made. In addition, loans totalling CHF 480.0 million were reimbursed in the reporting year. The interest expense for convertible loans and loans decreased accordingly.

Other financial expenses included a value adjustment on financial assets of CHF 1.2 million in the reporting year.

12. Income taxes

In millions of CHF	2024	2023
Current income taxes	21.7	21.6
Change in deferred taxes	-2.0	-2.2
	19.7	19.4

An average rate of 15.9% (previous year: 16.3%) was used to calculate the current income taxes and, in 2024, deferred taxes were calculated based on an expected rate of 15.7% (previous year: 15.6%).

The effective average tax rate based on earnings before tax amounted to 16.0% (previous year: 16.3%).

13. Non-current assets

Summary of property, plant and equipment 2024

In millions of CHF	Advances and construction in progress	Substations	Lines	Properties and buildings	Other property plant and equipment	Total
Acquisition cost at 1.1.2024	281.5	2,273.8	2,929.3	255.8	58.3	5,798.7
Additions	237.4	9.5	22.4	1.9	9.9	281.1
Disposals	–	-2.7	-0.6	–	–	-3.3
Reclassification	-113.2	16.8	42.5	11.4	21.4	-21.1
Acquisition cost at 31.12.2024	405.7	2,297.4	2,993.6	269.1	89.6	6,055.4
Accumulated depreciation and amortisation at 1.1.2024	5.2	1,570.7	1,802.9	91.5	54.0	3,524.3

In millions of CHF	Advances and construction in progress	Substations	Lines	Properties and buildings	Other property plant and equipment	Total
Depreciation and amortisation	–	65.8	49.3	5.6	15.6	136.3
Impairment losses	–	–	–	–	–	–
Disposals	–	–2.3	–0.3	–	–	–2.6
Reclassification	–	–	–	–	–	–
Accumulated depreciation and amortisation at 31.12.2024	5.2	1,634.2	1,851.9	97.1	69.6	3,658.0
Net book value at 1.1.2024	276.3	703.1	1,126.4	164.3	4.3	2,274.4
Net book value at 31.12.2024	400.5	663.2	1,141.7	172.0	20.0	2,397.4

Summary of property, plant and equipment 2023

In millions of CHF	Advances and construction in progress	Substations	Lines	Properties and buildings	Other property plant and equipment	Total
Acquisition cost at 1.1.2023	246.9	2,283.9	2,943.6	255.0	55.7	5,785.0
Additions	29.2	1.8	4.4	0.1	2.0	37.5
Disposals	–	–15.0	–8.7	–0.2	–0.1	–24.0
Reclassification	5.4	3.1	–10.0	0.9	0.7	0.1
Acquisition cost at 31.12.2023	281.5	2,273.8	2,929.3	255.8	58.3	5,798.7
Accumulated depreciation and amortisation at 1.1.2023	5.2	1,518.3	1,764.3	84.8	49.2	3,421.8
Depreciation and amortisation	–	67.4	47.3	6.9	4.9	126.5
Impairment losses	–	–	–	–	–	–
Disposals	–	–15.0	–8.7	–0.2	–0.1	–24.0
Reclassification	–	–	–	–	–	–
Accumulated depreciation and amortisation at 31.12.2023	5.2	1,570.7	1,802.9	91.5	54.0	3,524.3
Net book value at 1.1.2023	241.7	765.6	1,179.3	170.2	6.5	2,363.2
Net book value at 31.12.2023	276.3	703.1	1,126.4	164.3	4.3	2,274.4

Gross investments in property, plant and equipment amounted to CHF 281.1 million (previous year: CHF 254.1 million). In the reporting year, no property, plant and equipment was financed by proceeds from the auctioning of grid congestion capacities for cross-border supplies (previous year: CHF 226.6 million). In the reporting year, assets totalling CHF 21.1 million were reclassified from intangible assets to property, plant and equipment (previous year: reclassification from intangible assets under development to construction in progress of CHF 0.1 million).

Property, plant and equipment of CHF 22.3 million (previous year: CHF 21.2 million) was purchased from related parties in 2024.

Summary of intangible assets 2024

In millions of CHF	Intangible assets under development			Usage rights			Software			Total intangible assets		
	Purchased	Self-constructed	Total	Purchased	Self-constructed	Total	Purchased	Self-constructed	Total	Purchased	Self-constructed	Total
Acquisition cost at 1.1.2024	2.7	1.0	3.7	191.4	–	191.4	140.9	63.0	203.9	335.0	64.0	399.0
Additions	16.7	4.8	21.5	–	–	–	11.8	3.1	14.9	28.5	7.9	36.4
Disposals	–	–	–	–	–	–	–	–	–	–	–	–
Reclassification	0.3	1.7	2.0	–	–	–	15.9	3.2	19.1	16.2	4.9	21.1
Acquisition cost at 31.12.2024	19.7	7.5	27.2	191.4	–	191.4	168.6	69.3	237.9	379.7	76.8	456.5
Accumulated depreciation and amortisation at 1.1.2024	–	–	–	101.2	–	101.2	131.8	59.4	191.2	233.0	59.4	292.4
Depreciation and amortisation	–	–	–	5.7	–	5.7	13.8	4.4	18.2	19.5	4.4	23.9
Impairment losses	–	–	–	–	–	–	–	–	–	–	–	–
Disposals	–	–	–	–	–	–	–	–	–	–	–	–
Reclassification	–	–	–	–	–	–	–	–	–	–	–	–
Accumulated depreciation and amortisation at 31.12.2024	–	–	–	106.9	–	106.9	145.6	63.8	209.4	252.5	63.8	316.3
Net book value at 1.1.2024	2.7	1.0	3.7	90.2	–	90.2	9.1	3.6	12.7	102.0	4.6	106.6
Net book value at 31.12.2024	19.7	7.5	27.2	84.5	–	84.5	23.0	5.5	28.5	127.2	13.0	140.2

Summary of intangible assets 2023

In millions of CHF	Intangible assets under development			Usage rights			Software			Total intangible assets		
	Purchased	Self-constructed	Total	Purchased	Self-constructed	Total	Purchased	Self-constructed	Total	Purchased	Self-constructed	Total
Acquisition cost at 1.1.2023	6.2	2.9	9.1	191.4	–	191.4	134.2	60.9	195.1	331.8	63.8	395.6
Additions	1.6	0.6	2.2	–	–	–	1.0	0.3	1.3	2.6	0.9	3.5
Disposals	–	–	–	–	–	–	–	–	–	–	–	–
Reclassification	–5.1	–2.5	–7.6	–	–	–	5.7	1.8	7.5	0.6	–0.7	–0.1
Acquisition cost at 31.12.2023	2.7	1.0	3.7	191.4	–	191.4	140.9	63.0	203.9	335.0	64.0	399.0
Accumulated depreciation and amortisation at 1.1.2023	–	–	–	95.4	–	95.4	121.8	55.6	177.4	217.2	55.6	272.8
Depreciation and amortisation	–	–	–	5.8	–	5.8	10.0	3.8	13.8	15.8	3.8	19.6
Impairment losses	–	–	–	–	–	–	–	–	–	–	–	–
Disposals	–	–	–	–	–	–	–	–	–	–	–	–
Reclassification	–	–	–	–	–	–	–	–	–	–	–	–
Accumulated depreciation and amortisation at 31.12.2023	–	–	–	101.2	–	101.2	131.8	59.4	191.2	233.0	59.4	292.4
Net book value at 1.1.2023	6.2	2.9	9.1	96.0	–	96.0	12.4	5.3	17.7	114.6	8.2	122.8
Net book value at 31.12.2023	2.7	1.0	3.7	90.2	–	90.2	9.1	3.6	12.7	102.0	4.6	106.6

Gross investments in intangible assets amounted to CHF 36.4 million (previous year: CHF 25.4 million). In the reporting year, no intangible assets were financed by proceeds from the auctioning of grid congestion capacities for cross-border supplies (previous year: CHF 21.9 million). In addition, intangible assets amounting to CHF 0.2 million (previous year: CHF 0.3 million) were purchased from related parties in 2024.

14. Financial assets

In millions of CHF	31.12.2024	31.12.2023
Shareholdings	5.0	5.2
Other financial assets	—	0.9
	5.0	6.1

The decrease in financial assets is due to a value adjustment of CHF 1.2 million. By contrast, the conversion of shareholdings in foreign currencies resulted in an increase of CHF 0.1 million.

Swissgrid has the following shareholdings, which are recognised in the balance sheet as financial assets:

		Share capital in m.	Share in %
Joint Allocation Office (JAO)	A	0.125	4.0
TSCNET Services GmbH	B	0.040	6.25
Holding des Gestionnaires de Réseau de Transport d'Electricité SAS (HGRT)	C	52.119	5.0
Pronovo AG	D	0.100	100.0
ecmt AG	E	0.100	31.0
Equigy B.V.	F	0.050	20.0

Letters used for locations and currencies:

A = Luxembourg (Lux) | Currency EUR

B = Munich (D) | Currency EUR

C = Paris (F) | Currency EUR

D = Frick (CH) | Currency CHF

E = Winterthur (CH) | Currency CHF

F = Arnheim (NL) | Currency EUR

Swissgrid is not legally obliged to prepare consolidated financial statements. Either the control principle necessary to prepare a consolidated financial statement (Art. 963 of the Swiss Code of Obligations (CO)) is not met, or the subsidiaries do not have a material influence on Swissgrid's financial statements. In particular, Pronovo AG is regulated by the Swiss Federal Office of Energy (SFOE) and is explicitly excluded from any consolidation with Swissgrid based on Art. 64 (5) of the Energy Act (EnA).

The figures are unchanged from the previous year.

15. Volume- and tariff-related timing differences

In millions of CHF	Grid utilisation	General ancillary services/balance energy	Active power losses (individual ancillary services)	Reactive energy (individual ancillary services)	Power reserve	Total volume- and tariff-related timing differences	Thereof surpluses	Thereof deficits
Balance at 31.12.2022	156.0	368.1	150.1	18.5	55.0	747.7	–	747.7
Change in 2023	–37.2	170.9	77.2	–2.7	8.2	216.4	–	–
Change from the intermediary business in 2023	–	–	–	–	403.2	403.2	–	–
Balance at 31.12.2023	118.8	539.0	227.3	15.8	466.4	1,367.3	–	1,367.3
Change in 2024	–2.0	–438.7	–132.0	–2.1	–8.0	–582.8	–	–
Change from the intermediary business in 2024	–	–	–	–	–441.2	–441.2	–	–
Balance at 31.12.2024	116.8	100.3	95.3	13.7	17.2	343.3	–	343.3
Current portion	25.6	100.3	78.6	4.8	–	209.3	–	209.3

Negative figures represent surpluses, and positive figures deficits.

Further information on volume- and tariff-related timing differences (function, estimation uncertainties and current legal proceedings) can be found in [Notes 1](#), [2](#) and [3](#).

16. Balance sheet items held on a fiduciary basis

On the basis of a statutory mandate, Swissgrid coordinates the auctioning of bottleneck capacities for cross-border supplies and maintains accounting records and bank accounts on a fiduciary basis for this purpose.

Assets held on a fiduciary basis

In millions of CHF	31.12.2024	31.12.2023
Trade accounts receivable	29.9	15.3
Other receivables	0.7	1.5
Prepaid expenses and accrued income	18.0	5.3
Cash and cash equivalents	49.5	11.8
	98.1	33.9

Liabilities held on a fiduciary basis

In millions of CHF	31.12.2024	31.12.2023
Trade accounts payable	59.1	27.7
Accrued expenses and deferred income	39.0	6.2
	98.1	33.9

The revenues and the manner in which they are used are as follows:

Auctions

In millions of CHF	2024	2023
Share of revenue Switzerland	376.7	368.9
Congestion management clearing (incl. financial result)	-16.0	-17.2
Net proceeds	360.7	351.7
Used for reduction of the chargeable grid costs	-324.8	-123.1
Used for grid investments	-	-228.6
Undistributed income from auctions	35.9	-

Pursuant to ElCom's letter of approval dated 7 February 2023, income from auctions in 2024 amounting to CHF 324.8 million (previous year: CHF 351.7 million) was paid to Swissgrid.

17. Trade receivables

In millions of CHF	31.12.2024	31.12.2023
Trade receivables	414.1	222.3
Specific valuation allowances	-	-
	414.1	222.3

18. Other receivables

In millions of CHF	31.12.2024	31.12.2023
Security deposits on blocked bank accounts	0.5	1.2
Other	18.7	17.8
	19.2	19.0

Other receivables included the receivable for the 2024 enforcement costs for handling congestion management amounting to CHF 16.2 million (previous year: CHF 16.3 million).

19. Prepaid expenses and accrued income

In millions of CHF	31.12.2024	31.12.2023
Accrued revenue for supplies made	97.1	93.4
Other	15.6	18.5
	112.7	111.9

In particular, other prepaid expenses and accrued income include the discount on bond issues and financing and issue costs, which are amortised over the term of the financing instrument.

20. Financial liabilities

In millions of CHF	31.12.2024	31.12.2023
Bonds	1,915.0	1,915.0
Convertible loans	11.0	41.1
Loans	100.1	580.0
Total financial liabilities	2,026.1	2,536.1
Current portion	405.2	510.0

Bonds

Nominal amount in CHF	Interest rate	Term	Expiration at nominal value
350 million	1.625%	2013–2025	30.01.2025
150 million	0.000%	2021–2026	30.06.2026
200 million	1.900%	2023–2026	30.06.2026
175 million	1.100%	2022–2027	30.06.2027
150 million	0.000%	2020–2028	30.06.2028
150 million	0.625%	2015–2030	25.02.2030
150 million	0.200%	2020–2032	30.06.2032
110 million	0.050%	2021–2033	30.06.2033
125 million	0.150%	2020–2034	30.06.2034
130 million	0.125%	2020–2036	30.06.2036
100 million	0.200%	2021–2040	29.06.2040
125 million	0.050%	2019–2050	30.06.2050

The maturities of bonds are as follows:

In millions of CHF	Interest rate (bandwidth)	Year 1	Year 2–5	more than 5 years	
Balance at 31 December 2024					
Bonds	0.000–1.900%	350.0	675.0	890.0	1,915.0
Balance at 31 December 2023					
Bonds	0.000–1.900%	–	1,025.0	890.0	1,915.0

Convertible loans and loans

Convertible loans have a term of nine years and one-fifth of the loans become payable annually from year five. Moreover, these loans are also assigned a conversion right by Swissgrid in the event of occurrence of contractually defined events and an associated conversion obligation by the creditors. Creditors are compensated by a premium on the interest rate for the conversion right assigned to Swissgrid. Convertible loans are recognised in full in liabilities.

The interest conditions and maturities of convertible loans and loans are as follows:

In millions of CHF	Interest rate (bandwidth)	Year 1	Year 2–5	more than 5 years	Total
Balance at 31 December 2024					
Convertible loans	3.36–3.41%	5.2	5.8	–	11.0
Loans	0.00–2.40%	50.0	50.0	0.1	100.1
Balance at 31 December 2023					
Convertible loans	3.36–3.41%	30.0	11.0	–	41.0
Loans	0.00–2.40%	480.0	100.0	0.1	580.1

Convertible loans and loans are assessed at their nominal value.

Lines of credit

The committed lines of credit totalled CHF 600 million, and remained unclaimed as at 31 December 2024.

21. Provisions

In millions of CHF	Dismantling	Procedural costs	Deferred taxes	Total provisions
Balance at 31 December 2022	1.5	0.4	33.9	35.8
Provisions raised	–	0.1	–	0.1
Provisions used	–	–	–	–
Reversals	–	0.1	2.2	2.3
Balance at 31 December 2023	1.5	0.4	31.7	33.6
Provisions raised	–	–	–	–
Provisions used	–	–	–	–
Reversals	–	–	2.0	2.0

In millions of CHF	Dismantling	Procedural costs	Deferred taxes	Total provisions
Balance at 31 December 2024	1.5	0.4	29.7	31.6
Current portion	—	0.1	—	0.1

Procedural costs

The provision amount includes the estimated compensation payable to parties and the court costs imposed on Swissgrid due to the administrative procedures in conducting proceedings.

22. Other liabilities

In millions of CHF	31.12.2024	31.12.2023
Value-added tax	27.0	10.8
Security deposits on blocked bank accounts	0.1	0.7
Other	0.2	2.0
	27.3	13.5

23. Accrued expenses and deferred income

In millions of CHF	31.12.2024	31.12.2023
Accrued expenses for supplies made	52.1	61.2
Personnel expenses and employee insurance scheme	18.9	15.4
Accrued interest and premium from issued bonds	13.7	19.0
Taxes	13.6	15.2
	98.3	110.8

24. Other off-balance sheet commitments

Long-term rental contracts

Long-term rental contracts with fixed terms exist with several parties. These result in the following obligations:

In millions of CHF	Year 1	Year 2–10	More than 10 years	Total
31.12.2024	6.9	40.0	55.7	102.6
31.12.2023	6.3	40.8	59.4	106.5

The long-term rental obligations primarily include the rental commitments for Swissgrid's head office in Aarau.

Off-balance-sheet lease commitments

Swissgrid has the following off-balance-sheet lease commitments for vehicles and office equipment:

In millions of CHF	Year 1	Year 2–5	Total
31.12.2024	1.0	2.8	3.8
31.12.2023	1.2	0.9	2.1

25. Derivative financial instruments

Swissgrid made use of derivative financial instruments to partially hedge against market price risk from future procurement costs for active power losses. The nominal amount of these instruments was EUR 116.1 million or CHF 109.3 million (previous year: EUR 208.5 million or CHF 193.1 million). As at 31 December 2024, the positive replacement values stood at EUR 3.3 million or CHF 3.1 million (previous year: EUR 0.1 million or CHF 0.1 million) and the negative replacement values amounted to EUR 15.9 million or CHF 15.0 million (previous year: EUR 97.0 million or CHF 89.8 million), resulting in net negative replacement values of EUR 12.6 million or CHF 11.9 million (previous year: EUR 96.9 million or CHF 89.7 million).

26. Employee pension plan

Economic benefit / economic obligation and retirement benefit plan expenses

In millions of CHF	Shortfall/surplus funding	Economic share of the organisation	Change compared with previous year/ affecting income in FY	Accrued amounts	Pension benefit expenses within personnel expenses
	31.12.2024	31.12.2024	31.12.2023		2024 2023
Pension plans with overfunding	6.2	–	–	–	13.6 13.6 12.2
Total	6.2	–	–	–	13.6 13.6 12.2

Swissgrid is affiliated to a collective plan by the pension fund PKE Vorsorgestiftung Energie. Therefore, an economic benefit or economic obligation cannot be determined on the basis of the individual affiliation contract. The coverage ratio of the collective plan was 120.7% as at 31 December 2024 (previous year: 113.9%). The actuarial calculations are based on a technical interest rate of 2.0% (previous year: 2.0%) and on the technical basis of the Occupational Pensions Act (OPA) 2020 (previous year: OPA 2020).

27. Transactions with related parties

Transactions with related parties in millions of CHF	2024	2023
Total operating activities		
Net turnover	679.3	495.8
thereof grid utilisation	317.8	326.1
thereof general ancillary services/balance energy	219.8	87.0
thereof active power losses	125.7	63.2
thereof reactive energy	16.0	19.5
Other operating income	0.1	0.1
Procurement costs and operating expenses		
Procurement costs	383.6	460.7
thereof grid utilisation	34.6	14.8
thereof general ancillary services/balance energy	298.9	405.6
thereof active power losses	44.2	31.4
thereof reactive energy	5.9	8.9
Cost of materials and third-party supplies	13.6	13.2
Other operating expenses	5.9	4.4
Financial result		
Financial expenses	–	0.7

In the power reserve segment, revenue from related parties totalled CHF 119.9 million (previous year: CHF 0 million) and costs to related parties stood at CHF 25.8 million (previous year: CHF 94.5 million).

Unsettled balances at balance sheet date with related parties in millions of CHF	31.12.2024	31.12.2023
Assets		
Trade receivables	150.5	95.4
Prepaid expenses and accrued income	25.2	15.9
Financial assets	–	0.9
Liabilities		
Convertible loans and loans	0.5	21.6
Trade accounts payable	68.6	60.4
Accrued expenses and deferred income	8.3	6.3

The conditions relating to related parties are described in [Note 1](#).

As in the previous year, there were no transactions with members of the Board of Directors or the Executive Board in the reporting year, with the exception of ordinary remuneration.

28. Government grants

In the reporting year, Swissgrid received government grants related to assets totalling CHF 6.2 million for the modernisation and maintenance of the grid, which were offset against the asset (no government grants were received in the previous year).

29. Events after the balance sheet date

There are no events after the balance sheet date that would require disclosure or recognition in the 2024 financial statements.

On 14 April 2025, the Board of Directors of Swissgrid Ltd approved the 2024 financial statements for submission to the General Assembly and for publication.

Financial statements Swiss GAAP FER

Report of the Independent Auditor



Report of the independent auditor

to the General Meeting of Swissgrid AG, Aarau

Report on the audit of the financial statements Swiss GAAP FER

Opinion

We have audited the financial statements of Swissgrid AG (the Company), which comprise the income statement for the year ended 31 December 2024, the balance sheet as at 31 December 2024, the cash flow statement and the statement of changes in equity for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the Company as at 31 December 2024 and of its financial performance and its cash flows for the year then ended in accordance with Swiss GAAP FER.

Basis for opinion

We conducted our audit in accordance with Swiss law and Swiss Standards on Auditing (SA-CH). Our responsibilities under those provisions and standards are further described in the 'Independent Auditor's responsibilities for the audit of the financial statements' section of our report. We are independent of the Company in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach



Overview

Overall materiality: CHF 31.1 million

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the Company, the accounting processes and controls, and the industry in which the Company operates.

As key audit matters the following areas of focus have been identified:

- Appropriateness of the calculation of the result from regulated business (EBIT and volume- and tariff-related timing differences)
- Completeness and existence of net turnover and procurement costs

Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall materiality for the financial statements as a whole as set out in the table below. These, together with qualitative

considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the financial statements as a whole.

Overall materiality	CHF 31.1 million
Benchmark applied	Total "assets"
Rationale for the materiality benchmark applied	We chose total "assets" as the benchmark for determining materiality, as we believe that this is the figure that best reflects the company's purpose of ensuring the efficient operation of the transmission grid.

Audit scope

We designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we considered where subjective judgements were made; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Appropriateness of the calculation of the result from regulated business (EBIT and volume- and tariff-related timing differences)

Key audit matter	How our audit addressed the key audit matter
In the 2024 financial year, Swissgrid reported earnings before interest and taxes (EBIT) of CHF 139.1 million (previous year: CHF 138.2 million), the components of which are governed in the company's regulated business area by the provisions of the Federal Electricity Supply Act (ESA) and the Ordinance on the Establishment of an Electricity Reserve for the Winter (WRResO), as well as requirements of the Federal Department of the Environment, Transport, Energy and Communications (DETEC). The change in volume- and tariff-related timing differences totalled CHF -582.8 million (previous year: CHF +216.4 million). Further information on the regulated business, EBIT and volume- and tariff-related volume- and tariff-related timing differences can be found in the notes to the Swiss GAAP FER financial statements in "1. Accounting principles", "2. Estimation uncertainty", "3. Legal proceedings", "4. Segment reporting" and "15. Volume- and tariff-related timing differences". Earnings before interest and taxes (EBIT) from ESA activities are legally defined for the chargeable costs in Article 15 of the ESA and for the interest on volume- and tariff-related timing differences arising from the 2024 financial year onwards in Article 18a of the Electricity Supply Ordinance (ESO).	With regard to the calculation of EBIT and volume- and tariff-related timing differences, we obtained an in-depth understanding of the company's accounting policies, assumptions and estimates, processes and methods and, in particular, performed the following audit procedures: • Checking whether the parameters used in the calculation of the earnings from the regulated business, such as WACC, correspond to the rate specified by DETEC. • Mathematical recalculation and plausibility check of the calculation of the volume- and tariff-related timing differences. • Assessing and testing the key controls provided for the calculation. • Verifying compliance with the relevant legal, regulatory and judicial requirements. We discussed the results of the audit procedures performed with the Finance and Audit Committee.

The respective calculation is described in the “EBIT regulated under ESA” accounting principles.

Volume- and tariff-related timing differences arise due to volume and price variances between actual expenses and income as well as on the tariff-based sales and procurement side. The tariffs are determined on the basis of planned costs. These volume- and tariff-related timing differences are recognised in the balance sheet as ‘surpluses or deficits’ and reversed in future tariff periods in the income statement as “changes in volume- and tariff-related timing differences”.

The risk that the calculation of EBIT and the volume- and tariff-related timing differences are not determined as intended is a key audit matter, as this has a significant impact on the calculation of tariffs and the company’s result.

Completeness and existence of net turnover and procurement costs

Key audit matter	How our audit addressed the key audit matter
In the 2024 financial year, Swissgrid reported net turnover of CHF 1,825.1 million (previous year: CHF 1,219.2 million) and procurement costs of CHF 684.5 million (previous year: CHF 899.9 million). Further information on net turnover and procurement costs can be found in the notes to the Swiss GAAP FER financial statements in “1. Accounting principles”, “4. Segment reporting” and “5. Net turnover and procurement costs according to ESA/WResO”. Revenue is recognised in the income statement when the service is provided. For the activities defined in the ESA, the measurement of performance is mainly based on energy volumes measured directly on the transmission grid or registered by downstream grid levels. For individual sales and procurement items, the first billing values are available no earlier than six weeks after the service has been provided, meaning that accruals, estimates and assumptions based on historical and statistical data are required to recognise sales and procurement costs. Net turnover and procurement costs are key figures in financial reporting and are therefore the focus of internal and external stakeholders. We consider the completeness and existence of net turnover and procurement costs to be a key audit matter due to their volume and the estimates and assumptions required to determine them.	We obtained an in-depth understanding of the company’s accounting policies, assumptions and estimates, processes and methods with regard to revenue recognition and the recognition of procurement costs and, in particular, performed the following audit procedures: • IT-supported verification of the data consistency of the basic data used for revenue accrual and thus verification of the completeness of the invoiced net turnover and the procurement costs. • Checking the correct transfer of data between the various systems. • Testing the effectiveness of the key controls in the process of revenue accruals and procurement costs as at the balance sheet date. • Performing random checks of the existence of the transaction. • Plausibility check of changes in procurement items. We discussed the results of the audit procedures performed with the Finance and Audit Committee.

Other matter

The financial statements for the year ended 31 December 2023 were audited by another independent auditor who expressed an unmodified opinion on those financial statements on 15 April 2024.

Other information

The Board of Directors is responsible for the other information. The other information comprises the information included in the annual report, but does not include the financial statements Swiss GAAP FER, the statutory financial statements and our auditor's reports thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Board of Directors' responsibilities for the financial statements

The Board of Directors is responsible for the preparation of financial statements, that give a true and fair view in accordance with Swiss GAAP FER and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Independent Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and SA-CH will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Swiss law and SA-CH, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

PricewaterhouseCoopers AG

Thomas Wallmer
Licensed audit expert

Pascal Wintermantel
Licensed audit expert

Zürich, 14 April 2025

Statutory financial statements

Income statement

In millions of CHF	Notes	2024	2023
Net turnover	3	1,825.1	1,219.2
Other operating income	4	18.7	19.9
Change in volume- and tariff-related timing differences		-580.8	218.6
Capitalised self-constructed assets		29.2	22.5
Total operating income		1,292.2	1,480.2
Procurement costs	3	684.5	899.9
Gross profit		607.7	580.3
Cost of materials and third-party supplies	5	120.1	123.8
Personnel expenses	6	145.4	131.1
Other operating expenses	7	40.2	38.9
Earnings before interest, income taxes, depreciation and amortisation		302.0	286.5
Depreciation on property, plant and equipment		127.5	115.8
Amortisation on intangible assets		40.7	36.3
Earnings before interest and income taxes (EBIT)		133.8	134.4
Financial income		3.6	2.0
Financial expenses		19.2	20.8
Profit for the year before taxes		118.2	115.6
Income taxes		21.7	21.6
Profit for the year		96.5	94.0

Statutory financial statements

Balance sheet

Assets

In millions of CHF	Notes	31.12.2024	31.12.2023
Cash and cash equivalents		354.8	111.1
Trade accounts receivable	<u>8</u>	414.1	222.3
Other receivables	<u>9</u>	19.2	19.0
Inventory		2.5	0.9
Prepaid expenses and accrued income	<u>10</u>	112.7	111.9
Short-term deficits arising from volume-and tariff-related timing differences		209.3	723.7
Assets held on a fiduciary basis	<u>11</u>	98.1	33.9
Current assets		1,210.7	1,222.8
Financial assets		–	0.9
Shareholdings	<u>12</u>	5.0	5.2
Property, plant and equipment	<u>13</u>	2,264.5	2,131.9
Intangible assets	<u>14</u>	256.8	240.0
Long-term deficits arising from volume-and tariff-related timing differences		104.3	611.9
Non-current assets		2,630.6	2,989.9
Assets		3,841.3	4,212.7

Equity and liabilities

In millions of CHF	Notes	31.12.2024	31.12.2023
Trade accounts payable	<u>15</u>	179.3	172.8
Current financial liabilities	<u>18</u>	405.2	510.0
Other liabilities	<u>16</u>	27.3	13.5
Accrued expenses and deferred income	<u>17</u>	98.3	110.8
Current provisions	<u>19</u>	0.1	0.1
Liabilities held on a fiduciary basis	<u>11</u>	98.1	33.9
Current liabilities		808.3	841.1
Non-current financial liabilities	<u>18</u>	1,620.9	2,026.1
Non-current provisions	<u>19</u>	1.8	1.8
Non-current liabilities		1,622.7	2,027.9

In millions of CHF	Notes	31.12.2024	31.12.2023
Liabilities		2,431.0	2,869.0
Share capital	20	334.5	334.5
Legal capital reserves		430.1	430.1
Reserves from capital contributions		430.1	430.1
Legal retained earnings		1.6	1.6
General legal reserves		1.6	1.6
Available earnings		644.1	577.5
Results carried forward		547.5	483.5
Profit for the year		96.5	94.0
Equity		1,410.3	1,343.7
Equity and liabilities		3,841.3	4,212.7

Statutory financial statements

Cash flow statement

In millions of CHF excluding balance sheet items held on fiduciary basis	Notes	2024	2023
Profit for the year		96.5	94.0
Financial expenses		19.2	20.8
Financial income		–3.6	–2.0
Current income taxes		21.7	21.6
Depreciation and amortisation		168.2	152.1
Change in inventory		–1.6	0.2
Change in trade accounts receivable		–191.8	12.3
Change in other receivables		–0.2	40.2
Change in prepaid expenses and accrued income		–0.8	16.7
Change in volume- and tariff-related timing differences		1,022.0	–621.8
Change in trade accounts payable		6.5	–220.6
Change in other current liabilities		13.8	12.8
Change in accrued expenses and deferred income		–3.5	–12.2
Interest received		2.0	0.6
Income taxes paid		–22.7	–20.6
Cash flow from operating activities		1,125.7	–505.9
Gross investments in property, plant and equipment		–287.3	–254.1
Congestion proceeds received for grid investments		–	216.6
Government grants		6.2	–
Net investments in property, plant and equipment		–281.1	–37.5
Gross investments in intangible assets		–36.4	–25.4
Congestion proceeds received for grid investments		–	21.9
Net investments in intangible assets		–36.4	–3.5
Dividends received		0.7	0.5
Cash flow from investing activities		–316.8	–40.5
Change in current financial liabilities		–510.0	248.9
Change in non-current financial liabilities		–	100.0
Issuing of bonds		–	200.0
Interest paid		–25.6	–16.5
Dividends paid		–30.0	–48.2
Cash flow from financing activities		–565.6	484.2

In millions of CHF excluding balance sheet items held on fiduciary basis	Notes	2024	2023
Foreign currency translation effect on cash and cash equivalents		0.4	0.5
Change in cash and cash equivalents		243.7	−61.7
Composition			
Cash and cash equivalents at beginning of period		111.1	172.8
Cash and cash equivalents at end of period		354.8	111.1
Change in cash and cash equivalents		243.7	−61.7

Statutory financial statements

Notes

1. Accounting principles

General

The financial statements for Swissgrid Ltd, Aarau, have been prepared in accordance with the Swiss Law on Accounting and Financial Reporting (Title 32 of the Swiss Code of Obligations). The valuation principles applied are described below.

Conversion of foreign currency items

The accounting records are maintained in the local currency (Swiss francs, CHF). All short-term monetary assets and liabilities recognised in foreign currencies are converted at the exchange rate as of the balance sheet date. Transactions in foreign currencies are converted at the exchange rate on the day the transaction took place. Foreign exchange gains and losses resulting from transactions in foreign currencies are recognised in the income statement and are presented in the same item as the underlying transaction.

Cash flow statement

«Cash and cash equivalents» form the basis for the presentation of the cash flow statement. The cash flow from operating activities is calculated using the indirect method.

Revenue recognition

The revenue and procurement items result from the activities defined in the Electricity Supply Act (ESA) and include services for the non-discriminatory, reliable and efficient operation of the transmission grid, in particular ancillary services and balance and congestion management.

Revenue is recognised in the income statement upon performance of Swissgrid's obligations. For ESA activities, the measurement of performance is mainly based on energy volumes measured directly on the transmission grid or reported by downstream grid levels. For certain revenue and procurement items, initial billing values are available six weeks after delivery at the earliest, thereby rendering accruals based on historical and statistical data, as well as on estimates, necessary for the revenue recognition of these items.

The activities defined in the Ordinance on the Establishment of a Hydropower Reserve (WResO) are intermediary transactions in accordance with the accounting regulations, which is why only the value of the services provided by the company itself is reported in the power reserve segment.

Activities according to ESA/WResO

Volume- and tariff-related timing differences (surpluses and deficits)

According to Art. 14 of the Electricity Supply Act (ESA), grid usage costs must be allocated to users on a user-pays basis. The tariffs for a financial year are determined based on planned costs. Due to price and volume deviations, actual expenses and income vary from the tariff calculation on both the revenue and procurement side. This results in surpluses or deficits, i.e. the tariff revenues from a financial year are higher or lower than the actual expenses incurred during the same period. These volume- and tariff-related timing differences are transferred to the balance sheet and taken into account in cost and revenue calculations for future tariff periods. The expected reduction in volume- and tariff-related timing differences within twelve months of the balance sheet date is recognised as short-term surpluses or deficits in the balance sheet.

EBIT regulated under ESA

Earnings before interest and taxes (EBIT) from ESA activities are defined in Article 15 of the Electricity Supply Act (ESA) for chargeable costs, and are now defined in Article 18a of the Electricity Supply Ordinance (ESO) for interest on volume- and tariff-related timing differences arising from the 2024 financial year onwards. EBIT corresponds to the interest on invested operating assets (IOA) at the weighted average cost of capital rate for the current reporting year ($= WACC_{t+0}$), the interest on the volume- and tariff-related timing differences arising from the 2024 financial year onwards at the borrowing cost rate t_{+2} included in $WACC_{t+2}$ and taxes. In accordance with ElCom directive 03/2024, volume- and tariff-related timing differences up to and including the end of the 2023 financial year remain subject to interest at $WACC_{t+2}$ until they have been fully eliminated, which also has an impact on EBIT.

Invested operating assets consist of net current assets calculated on a monthly basis, as well as the property, plant and equipment and intangible assets as at the end of the financial year. The weighted average cost of capital rate is based on the current international practice of the capital cost concept with reference to the Capital Asset Pricing Model (CAPM). Besides considering the findings of financial market theory, the regulatory framework conditions in Switzerland and the current situation in the money and capital market are also taken into account. The weighted average cost of capital rate for 2024 ($WACC_{t+0}$) determined by the authorities on the basis of this calculation method is 4.13%, and the borrowing cost rate t_{+0} included in $WACC_{t+0}$ is 2.25%. The weighted average cost of capital rate for 2026 ($WACC_{t+2}$) applicable for the 2024 financial year is 3.43%, and the borrowing cost rate t_{+2} included in $WACC_{t+2}$ is 2.0%.

EBIT according to WResO

From the 2024 financial year, the chargeable costs for the power reserve are calculated in the same way as ESA activities in accordance with Article 15 ESA. However, interest on the assets required for the power reserve is calculated according to the borrowing cost rate t_{+0} included in $WACC_{t+0}$. In accordance with Article 18a ESO, interest on the volume- and tariff-related timing differences arising since 1 January 2024 is calculated at the borrowing cost rate t_{+2} . As previously, no interest is calculated on the volume- and tariff-related timing differences up to and including the end of the 2023 financial year until they have been fully eliminated. EBIT according to WResO is calculated from the interest on the assets required and the volume- and tariff-related timing differences arising since 1 January 2024.

Chargeability of operating and capital costs

ElCom has the right to verify ex post the chargeability of Swissgrid's operating and capital costs for tariff-setting purposes. In case of an ex post cost adjustment, an appeal can be lodged with the Federal Administrative Court with an ultimate possibility of appeal to the Federal Supreme Court. A cost adjustment impacting Swissgrid's operating result is applied whenever no appeal is lodged, or whenever an appeal's prospects for success are judged to be less than 50% on the basis of a reappraisal, or whenever a legally binding ruling is issued.

Property, plant and equipment

Property, plant and equipment are recognised at the cost of acquisition or production less accumulated amortisation and any impairment losses. Significant spare parts which are likely to be used for a longer period and whose use only takes place in connection with a non-current asset item are recognised in non-current assets and depreciated over the remaining useful life of the relevant asset.

Depreciation/amortisation is calculated using the straight-line method on the basis of the estimated useful technical and economic service life. The service life is within the following ranges:

- Lines: 15 to 60 years

- Substations: 10 to 35 years
- Buildings and expansions: 5 to 50 years
- Other property, plant and equipment: 3 to 8 years
- Construction in progress and properties: only applicable in the case of an impairment loss

Intangible assets

Intangible assets are recognised at the cost of acquisition or production less accumulated amortisation and any impairment losses. Depreciation/amortisation is calculated using the straight-line method on the basis of the estimated useful technical and economic service life.

The service life is within the following ranges:

- Rights of use: contract term
- Software: 3 to 5 years
- Intangible assets under development: only applicable in the case of an impairment loss

The merger losses (goodwill) resulting from the mergers on 3 January 2013 and 5 January 2015 are also recognised in this item. Goodwill is depreciated on a straight-line basis over 20 years and is reviewed annually for impairments. The rights of use include easements and rights of use to mixed-use assets that were compensated once before 1 June 2019.

Impairment losses

The value of property, plant and equipment and intangible assets is reviewed annually. If there is an indication of an impairment loss, the book value is reduced to the realisable value and an impairment loss is charged to the results of the period.

Construction in progress/intangible assets under development

Construction in progress and intangible assets under development are non-current assets that are not yet completed or not yet operational. All items of property, plant and equipment and intangible assets, including self-constructed assets, are classified as non-current assets. As of each balance sheet date, a review is performed to determine whether any construction in progress or intangible assets under development have to be impaired. These are recognised as impairment losses in the year of completion. Ordinary depreciation or amortisation of these assets begins once they are completed or are ready for operation.

Financial assets

Financial assets are measured at acquisition costs less any impairment losses. Employer contribution reserves without conditional renounced use are also recognised in financial assets.

Shareholdings

Shareholdings are measured at acquisition costs less any impairment losses. These include shareholdings with a capital share of over 20%, but which do not have a significant impact on the financial statements, as well as shareholdings with a capital share of less than 20% that do have a significant impact.

Inventory

Inventory includes waste material for maintaining the grid systems. Inventory is measured at the lower of acquisition cost or market price.

Accounts receivable

Accounts receivable are reported at their nominal value less any impairment losses required for business reasons.

Cash and cash equivalents

Cash and cash equivalents include cash in hand, cash at banks and deposits at banks maturing in 90 days or less. They are recognised at their nominal value.

Bonds

Bonds issued on the capital market are recognised at their nominal value. Deviations from the nominal value in the case of below- or above-par issues are recognised as accruals and deferrals and are reversed on a straight-line basis over the term of the bond.

Liabilities

Liabilities are recognised at their nominal value.

Provisions

Provisions are recognised if there is a probable obligation based on an event that took place prior to the balance sheet date, the amount and/or due date of which is uncertain but capable of being estimated.

Contingent liabilities

Contingent liabilities are measured as of the balance sheet date. A provision is reported if a cash outflow without a usable countervalue is probable and assessable. Otherwise, contingent liabilities are disclosed in the notes to the financial statements.

Interest on borrowed capital

Interest on borrowed capital is recognised as an expense in the period in which it arises.

Income taxes

Current income taxes are calculated based on the taxable results on an accrual basis.

Derivative financial instruments

Swissgrid may use derivative financial instruments to hedge against currency and market price risks. If the conditions are met, Swissgrid will apply hedge accounting to hedge expected future cash flows. The instruments used for this purpose will be disclosed in the notes to the financial statements until the underlying transaction is realised.

2. Estimation uncertainty

Financial-statement reporting requires estimates and assumptions to be made that may have a significant impact on Swissgrid's financial statements. With respect to assets and liabilities recognised in the balance sheet, accruals and deferrals (prepaid expenses and accrued income/accrued expenses and deferred income) and volume- and tariff-related timing differences in particular are based on various assumptions and estimates that may necessitate significant adjustments. This is due to specific volumes not being available for certain revenue and procurement items when the financial statements are prepared, as well as regulatory uncertainties. The volume- and tariff-related timing differences are also influenced by estimates in the allocation of operating expenses to the segments.

More information is given in the sections on «Revenue recognition» and «Activities according to ESA/WResO»

in [Note 1](#), as well as in [Note 25](#).

3. Net turnover and procurement costs

Net turnover

For the 2024 financial year, net turnover across all segments amounted to CHF 1,825.1 million. This represents an increase of CHF 605.9 million in relation to the previous year's figure of CHF 1,219.2 million. The rise is mainly attributable to the CHF 417.8 million and CHF 156.2 million increase in net turnover in the general ancillary services and active power loss segments respectively. Both segments recorded higher tariff income and were allocated higher pro rata auction income to cover the chargeable costs of the transmission system. The increase in tariff income is due to the regulatory requirement to reduce the deficit from previous years. In addition to higher tariff income and auction income, higher revenue from balance group balancing energy in the general ancillary services segment also led to a rise in net turnover.

Procurement costs

At CHF 684.5 million, procurement costs were CHF 215.4 million lower than the previous year's figure of CHF 899.9 million. This decrease is due to a reduction in costs of CHF 186.1 million and CHF 48.3 million respectively in the general ancillary services and active power loss segments. The reduction in the general ancillary services segment is attributable to lower costs for control power provision. The decrease in the active power loss segment is due to lower procurement costs for the energy required to compensate for active power losses. By contrast, higher national redispatch costs in the grid usage segment led to an increase of CHF 29.1 million in procurement costs. Costs in the reactive energy segment remained at the previous year's level.

More detailed comments on the individual segments, including the effects on the volume- and tariff-related timing differences, can be found in [Note 4](#) to the financial statements in accordance with Swiss GAAP FER.

4. Other operating income

In millions of CHF	2024	2023
Congestion management clearing	16.2	16.3
Other	2.5	3.6
	18.7	19.9

5. Materials and third-party supplies

In millions of CHF	2024	2023
Grid maintenance	23.9	25.1
Grid system control	0.5	0.4
Other services in the grid area	19.4	23.5
Expenses for projects, advisory and non-cash benefits	58.0	56.9
Hardware/software maintenance	18.3	17.9
	120.1	123.8

Other grid-related services consist of remuneration for easements, including easement management services

performed by third parties and operating expenses for mixed-use plants.

6. Personnel expenses

In millions of CHF	2024	2023
Salaries, bonuses, allowances	116.9	105.5
Employee insurance	23.3	20.8
Other personnel expenses	5.2	4.8
	145.4	131.1

Other personnel expenses include, in particular, the costs of training and further education, recruitment, lump-sum expenses, as well as contributions to external catering for employees.

The average number of full-time equivalents exceeded 250 in the reporting period, as was the case in the previous year.

7. Other operating expenses

In millions of CHF	2024	2023
Rental and occupancy costs	11.9	10.1
Ground rents	4.7	4.2
Rental costs for communication equipment/telecommunication expenses	2.3	3.4
Board of Directors' fees and expenses incl. social costs	0.9	0.8
Actual expenses for travel and subsistence for employees and third parties	2.5	2.4
Fees, dues and licences	4.9	4.8
Insurance	2.5	2.4
Other administrative costs	10.5	10.8
	40.2	38.9

Other administrative costs included borrowing costs of CHF 6.2 million (previous year: CHF 6.1 million), which were incurred in connection with the additional tasks transferred to Swissgrid by the federal government in the power reserve segment and represent chargeable costs in accordance with Art. 22 WResO.

Board of Directors' fees and expenses represent fixed gross remuneration including the deduction of any employee contributions to the employee pension plan. The remuneration paid to the Chairman of the Board of Directors amounted to CHF 250,000, including lump-sum expenses (previous year: CHF 250,000). The remaining members of the Board of Directors received remuneration of between CHF 57,500 and CHF 77,500 pro rata temporis for 2023, including lump-sum expenses (previous year: between CHF 57,500 and

CHF 77,500).

Further information on the members of the Board of Directors can be found in the Corporate Governance Report.

8. Trade receivables

As at 31 December 2024, trade receivables included CHF 107.2 million (previous year: CHF 57.2 million) in relation to companies with a direct or indirect shareholding in Swissgrid.

9. Other receivables

Other receivables included the receivable for the 2024 enforcement costs for handling congestion management amounting to CHF 16.2 million (previous year: CHF 16.3 million).

10. Prepaid expenses and accrued income

In millions of CHF	31.12.2024	31.12.2023
Accrued revenue for supplies made	97.1	93.4
Other	15.6	18.5
	112.7	111.9

In particular, other prepaid expenses and accrued income include the discount on bond issues and financing and issue costs, which are amortised over the term of the financing instrument.

11. Balance sheet items held on a fiduciary basis

Pursuant to a letter of approval dated 7 February 2023, income from auctions in 2024 amounting to CHF 324.8 million (previous year: CHF 351.7 million) was paid to Swissgrid. At CHF 98.1 million, the balance sheet item was CHF 64.2 million above the previous year's figure of CHF 33.9 million. The increase is due to the higher level of outstanding trade accounts receivable, trade accounts payable and cash and cash equivalents as at 31 December 2024.

12. Shareholdings

		Share capital in m.	Share in %
Joint Allocation Office (JAO)	A	0.125	4.0
TSCNET Services GmbH	B	0.040	6.25
Holding des Gestionnaires de Réseau de Transport d'Electricité SAS (HGRT)	C	52.119	5.0
Pronovo AG	D	0.100	100.0

		Share capital in m.	Share in %
ecmt AG	E	0.100	31.0
Equigy B.V.	F	0.050	20.0

Letters used for locations and currencies:

A = Luxembourg (Lux) | Currency EUR

B = Munich (D) | Currency EUR

C = Paris (F) | Currency EUR

D = Frick (CH) | Currency CHF

E = Winterthur (CH) | Currency CHF

F = Arnheim (NL) | Currency EUR

Swissgrid is not legally obliged to prepare consolidated financial statements. Either the control principle necessary to prepare a consolidated financial statement (Art. 963 of the Swiss Code of Obligations (CO)) is not met, or the subsidiaries do not have a material influence on Swissgrid's financial statements. In particular, Pronovo AG is regulated by the Swiss Federal Office of Energy (SFOE) and is explicitly excluded from any consolidation with Swissgrid based on Art. 64 (5) of the Energy Act (EnA).

The figures are unchanged from the previous year.

13. Property, plant and equipment

The book values of the individual categories are as follows:

In millions of CHF	31.12.2024	31.12.2023
Construction in progress	400.5	276.3
Substations	613.4	647.0
Lines	1,067.3	1,048.8
Properties and buildings	163.3	155.5
Other property, plant and equipment	20.0	4.3
	2,264.5	2,131.9

14. Intangible assets

The book values of the individual categories are as follows:

In millions of CHF	31.12.2024	31.12.2023
Intangible assets under development	27.2	3.7
Usage rights	57.9	62.5
Software	28.5	12.7
Merger losses (goodwill)	143.2	161.1
	256.8	240.0

15. Trade accounts payable

As at 31 December 2024, trade accounts payable included CHF 70.9 million (previous year: CHF 65.6 million) in relation to companies with a direct or indirect shareholding in Swissgrid. No liabilities existed in relation to the external auditor as at 31 December 2024 (previous year: CHF 0.1 million).

16. Other liabilities

In millions of CHF	31.12.2024	31.12.2023
Value-added tax	27.0	10.8
Security deposits on blocked bank accounts	0.1	0.7
Other	0.2	2.0
	27.3	13.5

17. Accrued expenses and deferred income

In millions of CHF	31.12.2024	31.12.2023
Accrued expenses for supplies made	52.1	61.2
Personnel expenses and employee insurance scheme	18.9	15.4
Accrued interest and premium from issued bonds	13.7	19.0
Taxes	13.6	15.2
	98.3	110.8

18. Financial liabilities

In millions of CHF	31.12.2024	31.12.2023
Bonds	1,915.0	1,915.0
Convertible loans	11.0	41.1
Loans	100.1	580.0
Total financial liabilities	2,026.1	2,536.1
Current portion	405.2	510.0

Bonds

Nominal amount in CHF	Interest rate	Term	Expiration at nominal value
350 million	1.625%	2013–2025	30.01.2025
150 million	0.000%	2021–2026	30.06.2026
200 million	1.900%	2023–2026	30.06.2026
175 million	1.100%	2022–2027	30.06.2027

Nominal amount in CHF	Interest rate	Term	Expiration at nominal value
150 million	0.000%	2020–2028	30.06.2028
150 million	0.625%	2015–2030	25.02.2030
150 million	0.200%	2020–2032	30.06.2032
110 million	0.050%	2021–2033	30.06.2033
125 million	0.150%	2020–2034	30.06.2034
130 million	0.125%	2020–2036	30.06.2036
100 million	0.200%	2021–2040	29.06.2040
125 million	0.050%	2019–2050	30.06.2050

The maturities of bonds are as follows:

In millions of CHF	Interest rate (bandwidth)	Year 1	Year 2–5	more than 5 years	
Balance at 31 December 2024					
Bonds	0.000–1.900%	350.0	675.0	890.0	1,915.0
Balance at 31 December 2023					
Bonds	0.000–1.900%	–	1,025.0	890.0	1,915.0

Convertible loans and loans

Convertible loans have a term of nine years and one-fifth of the loans become payable annually from year five. Moreover, loans are also assigned a conversion right by Swissgrid in the event of occurrence of contractually defined events and an associated conversion obligation by the creditors. Creditors are compensated by a premium on the interest rate for the conversion right assigned to Swissgrid. Convertible loans are recognised in full in liabilities.

The interest conditions and maturities of convertible loans and loans are as follows:

In millions of CHF	Interest rate (bandwidth)	Year 1	Year 2–5	more than 5 years	Total
Balance at 31 December 2024					
Convertible loans	3.36–3.41%	5.2	5.8	–	11.0
Loans	0.00–2.40%	50.0	50.0	0.1	100.1
Balance at 31 December 2023					
Convertible loans	3.36–3.41%	30.0	11.0	–	41.0
Loans	0.00–2.40%	480.0	100.0	0.1	580.1

Convertible loans and loans are assessed at their nominal value.

As at 31 December 2024, convertible loans of CHF 10.8 million (previous year: CHF 40.1 million) existed towards companies with a direct or indirect shareholding in Swissgrid.

19. Provisions

In millions of CHF	31.12.2024	31.12.2023
Dismantling	1.5	1.5
Procedural costs	0.4	0.4
Total provisions	1.9	1.9
Current portion	0.1	0.1

Procedural costs

The provision amount includes the estimated compensation payable to parties and the court costs imposed on Swissgrid due to the administrative procedures in conducting proceedings.

20. Share capital and reserves from capital contributions

The share capital consists of 334,495,151 (previous year: 334,495,151) fully paid-up registered shares with a par value of CHF 1 per share.

21. Intermediary business

This segment handles the orders regulated by the Winter Reserve Ordinance (WResO) for the use of the hydropower reserve and reserve power plants, pooled emergency power groups and combined heat and power plants (CHP plants). In accordance with the accounting regulations, these activities are intermediary transactions, which is why only the value of the services provided by the company itself (operating and capital costs) and the associated net turnover are reported in the power reserve segment.

The expenses resulting from the intermediary business amounted to CHF 186.5 million in the reporting year (previous year: CHF 403.2 million). In addition, tariff income of CHF 645.2 million was received for the first time in 2024.

22. Derivative financial instruments

Swissgrid made use of derivative financial instruments to partially hedge against market price risk from future procurement costs for active power losses. The nominal amount of these instruments was EUR 116.1 million or CHF 109.3 million (previous year: EUR 208.5 million or CHF 193.1 million). As at 31 December 2024, the positive replacement values stood at EUR 3.3 million or CHF 3.1 million (previous year: EUR 0.1 million or CHF 0.1 million) and the negative replacement values amounted to EUR 15.9 million or CHF 15.0 million (previous year: EUR 97.0 million or CHF 89.8 million), resulting in net negative replacement values of EUR 12.6 million or CHF 11.9 million (previous year: EUR 96.9 million or CHF 89.7 million).

23. Other off-balance sheet commitments

Off-balance-sheet lease commitments

Swissgrid has the following off-balance-sheet lease commitments for vehicles and office equipment:

In millions of CHF	Year 1	Year 2–5	Total
31.12.2024	1.0	2.8	3.8
31.12.2023	1.2	0.9	2.1

Long-term rental contracts

Long-term rental contracts with fixed terms exist with several parties. These result in the following obligations:

In millions of CHF	Year 1	Year 2–10	More than 10 years	Total
31.12.2024	6.9	40.0	55.7	102.6
31.12.2023	6.3	40.8	59.4	106.5

The long-term rental obligations primarily include the rental commitments for Swissgrid's head office in Aarau.

24. Legal proceedings

Swissgrid's legal mandate and business activities expose the company to costs that can be passed on to the lower grid levels and end consumers in the form of tariff revenues if ElCom deems the costs to be chargeable. ElCom has the right to verify ex post the chargeability of Swissgrid's costs for tariff-setting purposes.

At present, ElCom has not initiated any proceedings to examine Swissgrid's chargeable costs. Swissgrid's Board of Directors and Executive Board believe that all costs were incurred within the framework of Swissgrid's legal mandate and should therefore qualify as chargeable. Based on this assessment, Swissgrid has treated all operating and capital costs as chargeable and consequently recognised them in full in the volume- and tariff-related timing differences. If, contrary to Swissgrid's assessment, the costs claimed are ruled to be non-chargeable, this would be reflected in future financial statements.

Third-party proceedings

The financial impact of third-party proceedings in which Swissgrid is involved are included in Swissgrid's financial statements if the Swiss GAAP FER criteria for recognition have been met. However, they have no direct impact on Swissgrid's results as they are included in the volume- and tariff-related timing differences.

25. Audit fees

In the 2024 financial year, the fees for auditing services amounted to CHF 198,900 (previous year: CHF 214,000) and CHF 34,000 (previous year: CHF 146,200) for other services.

26. Government grants

In the reporting year, Swissgrid received government grants related to assets totalling CHF 6.2 million for the modernisation and maintenance of the grid, which were offset against the asset (no government grants were received in the previous year).

27. Events after the balance sheet date

There are no events after the balance sheet date that would require disclosure or recognition in the 2024 financial statements.

On 14 April 2025, the Board of Directors of Swissgrid Ltd approved the 2024 financial statements for submission to the General Assembly and for publication.

Statutory financial statements

Proposed appropriation of retained earnings

The Board of Directors proposes to the General Assembly that the retained earnings be appropriated as follows:

CHF	2024	2023
Balance carried forward from the previous year	547,525,118.61	483,537,900.53
Profit for the year	96,529,871.40	93,993,597.53
Retained earnings	644,054,990.01	577,531,498.06
Appropriation to the general legal reserves	—	—
Dividend payment	51,883,626.84	30,006,379.45
Balance to be carried forward	592,171,363.17	547,525,118.61
Total appropriation	644,054,990.01	577,531,498.06

Since legal capital reserves and legal retained earnings have reached 50% of the share capital, no more funds will be allocated to these accounts.

Aarau, 14 April 2025

On behalf of the Board of Directors:

Adrian Bult, Chairman

Statutory financial statements

Report of the Statutory Auditor



Report of the statutory auditor to the General Meeting of Swissgrid AG, Aarau

Report on the audit of the statutory financial statements

Opinion

We have audited the financial statements of Swissgrid AG (the Company), which comprise the income statement for the year ended 31 December 2024, the balance sheet as at 31 December 2024 and the cash flow statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements comply with Swiss law and the Company's articles of incorporation.

Basis for opinion

We conducted our audit in accordance with Swiss law and Swiss Standards on Auditing (SA-CH). Our responsibilities under those provisions and standards are further described in the 'Auditor's responsibilities for the audit of the financial statements' section of our report. We are independent of the Company in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach



Overview

Overall materiality: CHF 31.1 million

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the Company, the accounting processes and controls, and the industry in which the Company operates.

As key audit matters the following areas of focus have been identified:

- Appropriateness of the calculation of the result from regulated business (EBIT and volume- and tariff-related timing differences)
- Completeness and existence of net turnover and procurement costs

Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall materiality for the financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the financial statements as a whole.

Overall materiality	CHF 31.1 milion
Benchmark applied	Total "assets"
Rationale for the materiality benchmark applied	We chose total "assets" as the benchmark for determining materiality, as we believe that this is the figure that best reflects the company's purpose of ensuring the efficient operation of the transmission grid.

Audit scope

We designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we considered where subjective judgements were made; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Appropriateness of the calculation of the result from regulated business (EBIT and volume- and tariff-related timing differences)

Key audit matter	How our audit addressed the key audit matter
In the 2024 financial year, Swissgrid reported earnings before interest and taxes (EBIT) of CHF 133.8 million (previous year: CHF 134.4 million), the components of which are governed in the company's regulated business area by the provisions of the Federal Electricity Supply Act (ESA) and the Ordinance on the Establishment of an Electricity Reserve for the Winter (WResO), as well as requirements of the Federal Department of the Environment, Transport, Energy and Communications (DETEC). The change in volume- and tariff-related timing differences totalled CHF -580.8 million (previous year: CHF +218.6 million). Further information on the regulated business, EBIT and the volume- and tariff-related volume- and tariff-related timing differences can be found in the notes to the statutory financial statements in "1. Accounting principles", "2. Estimation uncertainty" and "24. Legal proceedings". Earnings before interest and taxes (EBIT) from ESA activities are legally defined for the chargeable costs in Article 15 of the ESA and for the interest on volume- and tariff-related timing differences arising from the 2024 financial year onwards in Article 18a of the Electricity Supply Ordinance (ESO). The corresponding calculation is described in the accounting principles "EBIT regulated under ESA". Volume- and tariff-related timing differences arise due to volume and price variances between actual	With regard to the calculation of EBIT and volume- and tariff-related timing differences, we obtained an in-depth understanding of the company's accounting policies, assumptions and estimates, processes and methods and, in particular, performed the following audit procedures: • Checking whether the parameters used in the calculation of the earnings from the regulated business, such as WACC, correspond to the rate specified by DETEC. • Mathematical recalculation and plausibility check of the calculation of the volume- and tariff-related timing differences. • Assessing and testing the key controls provided for the calculation. • Verifying compliance with the relevant legal, regulatory and judicial requirements. We discussed the results of the audit procedures performed with the Finance and Audit Committee.

expenses and income as well as on the tariff-based sales and procurement side. The tariffs are determined on the basis of planned costs. These volume- and tariff-related timing differences are recognised in the balance sheet as “surpluses or deficits” and reversed in future tariff periods in the income statement as “changes in volume- and tariff-related timing differences”.

The risk that the calculation of EBIT and the volume- and tariff-related timing differences are not determined as intended is a key audit matter, as this has a significant impact on the calculation of tariffs and the company's result.

Completeness and existence of net turnover and procurement costs

Key audit matter	How our audit addressed the key audit matter
In the 2024 financial year, Swissgrid reported net turnover of CHF 1,825.1 million (previous year: CHF 1,219.2 million) and procurement costs of CHF 684.5 million (previous year: CHF 899.9 million). Further information on net turnover and procurement costs can be found in the notes to the statutory financial statements in “1. Accounting principles” and “3. Net turnover and procurement costs”. Revenue is recognised in the income statement when the service is provided. For the activities defined in the ESA, the measurement of performance is mainly based on energy volumes measured directly on the transmission grid or registered by downstream grid levels. For individual sales and procurement items, the first billing values are available no earlier than six weeks after the service has been provided, meaning that accruals, estimates and assumptions based on historical and statistical data are required to recognise sales and procurement costs Net turnover and procurement costs are key figures in financial reporting and are therefore the focus of internal and external stakeholders. We consider the completeness and existence of net turnover and procurement costs to be a key audit matter due to their volume and the estimates and assumptions required to determine them.	We obtained an in-depth understanding of the company's accounting policies, assumptions and estimates, processes and methods with regard to revenue recognition and the recognition of procurement costs and, in particular, performed the following audit procedures: • IT-supported verification of the data consistency of the basic data used for revenue accrual and thus verification of the completeness of the invoiced net turnover and the procurement costs. • Checking the correct transfer of data between the various systems. • Testing the effectiveness of the key controls in the process of revenue accruals and procurement costs as at the balance sheet date. • Performing random checks of the existence of the transaction. • Plausibility check of changes in procurement items. We discussed the results of the audit procedures performed with the Finance and Audit Committee.

Other matter

The financial statements for the year ended 31 December 2023 were audited by another statutory auditor who expressed an unmodified opinion on those financial statements on 15 April 2024.

Other information

The Board of Directors is responsible for the other information. The other information comprises the information included in the annual report, but does not include the statutory financial statements, the financial statements Swiss GAAP FER and our auditor's reports thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Board of Directors' responsibilities for the financial statements

The Board of Directors is responsible for the preparation of financial statements in accordance with the provisions of Swiss law and the Company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and SA-CH will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Swiss law and SA-CH, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them regarding all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit

matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on other legal and regulatory requirements

In accordance with article 728a para. 1 item 3 CO and PS-CH 890, we confirm the existence of an internal control system that has been designed, pursuant to the instructions of the Board of Directors, for the preparation of the financial statements.

Based on our audit according to article 728a para. 1 item 2 CO, we confirm that the Board of Directors' proposal complies with Swiss law and the Company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

PricewaterhouseCoopers AG

Thomas Wallmer
Licensed audit expert
Auditor in charge

Pascal Wintermantel
Licensed audit expert

Zürich, 14 April 2025

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Corporate Governance

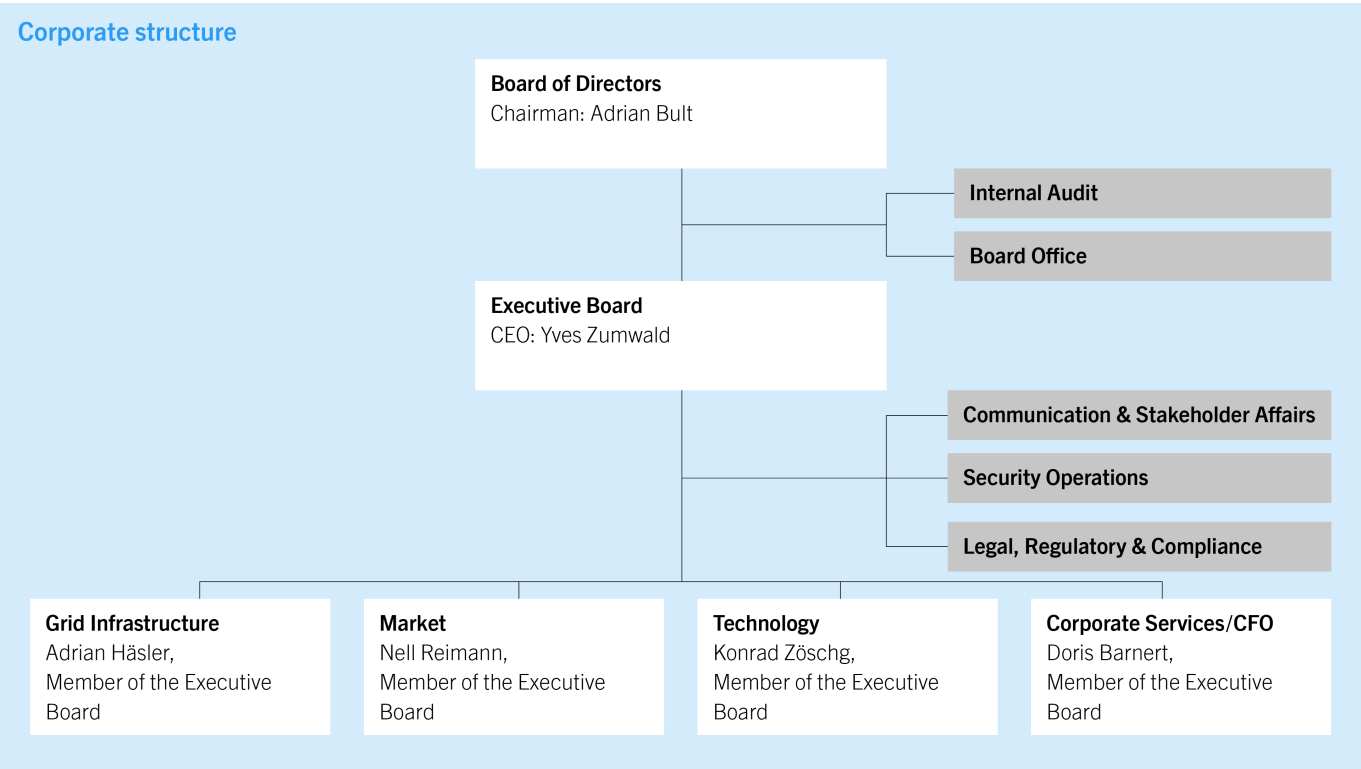
The Board of Directors and the Executive Board of Swissgrid Ltd (hereinafter Swissgrid) place great importance on good corporate governance. The following lists are based on the Swiss Code of Best Practice for Corporate Governance. All information relates to the reporting date of 31 December 2024, unless specified otherwise.

GRI 2-1

Corporate structure and shareholders

Corporate structure

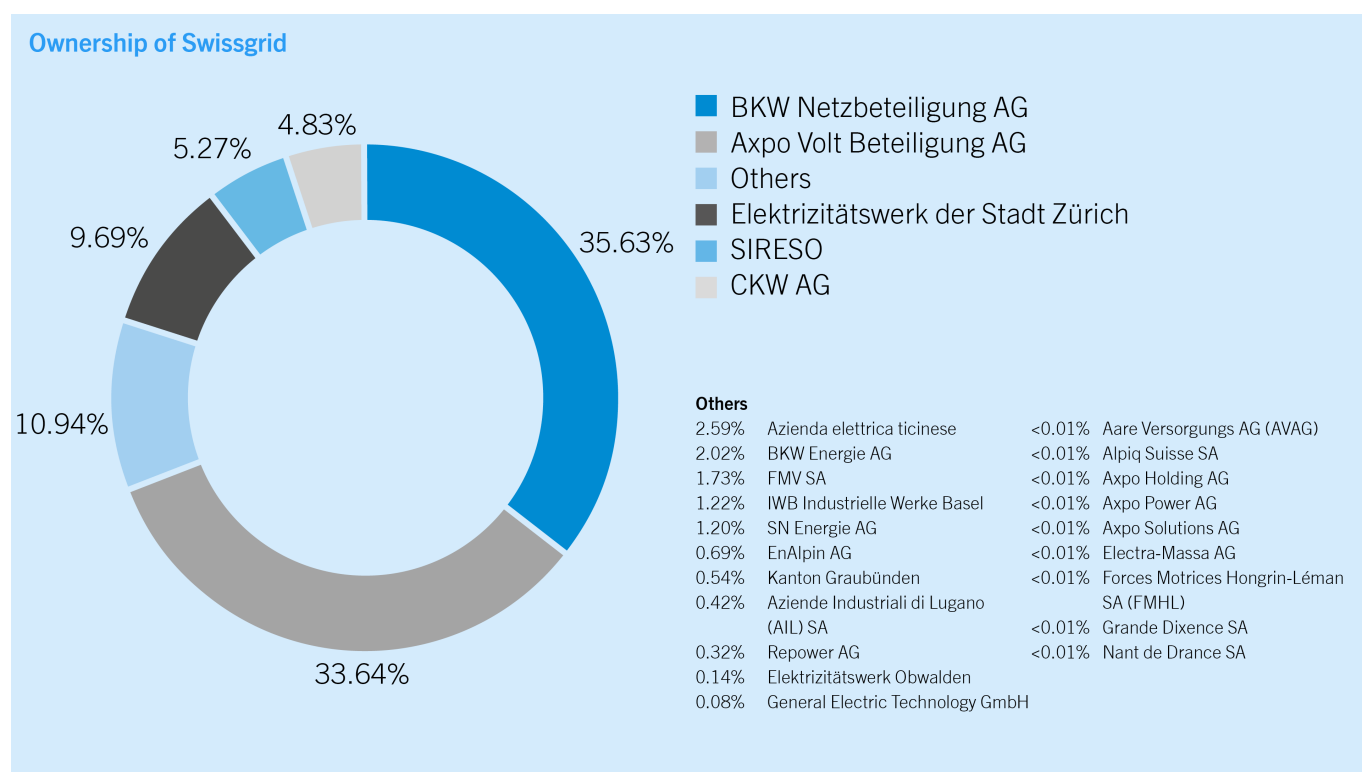
Swissgrid’s corporate structure is shown below:



The shareholdings of Swissgrid are listed in paragraph 12 of the notes on the statutory financial statements. Swissgrid holds 100% of the shares in the non-consolidated subsidiary Pronovo AG. In accordance with Art. 64 of the Energy Act, Pronovo AG is the responsible enforcement agency for guarantees of origin, the feed-in tariff system, one-off remuneration activities, additional cost financing and other tasks assigned by the Federal Council. It is also responsible for the collection of grid premiums in this respect. Pronovo AG prepares separate annual reports, which can be accessed at www.pronovo.ch.

Swissgrid ownership structure

As at 31 December 2024 (all figures rounded). The current shareholder structure can be viewed online at www.swissgrid.ch.



Cross shareholdings

No cross shareholdings currently exist.

Capital structure

Capital and restriction on transferability

The ordinary share capital as at 31 December 2024 consists of 334,495,151 registered shares with a nominal value of CHF 1 per share (divided into 167,247,576 A registered shares and 167,247,575 B registered shares). The conditional share capital as at 31 December 2024 consists of a maximum of 112,939,487 fully paid-up registered shares (half A registered shares and half B registered shares), each with a nominal value of CHF 1. The conditional share capital relates to received convertible bonds that Swissgrid used to finance the transfer of the transmission grid.

Creditors can exercise conversion rights over a maximum of 20 years. Shareholders have no pre-emptive rights. Shareholder advance subscription rights are also excluded, as the convertible bonds are financing the takeover of grid companies transferred as contributions in kind or individual system elements, or the simple and rapid improvement of Swissgrid's capital resources.

No authorised capital exists. According to Art. 18 Para. 5 of the Electricity Supply Act, the company's shares may not be listed on a stock exchange. The Board of Directors maintains a share register listing the names and addresses of the owners and beneficiaries. Only shareholders or beneficiaries listed in the share register are recognised by the company and are authorised to exercise their shareholder rights. The status of the entries in the share register on the 20th day prior to the General Assembly is decisive for determining

entitlement to participation and representation at the General Assembly.

According to Art. 18 Para. 3 of the Electricity Supply Act, the majority of the share capital and the associated voting rights must be directly or indirectly held by the cantons and municipalities. In the event of share transfers (sale, gift, exercise of pre-emptive rights and purchase rights, etc.), these majorities must be retained. If an intended transaction breaches one of these majority ownership requirements, the Board of Directors must not grant its approval.

There are no participation or profit-sharing certificates and no options were issued.

Capital changes

Further information on the share capital and capital changes in the last two years is shown in the statement of changes in equity in the Swiss GAAP FER financial statements.

GRI 2-9

Board of Directors

Members of the Board of Directors, additional activities and affiliations



From top left to bottom right: Adrian Bult, Regula Wallimann, Mario Cavigelli, Felix Graf, Martin Koller, Benedikt Loepfe, Claude Nicati, Roberto Pronini, Stefan Witschi



Adrian Bult

Chairman, independent member, born in 1959, Swiss

Adrian Bult, lic. oec., has been a member of the Swissgrid Board of Directors since 2006 and its Chairman since 2012. Between 2007 and 2012, he was a member of the Executive Board (COO) at Avaloq Evolution AG. Until 2007, he was the Head of IT Telecom PTT and was later a member of the Group management of Swisscom, initially as CIO, then as CEO Swisscom Fixnet and finally as CEO Swisscom Mobile. Before this, he sat on the Executive Board of IBM Switzerland.

Affiliations President of the Bank Council at Basler Kantonalbank; Chairman of the Board of Directors at AdNovum AG, NEVIS Security AG and Amrop Executive Search AG; member of the Board of Directors at Alfred Müller AG, GARAIO REM AG and SWICA.



Regula Wallimann

Vice-Chairwoman, independent member, born in 1967, Swiss

Regula Wallimann, lic. oec. HSG, has been a member of the Swissgrid Board of Directors since 2017, and Vice-Chairwoman since 2022. She has been an independent financial advisor since April 2017. Prior to this, she worked for KPMG AG for 24 years. Between 2003 and 2017, she was the Global Lead Partner responsible for auditing international companies and managed audit teams in the areas of tax, IT and treasury and compliance, among others.

Affiliations Member of the Board of Directors at Straumann Holding AG, Institut Straumann AG, Adecco

Group AG, Helvetia Holding AG, Helvetia Schweizerische Versicherungsgesellschaft AG, Helvetia Schweizerische Lebensversicherungsgesellschaft AG and Radar Topco S.à.r.l., Luxembourg (including the Swissport Group); member of the Advisory Board of the Institute for Accounting, Controlling and Auditing ACA-HSG at the University of St. Gallen.



Mario Cavigelli

Board of Directors, cantonal representative, born in 1965, Swiss

Mario Cavigelli, Dr. iur., has been a member of the Swissgrid Board of Directors since 2024. He has been an independent consultant to private and public companies and institutions since 2023. Between 2011 and 2022, he was a member of the Government of the Canton of Grisons and Head of the Department of Infrastructure, Energy and Mobility. From 2012 to 2016 and 2016 to 2022, he was also President of the Conference of Cantonal Energy Directors (EnDK) and of the Government Conference of the Mountain Cantons (RKGK). He was previously a lawyer/partner in a law firm in Chur.

Affiliations Chairman of the Board of Directors of Rhätische Bahn AG, RhB Immobilien AG and Catram AG; Chairman of the Administrative Commission of the Samedan Regional Airport infrastructure company.



Felix Graf

Board of Directors, independent member, born in 1967, Swiss

Felix Graf, Dr. sc. nat. ETH (physics), has been a member of the Swissgrid Board of Directors since 2022. He has been CEO of the NZZ company since 2018. He was CEO of CKW AG and a member of the Group

management of Axpo Holding between 2014 and 2018. He was Head of the Energy business unit and a member of the Executive Board at CKW AG between 2011 and 2014. Prior to this, he held senior positions at Teleclub, Swisscom and McKinsey.

Affiliations Chairman of the Board of Directors of DAAily platforms AG and The Market Media AG; member of the Board of Directors of SwissMediaForum AG and CH Media Holding AG; member of the Board of Trustees of the Christian Wenk Foundation; Board member of the Swiss Management Association.



Martin Koller

Board of Directors, industry representative, born in 1978, Swiss

Martin Koller, lic. oec. publ. University of Zurich, Dr. sc. ETH (economics), has been a member of the Swissgrid Board of Directors since 2022. He has held various positions within the Axpo Group since 2012, where he has been Head Group Strategy & Economics since 2022. Between 2007 and 2010/ 2012 respectively, he worked as an economist for Swiss Post and for ETH Zurich.

Affiliations Guest Lecturer at the University of Geneva.



Benedikt Loepfe

Board of Directors, industry representative, born in 1967, Swiss

Benedikt Loepfe, dipl. El.-Ing. (graduate electrical engineer) ETH, has been a member of the Swissgrid Board of Directors since 2021. Since September 2020, he has served as Director of the electricity company of the

City of Zurich (ewz). Prior to this, he headed the Grids business unit (2014–2019) and the Energy business unit (2019–2020) at ewz. Between 2011 and 2015, he was Managing Director of Curtiss-Wright Antriebstechnik GmbH in Neuhausen and 3d-Radar in Oslo.

Affiliations Member of the Board of Directors at Rico Sicherheitstechnik AG, Kraftwerke Oberhasli AG (KWO AG) and various other power plant shareholdings of ewz; Chairman of Regiogrid; member of the Board of Directors at the Association of Swiss Electricity Companies (VSE).



Claude Nicati

Board of Directors, cantonal representative, born in 1957, Swiss

Claude Nicati, lic. iur., lawyer, has been a member of the Swissgrid Board of Directors since 2014. He works as an independent lawyer at the Etude d'avocat-e-s NVLE law firm. From 2009 to 2013, he served as Councillor of the Canton of Neuchâtel and Head of the Regional Planning department. From 1997 to 2001, he was the examining magistrate for the Canton of Neuchâtel, and finally, from 2001 to 2009, Deputy Federal Public Prosecutor. Before this, he held various senior positions in municipal and cantonal police departments.

Affiliations President of the Union Cycliste Neuchâteloise (UCN); member of the Governing Board of the Swiss Alpine Club (SAC); member of the Board of Directors at the Aide Pour Enfants (APE) and Planet Solar foundations; member of the Board of Directors at Solar Stratos SA; Secretary of the Criminal Commission of the International Union of Lawyers (UIA).



Roberto Pronini

Board of Directors, industry representative, born in 1968, Swiss

Roberto Pronini, Dr. Ing. ETH, has been a member of the Swissgrid Board of Directors since 2021. He has been a Director (CEO) of Azienda Elettrica Ticinese (AET) since 2009, and was Vice-Director of AET between 2000 and 2009. Prior to this, he had held various positions at AET since 1997.

Affiliations Chairman of the Board of Directors of Lucendro SA and Parco eolico del San Gottardo SA; Vice-Chairman of the Board of Directors of Officine Idroelettriche della Maggia SA (Ofima SA) and Ritom SA; member of the Board of Directors at various other power plant shareholdings of AET; member of the Board of Directors at the Association of Swiss Electricity Companies (VSE) and the Swiss Water Management Association (SWV); member of the National Committee CIGRE.



Stefan Witschi

Board of Directors, industry representative, born in 1970, Swiss

Stefan Witschi, dipl. El.-Ing. FH Biel, MBA in Integrated Management, has been a member of the Swissgrid Board of Directors since 2021. Since 2015, he has been Head of Distribution Grid Management and a member of the Grids Executive Board at BKW Energie AG. Prior to this, he had held various positions at BKW Energie AG since 1996.

Affiliations Chairman of the Board of Directors at NIS AG and CC Energie SA; Vice-Chairman of the Board of Directors at BKW Netzbeteiligung AG.

Resignations in the reporting period: Markus Kägi

New elections in the reporting period: Mario Cavigelli

GRI 2-9, 2-10

Election and term of office

The Board of Directors is comprised of at least three elected members. The majority of members and the Chairman must meet independence requirements in accordance with Art. 18 Para. 7 of the Electricity Supply Act. They may therefore not belong to the boards of any legal entities which are engaged in activities in the fields of electricity production or sales, or are in a service-provision relationship with any such legal entities.

All cantons together have the right to delegate and recall two members to/from the company's Board of Directors (Art. 18 Para. 8 of the Electricity Supply Act). Furthermore, the Articles of Incorporation approved by the Federal Council stipulate that the two members designated by the cantons must also fulfil the independence requirements pursuant to Art. 18 Para. 7 of the Electricity Supply Act. They represent the individual national regions and not any publicly owned power supply companies.

Dr. Mario Cavigelli was newly elected to the Board of Directors in the reporting year. He was delegated by the Conference of Cantonal Energy Directors EnDK as a representative of the cantons, and as such, he succeeds Markus Kägi, who is leaving the Board of Directors after reaching the statutory age limit.

The Articles of Incorporation also state that the Board of Directors should endeavour to ensure a level of diversity of its members that is appropriate for the company. The Board of Directors bases its proposal to the General Assembly on a profile of requirements for the Board of Directors as a whole.

As a rule, the Board of Directors is elected at the Annual General Assembly for one year at a time. The term of office for the members of the Board of Directors ends on the day of the next Annual General Assembly. The members of the Board of Directors can be re-elected at any time. The Board of Directors is self-constituting. It nominates its Chair, Vice-Chair and Secretary, who does not have to be a member of the Board of Directors. The General Assembly grants discharge to members each year.

The current composition of the Board of Directors meets the applicable independence requirements, both for the Board as a whole and for the individual committees.

Internal organisation

The Board of Directors is responsible for the overall management of the company and for supervising the management of the company. It represents the company externally and takes care of all matters that are not assigned to another corporate body according to law, regulations or the Articles of Incorporation. The Board of Directors can, subject to the legal guidelines on independence (Art. 18 Para. 7 of the Electricity Supply Act), transfer the management of the company or individual parts thereof, as well as the representation of the company, to one or more persons, members of the Board of Directors or third parties, who do not have to be shareholders. It issues the organisational regulations and arranges the corresponding contractual relationships. The powers of the Board of Directors and the Executive Board are defined in the organisational regulations. The members of the Board of Directors do not exercise any executive roles within Swissgrid. The Board of Directors met nine times during the last financial year.

As part of their annual self-evaluation, the Board of Directors and the Executive Board review whether the composition of the individual committees, the understanding of their roles, the selection of agenda items, the conduct of meetings, the culture of discussion and cooperation with other bodies meet the expectations placed on them. The role and requirements profile is also regularly reviewed. By doing this, Swissgrid ensures that the Board of Directors has the necessary knowledge and experience.

Management of conflicts of interest

Appropriate measures are taken to ensure that potential conflicts of interest are recognised, addressed, disclosed and, if necessary, dealt with at an early stage, both in general and in individual cases, so that they cannot have a decisive influence on the passing of resolutions. These measures include active enquiries by the Chair or the Secretary of the Board of Directors, the adoption of resolutions by means of a double resolution, and other measures determined during the reporting year in accordance with the organisational regulations. The affiliations of the individual members of the Board of Directors and the shareholdings of the company and its shareholders are disclosed transparently in this report and on the [Swissgrid website](#). Finally, shareholder relations (including those with the majority shareholder) and financial counterparty risks are tracked as part of shareholder/stakeholder management and financial planning/accounting.

Board committees

In order to incorporate the specialist knowledge and broad range of experience of the individual members into the decision-making process in a targeted manner, the Board of Directors has formed three committees to assist with management and control activities in close collaboration with the Executive Board: the Strategy Committee, the Finance and Audit Committee, and the Staff and Compensation Committee. The tasks and powers of the Board committees are set out in detail in the organisational regulations. The chairs of the committees report on the progress of the preliminary discussions in the committees at each meeting of the Board of Directors.

Strategy Committee

The Strategy Committee supports the Board of Directors in the strategy process. It elaborates the strategic principles on behalf of the Board of Directors and reviews the strategy for the Board of Directors on a regular basis. The committee presents its view on proposals that relate to strategic issues. The Strategy Committee met four times during the last financial year.

Members:

- Adrian Bult (Chairman, since 2012)
- Mario Cavigelli (since 2024)
- Benedikt Loepfe (since 2024)
- Roberto Pronini (since 2021)

Changes in the reporting period:

Resignations: Claude Nicati, Martin Koller

New members: Mario Cavigelli, Benedikt Loepfe

Finance and Audit Committee

The Finance and Audit Committee supports the Board of Directors in its supervisory role, i.e. with regard to the integrity of the accounts, the fulfilment of legal provisions, and the competence and services of the external auditors. The Finance and Audit Committee assesses the suitability of financial reporting, the internal control system and the general monitoring of business risks. It ensures that there is ongoing communication with the external auditors concerning the financial position and the course of business, and supervises the work of the Internal Audit division. It makes the necessary preparations relating to the appointment or discharge of external auditors and the organisation and management of the Internal Audit division.

The Finance and Audit Committee met five times in the last financial year.

Members:

- Regula Wallimann (Chairwoman, since 2017)
- Adrian Bult (since 2021)
- Claude Nicati (since 2024)
- Stefan Witschi (since 2021)

Changes in the reporting period:

Resignations: none

New member: Claude Nicati

Staff and Compensation Committee

The Staff and Compensation Committee draws up principles for all compensation components of the members of the Board of Directors, the CEO and the members of the Executive Board, and submits a proposal to the Board of Directors accordingly. The committee defines the compensation of the CEO and the members of the Executive Board. The basis for this decision is the compensation concept approved by the Board of Directors. The committee presents its view on the changes to the Executive Board that are proposed by the CEO. It also ensures that succession planning is in place for the Board of Directors and the Executive Board. The Staff and Compensation Committee met three times during the last financial year, in particular to evaluate the new member of the Executive Board.

Members:

- Felix Graf (Chairman since 2024, member since 2022)
- Martin Koller (since 2024)
- Regula Wallimann (since 2022)

Changes in the reporting period:

Resignations: Markus Kägi, Benedikt Loepfe

New member: Martin Koller

Ad hoc committees

The Board of Directors may appoint ad hoc committees for specific tasks. It did not set up any such committee in the last financial year.

GRI 2-12, 2-13

Information and control instruments with regard to the Executive Board

Information and control instruments

The Board of Directors has the following instruments for monitoring and supervising the Executive Board:

- At Board meetings, the Executive Board submits all important issues for information or resolution.
- A financial report to the Board of Directors is compiled quarterly, and contains key figures on business performance together with comments from the Executive Board.
- At every ordinary Board meeting, the CEO submits a written report on business operations that addresses subjects such as grid operations, ancillary services, grid construction projects, relevant developments in Switzerland and Europe, and key performance indicators (KPI).
- Regular reporting also takes place on recurring issues. This applies in particular to the implementation of the corporate strategy.
- The risk report is discussed with and approved by the Board of Directors every six months.

- Internal Audit issues an annual written report for the Board of Directors containing the conclusions of the main audits and audit results from the reporting year, as well as information on key activities and the utilisation of resources.
- The auditor issues an annual written report for the Board of Directors.

Internal control system

The internal control system has an important role as part of corporate management and monitoring, and covers all procedures, methods and measures mandated by the Board of Directors and the Executive Board that serve to ensure the correct execution of the business processes with regard to financial management and accounting at Swissgrid. The internal operational controls are integrated into the operating procedures. They are implemented while work is being carried out or take place immediately before or after a procedure. Internal checks do not come under a separate function, but are integrated into the processes. The internal control system at Swissgrid is implemented at all levels of the organisation and demands a high level of personal responsibility from employees.

Internal Audit

The Internal Audit division is responsible for planning and conducting audits throughout the company in accordance with the guidelines of the profession. It has the highest degree of independence. Internal Audit reports to the Board of Directors, while the Finance and Audit Committee takes on operational management tasks. Internal Audit assists the Board of Directors and its Finance and Audit Committee with the fulfilment of statutory and regulatory supervisory and control duties. It also supports the management by pointing out opportunities to improve business processes and controls. It documents audit findings and monitors the implementation of measures. The duties, powers, tasks and responsibilities of the Internal Audit division are laid down in separate regulations.

The Finance and Audit Committee approves the Internal Audit division's audit planning annually. The Internal Audit division pursues a risk-based audit approach. The audit results are discussed on an ongoing basis at the meetings of the Finance and Audit Committee. The Finance and Audit Committee is informed of findings as well as any associated recommendations and measures at the meetings. Internal Audit also maintains a follow-up process to monitor and ensure that the agreed actions are implemented in a timely and effective manner.

The Internal Audit division performed ten audits during the year under review.

Risk management

Risk management is an integral part of effective and prudent corporate management for Swissgrid. Swissgrid's risk management covers the entire organisation, not including its subsidiaries and shareholdings, takes account of established standards (ISO 31000, COSO Enterprise Risk Management Framework) and satisfies the internal requirements of corporate governance as well as the requirements under Swiss law. Additional information on the implementation of the risk assessment can be found in the Management Report.

Executive Board

Members of the Executive Board, additional activities and affiliations



From top left to bottom right: Yves Zumwald, Adrian Häsler, Doris Barnert, Nell Reimann, Konrad Zöschg



Yves Zumwald

CEO, born in 1967, Swiss

Yves Zumwald, dipl. Ing., dipl. NDS EPFL in energy, has been CEO of Swissgrid since March 2016. Between 2014 and March 2016, he was a member of the Executive Board and Head of Grid Operations. From 2009 to 2014, he was a Board member and Director of the Sales division at the Romande Energie Group. Before this, he worked at EOS Holding (Energie Ouest Suisse), where he was responsible for grid usage and grid access, before serving as a member of the Executive Board with responsibility for the Infrastructure department at EOS Réseau. Early on in his professional career, he worked at EOS and Orange Communications.

Affiliations Member of the Assembly of the European Network of Transmission System Operators (ENTSO-E), member of the Supervisory Board and Compensation Committee of EPEX SPOT SE.



Adrian Häbler

Head of Grid Infrastructure, born in 1966, Swiss

Adrian Häbler, dipl. Elektroingenieur (graduate electrical engineer) HTL, Executive MBA HSG, has been a member of the Executive Board since April 2019. Prior to this, he was the Head of the Grid Delivery department at Swissgrid. Between 2007 and 2017, he was a member of the Hydropower Division management at Axpo Power AG and Head of the Technical Support business unit, which was responsible for planning, building and servicing hydropower plants. Prior to this, he headed the Secondary Systems department at Nordostschweizerische Kraftwerke AG for seven years. He started his career at Kraftwerke Oberhasli AG as the Head of Operational Management.

Affiliations Deputy Chairman of the Specialist Commission for High Voltage Issues.



Doris Barnert

CFO, Head of Corporate Services, born in 1969, Swiss

Doris Barnert, dipl. architect (ETH Zurich), holds a master's degree in Corporate Finance from the Institute of Financial Services Zug (IFZ) and an Executive MBA from the University of St. Gallen (HSG), and has been a member of the Executive Board since April 2017. Between 2008 and 2017, she was the CFO and member of the Executive Board of Solothurner Spitäler AG. From 2006 to 2008, she was the Head of Finances for the Western Switzerland route in the SBB's Infrastructure division. Prior to this, she managed various projects in the Infrastructure division. She began her professional career in architecture.

Affiliations Member of the Board of Directors at Skyguide; member of the Supervisory Board at Equigy.



Nell Reimann

Head of Market, born in 1966, Swiss and British

Nell Reimann, dipl. Ing. EPFL, PhD EPFL (Doctorat ès sciences techniques), Executive MBA University of Lausanne, has been a member of the Executive Board since July 2023. From 2019 to 2023, she was Head of System Operations for the control centres in Aarau and Prilly and deputy Head of Business Unit Market. Nell Reimann joined Swissgrid in 2016 as Head of the System Development department. Prior to that, she took over the engineering department and the operation and management of the high-voltage grid at Romande Energie in 2013. From 2009 to 2013, she was in charge of the Grids department at Alpiq. She started her professional career at EOS, where she was responsible for grid calculations and operational planning.

Affiliations Board member of the European Network of Transmission System Operators (ENTSO-E).



Konrad Zöschg

Head of Technology, born in 1976, Swiss

Konrad Zöschg, Telecom Engineer HTL and Industrial Engineer FH, has been a member of the Executive Board since 2021. Before joining Swissgrid, he worked as Head ICT/CIO at Flughafen Zürich AG for seven years. Between 2005 and 2014, he held various management positions within IT there in the area of aviation, building and security systems. Earlier in his career, he gained international experience at Acterna and its successor company Nexus Telecom AG. In 2020, he was awarded the Swiss CIO Award as best CIO of the

year.

Affiliations Chairman of the Board of Directors of ecmt AG, member of the ICT Committee of ENTSO-E.

Changes in the reporting period: none

Appointments in the reporting period: none

GRI 2-19, 2-20

Remuneration

The members of the Board of Directors receive a fixed remuneration (fees and expenses) based on a sliding scale for the Chair, the Vice-Chair, the Chairs of the committees and the other Board members. Remuneration for the members of the Executive Board consists of a basic salary (including lump-sum expenses) and a variable salary component that is dependent on achieving company and personal targets. The amount of remuneration for members of the Executive Board is determined by the Staff and Compensation Committee within the framework defined by the Board of Directors. The remuneration paid to the Executive Board and Board of Directors is disclosed in paragraphs 8 and 9 of the notes to the Swiss GAAP FER financial statements and is approved in this form by the General Assembly, as it was in the previous reporting year, without any objections from shareholders.

Rights of participation

Shareholders' rights to assets and rights of participation are governed by law and the Articles of Incorporation. The Articles of Incorporation can be viewed online at www.swissgrid.ch. There are no statutory regulations that differ from the legal provisions.

GRI 2-5

External audit

Mandate and fees

PricewaterhouseCoopers AG, Zurich (PwC), was appointed as Swissgrid Ltd's new statutory auditor by the General Assembly held on 15 May 2024. Thomas Wallmer took on the role of auditor in charge. The auditor is appointed at the General Assembly for a one-year term. For its function as auditor, PwC received remuneration of CHF 198,900 for the last financial year.

The non-financial reporting for the 2024 financial year was audited by PwC (limited assurance audit), with Thomas Wallmer acting as lead auditor. PwC performed a business audit on selected environmental and social aspects of the Sustainability Report. The detailed description of the subject matter and scope of the audit performed, including the audit specifications, can be found in the notes on «Limited Assurance». PwC received remuneration of CHF 39,980 for its activities in the past financial year.

Information instruments

Every year, the Finance and Audit Committee evaluates the effectiveness of the auditor. The members of the committee use their knowledge and experience garnered from holding similar positions in other companies to evaluate the audit. They also base their evaluation on the documents provided by the auditor, such as the comprehensive report and the verbal and written statements on individual aspects in connection with

accounting, the internal control system and the audit.

Sustainability Report 2024





Sustainability at Swissgrid

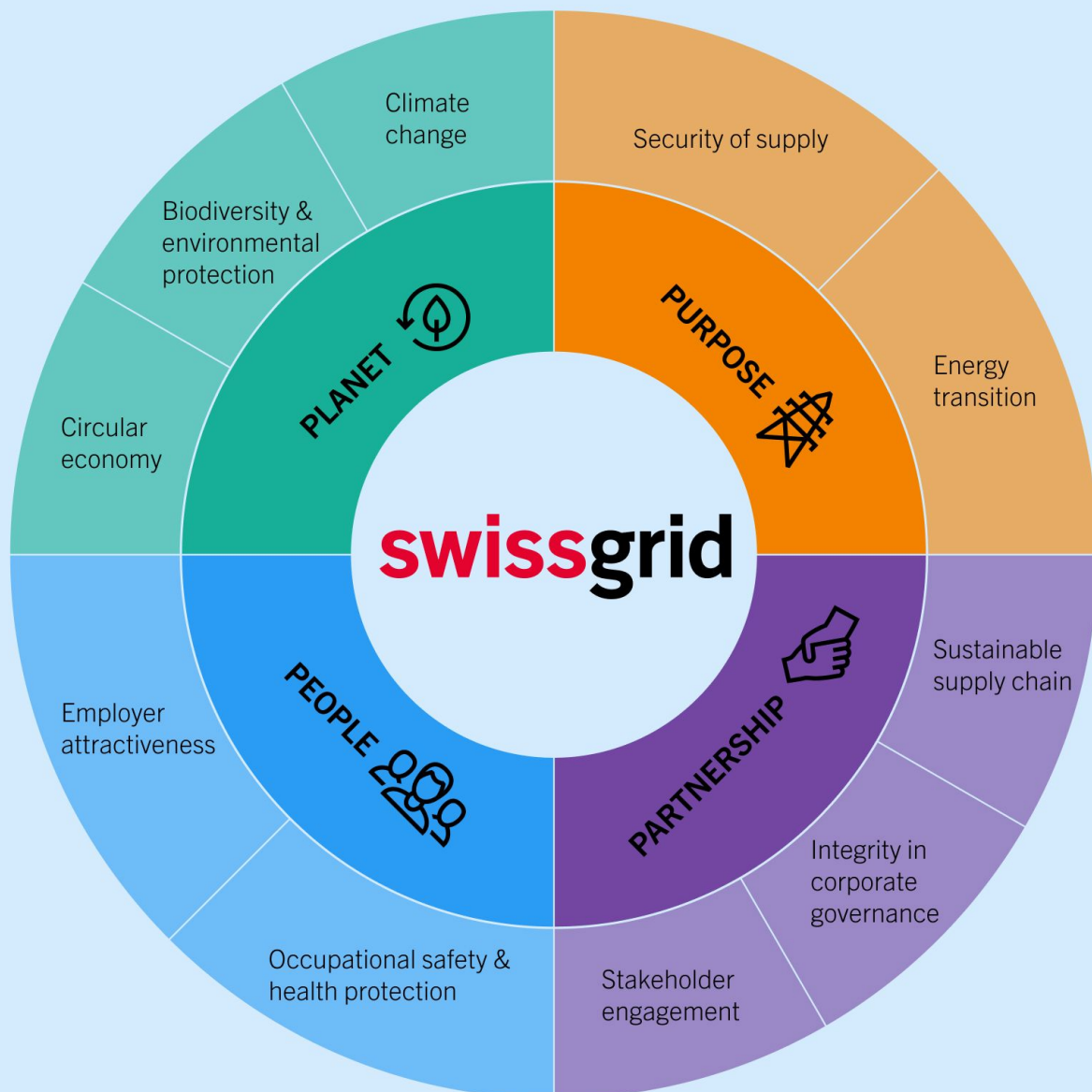
Swissgrid is helping to shape the future of energy in Switzerland – safely, innovatively and sustainably. As the transmission system operator, Swissgrid is the backbone of a reliable, stable and efficient supply of energy and is playing a key role in the transformation of the energy system on the grid side. Responsible behaviour towards people and the environment is an integral part of Swissgrid's corporate strategy. By firmly establishing ecological, social and economic aspects as part of its core mandate, Swissgrid is not only strengthening the sustainability of the company, but also making a vital contribution to the resilience and future viability of the supply of electricity in Switzerland.

GRI 3-3

Priorities of Swissgrid's commitment to sustainability

Swissgrid's Board of Directors has firmly established the company's commitment to sustainability in its Strategy 2027 as the «Corporate Social & Environmental Responsibility» (CSER) strategic focus area. The aim of the CSER approach is to enable Swissgrid to fulfil its social responsibility for people and the environment by actively and naturally implementing sustainable actions in all activities and areas of the company. Swissgrid divides its commitment to sustainability into four strategic areas of action: Purpose, Planet, People and Partnership. In January 2025, the Board of Directors defined ten priorities in these four strategic areas of action using the company's updated dual materiality analysis. These priorities form the basis for the strategic focus on CSER and for non-financial reporting.

Swissgrid's areas of action and priorities related to sustainability



GRI 2-23, 2-24, 3-3

Swissgrid's sustainability goals

In the 2024 reporting year, the Executive Board approved Swissgrid's guiding principles for sustainability and the CSER management concept. The guiding principles provide a framework for the further development of the company's commitment to sustainability. Detailed information on the objectives, the management approaches for handling social and environmental impacts, the measures being taken and the progress being made is given for all the priorities in the corresponding sections of the Annual Report. The following table provides an overview of Swissgrid's ambition and selected key figures for each of the ten priorities.

Priority	Ambition	Key figures for 2024
Purpose Security of supply Energy transition	Swissgrid guarantees grid-related security of supply. Swissgrid is supporting the transformation of the energy system on the grid side.	• Availability of the transmission grid > 99.9% • «Energy not supplied» of 0.002 GWh in the meshed grid • Use of positive control energy (944 GWh) and negative control energy (550 GWh) • Exported energy (39,175 GWh) and imported energy (25,262 GWh)

Planet	<u>Climate change</u>	Swissgrid intends to reduce its Scope 1 and Scope 2 greenhouse gas emissions by 50% by 2030 and by 90% by 2040 (in relation to 2023).	• Increase in Scope 1 and Scope 2 greenhouse gas emissions by 8.5% (compared with 2023)
	<u>Environmental protection and biodiversity</u>	Swissgrid is committed to preserving biodiversity and minimising harmful effects on land, air and water.	• 24 substations with small structures to preserve biodiversity • 3 events of environmental relevance in grid operations
	<u>Circular economy</u>	Swissgrid integrates the principles of the circular economy along its value chain.	• 58% of waste from grid projects is reused or recycled
People	<u>Occupational health and safety</u>	Swissgrid has set itself the goal of protecting the health and safety of employees, service providers and neighbours.	• 14 occupational accidents involving employees and service providers
	<u>Employer attractiveness</u>	Swissgrid is striving to establish its position as one of the best employers in Switzerland in order to successfully attract and retain new talent.	• Departure rate of 6.2% • Proportion of women of 22%
Partnership	<u>Sustainable supply chain</u>	Swissgrid fulfils its environmental, social and economic responsibility along the value chain.	• > 98% of tenders in open and invitation procedures take sustainability criteria into account
	<u>Integrity in corporate governance</u>	Swissgrid and its employees always act responsibly, professionally and credibly to ensure a secure and sustainable supply of electricity, both now and in the future.	• No material compliance violations of legal principles related to sustainability or the principles of Swissgrid's Code of Conduct
	<u>Stakeholder engagement</u>	Swissgrid creates a common basis for finding sustainable solutions by engaging in transparent dialogue and constructive cooperation with stakeholders.	

Contribution to the Sustainable Development Goals (SDGs)

Swissgrid is helping Switzerland to achieve the SDGs thanks to its commitment to sustainability. As the link between generation and consumption, Swissgrid is making a significant contribution to the energy transition (SDG 7), to climate protection (SDG 13) and to the provision of a resilient and innovative infrastructure (SDG 9). In addition, Swissgrid's commitment to sustainability contributes to the achievement of six other SDGs (see overview below). As a member of the UN Global Compact (UNGC), Swissgrid is also committed to integrating the ten principles of sustainability into its strategy, its activities and its culture.

Overview of how each area of action contributes to the SDGs



Principles and guidelines

The ambitions of Swissgrid's guiding principles for sustainability and the principles of the UNGC are supplemented by further sustainability-related declarations of commitment and internal directives:

- Swissgrid's Code of Conduct and Whistleblowing Policy approved by the Board of Directors (see the «Integrity in corporate governance» section)
- Sustainability Charter for Suppliers approved by the Executive Board (see the «Sustainable supply chain» section)
- Supply chain policy for exercising due diligence approved by the Board of Directors (see the «Sustainable supply chain» section)
- Occupational health and safety policy approved by the Executive Board (see the «Occupational health and safety» section)
- The organisational regulations (approved by the Board of Directors) and internal directives and regulations (approved by the Executive Board) in the areas of HR policy, anti-corruption, human rights, procurement, fair conduct and transparency in the wholesale energy market and the financial market, data protection, information security and cybersecurity, compliance, risk management, occupational safety, health protection and the environment
- Guidelines and handbooks for suppliers in areas including occupational safety, health protection, environmental protection and the safety culture

GRI 3-3

Sustainability management system

Swissgrid strengthened its cross-departmental management system in the 2024 financial year in order to integrate sustainable and responsible behaviour into all its activities and to continuously improve its commitment to sustainability. The sustainability management system is based on the specifications of ISO 26000 and the PDCA («Plan-Do-Check-Adjust») model. The guiding principles for sustainability establish the basis for putting the management model into practice in operations. In particular, this includes integrating sustainability into all relevant corporate processes, exercising due diligence with regard to environmental and social impacts along the value chain, actively involving employees and stakeholders by providing information, training and dialogue, and ensuring transparent and comprehensive reporting.

Sustainability management model



GRI 2-19

Sustainability targets for variable remuneration

Variable remuneration at Swissgrid is measured according to an individual performance assessment and the achievement of the strategic corporate objectives defined for the financial year. The Executive Board reviews target achievement on a quarterly basis and initiates measures if targets are not met. As part of its Strategy 2027, Swissgrid has also defined CSER targets and performance criteria. The extent of their achievement has an impact on the variable remuneration of members of the Executive Board and senior and specialist managers. For the 2024 financial year, progress in the following sustainability areas was relevant for variable remuneration: greenhouse gas emissions, occupational safety, sustainable procurement, the enhancement of employee skills and the further development of the sustainability strategy. Progress in these five areas

accounted for a total of 23% of the variable remuneration component linked to corporate objectives.

GRI 2-29

Collaboration with external stakeholders

Swissgrid works closely with external stakeholders in relation to sustainability, including authorities, industry partners, organisations, environmental protection associations, European transmission system operators and other groups. The objectives range from exchanging experience and developing and piloting joint sustainability projects to preparing industry-wide standards. Partnerships with stakeholders and the integration of the knowledge gained as a result provide Swissgrid with an important basis for continuously improving its management approaches in various areas of sustainability. For example, Swissgrid continued to work closely with other transmission system operators in Europe in the 2024 financial year to harmonise the environmental and social requirements for suppliers with regard to procurement. The aim is to increase the effectiveness and feasibility of the criteria used (see the [«Sustainable supply chain»](#) section). Swissgrid also incorporates the concerns and interests of the public, authorities and other interest groups into its grid projects. Their involvement and influence are described in detail in the [«Stakeholder engagement»](#) section.

GRI 2-14, 3-1, 3-2

Dual materiality analysis

Swissgrid identified its ten priorities using the dual materiality analysis. The materiality analysis is approved by the Board of Directors, reviewed once a year across all departments, and modified if necessary with the approval of the Board of Directors. When conducting its materiality analysis, Swissgrid refers to the guidelines of the Global Reporting Initiative (GRI) and the general requirements of the European Sustainability Reporting Standards (ESRS 1). In the 2024 financial year, Swissgrid carried out a two-stage evaluation and update of its materiality analysis.

Validation of the sustainability topics identified during the analysis

In an initial step, Swissgrid validated the list of relevant sustainability topics to be evaluated according to the following procedure:

- **Collection of possible sustainability topics:** Swissgrid compiled a list of potentially relevant topics. This was based on the corporate strategy, the 2022 materiality matrix, a benchmarking comparison with European and Swiss companies, relevant international and national standards, and the risk categories of Swissgrid's Enterprise Risk Management (ERM) system. National and international trends and developments in the electricity and sustainability sector were also taken into account.
- **Analysis of the corporate context:** Swissgrid's corporate context was analysed in order to validate the collection of topics. To do so, Swissgrid took into account its corporate activities, business relationships and impact chains, as well as the concerns of relevant stakeholders.
- **Internal and external consultations:** external (industry, investors, NGOs, academia and service providers) and internal stakeholders were consulted for further validation.

Evaluation of the identified sustainability topics according to the dual materiality principle

In a second step, Swissgrid evaluated the sustainability topics identified, including those listed in Art. 964b of the Swiss Code of Obligations, according to the dual materiality principle:

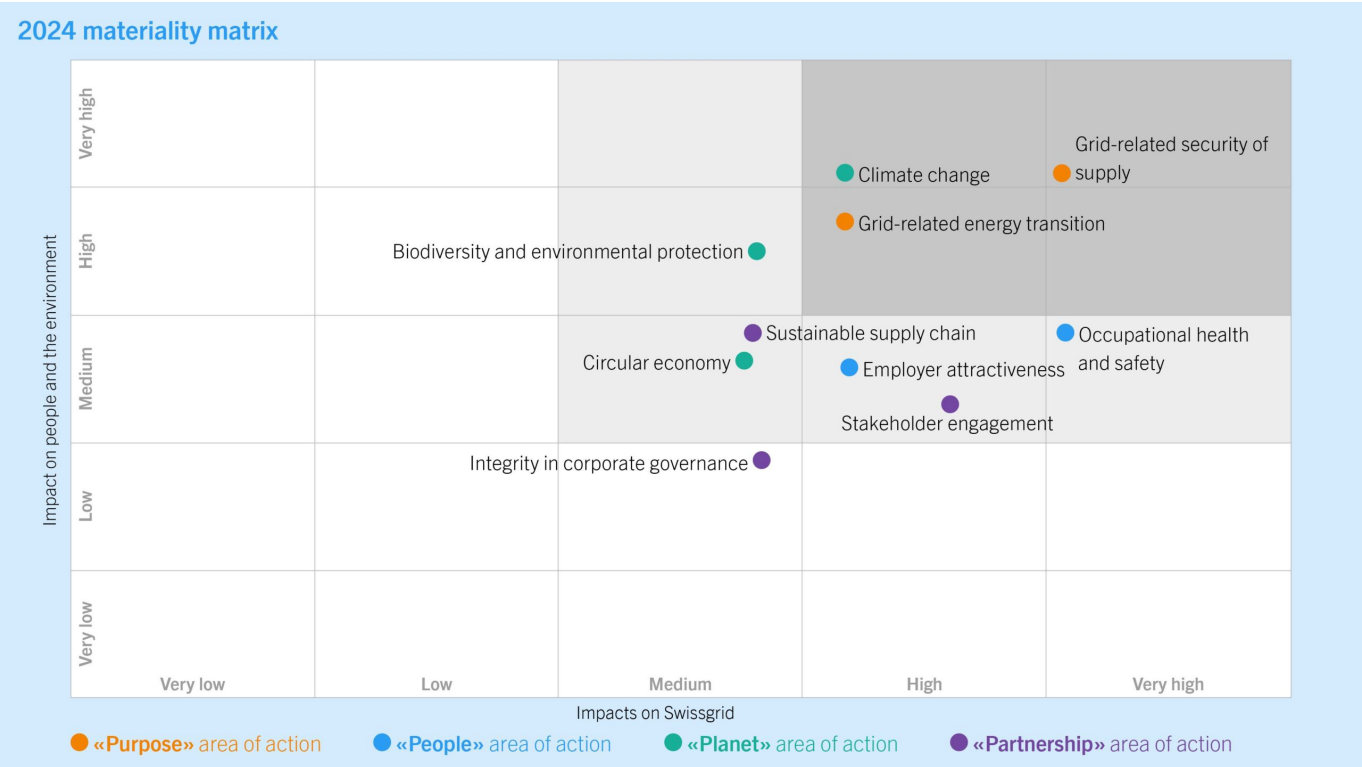
- **External impacts («inside-out» perspective):** Swissgrid evaluated the external negative and positive impacts of its business activities on people and the environment along the value chain. To do so,

assessment scenarios were defined for each topic in order to evaluate the extent, scope, irreversibility and probability of occurrence of the identified potential external impacts on people and the environment. Short, medium and long-term effects were taken into account.

- Impact on the inside («outside-in» perspective):** Swissgrid also evaluated the actual and potential sustainability-related risks and opportunities for the company. The corporate risks recorded in the ERM served as a basis for ensuring the consistency of the risk assessment. In accordance with the ERM, identified risks are evaluated on the basis of assessment scenarios to establish the probability of occurrence and the potential extent of damage. The extent of damage is determined in relation to nine risk categories: personal safety, security of supply, efficiency of the transmission system, financial situation, compliance, reputation, environmental and landscape protection, innovation and digitalisation and/or information security. Swissgrid adopted the highest-rated ERM risk or the highest-rated opportunity as a benchmark to evaluate (financial) materiality from an «outside-in» perspective.

Updated 2024 materiality matrix

The materiality matrix provides an overview of the ten material topics identified by Swissgrid. The company has set the following threshold value for defining the materiality of the topics analysed: Swissgrid considers an issue to be material if either the impact on people and the environment or the opportunities and risks for Swissgrid are assessed as «medium» (on a five-point scale, this corresponds to a threshold value of 2.6 points). Issues that were not considered material from a sustainability perspective (e.g. water or marine resources) are not listed in the materiality matrix.



These methodological changes have resulted in the further development of the analysis, the presentation and the main topics. The materiality matrix now shows ten instead of 14 areas that are of particular relevance to Swissgrid from a sustainability perspective. The most important changes were made for the following reasons:

- Methodological changes:** «Grid-related energy transition» is now identified as a material topic due to its

relevance for a climate-friendly energy transition, grid stability and Swissgrid's core business. «Healthy financial strength» remains an important basis for financing sustainable investments, and «transparency» is part of Swissgrid's sustainability reporting principles. However, in line with the dual materiality methodology, these issues are no longer managed as separate material topics.

- **Consolidation of topics:** «Diversity and inclusion» and «Attracting, retaining and developing skilled workers» have been consolidated under «Employer attractiveness», and «Innovation and digitalisation» has been integrated into «Grid-related energy transition» and «Grid-related security of supply».
- **Changes in terminology:** «Integrity in corporate governance» is now used instead of «Governance, compliance, anti-corruption and risk minimisation».

Governance and organisation

The responsibilities and organisation in relation to sustainability are part of Swissgrid's corporate governance structure. The responsibilities of the Board of Directors, the Executive Board and the operational business area are defined in the legal requirements, the Articles of Incorporation and the organisational regulations approved by the Board of Directors. The 2024 Corporate Governance Report gives details of the composition of the Board of Directors and the Executive Board, of provisions and processes relevant to corporate governance and of the corresponding areas of responsibility.

GRI 2-5, 2-9, 2-12, 2-13, 2-14, 2-17, 2-24

The role of the Board of Directors with regard to sustainability

As Swissgrid's highest supervisory body, the Board of Directors is responsible for the sustainability strategy (including long-term objectives), for annual non-financial reporting and for the due diligence and management processes for identifying and managing positive and negative impacts, risks and opportunities in relation to sustainability (sustainability issues).

The Board of Directors has various monitoring, control and audit functions, and can access tools to help it to fulfil its responsibilities:

- The Finance and Audit Committee (FPA) helps the Board of Directors to monitor the management of environmental and social impacts and risks that may arise from Swissgrid's business activities. In addition, the FPA reviews and approves the non-financial reporting for the attention of the Board of Directors.
- Internal Audit reports directly to the Board of Directors and carries out risk-oriented, independent audits and provides advisory services on its behalf. In particular, its tasks include regular auditing of internal supervision, control and risk management processes. In the 2024 financial year, Internal Audit validated and confirmed the implementation of two measures related to sustainability.
- The monitoring of sustainability issues represents an integral part of the ERM system. In the course of semi-annual risk assessments and regular risk updates, the FPA and the Board of Directors are informed about the main risks and their management.
- When submitting proposals, the Board of Directors considers the impact of Swissgrid's planned activities on the four areas of action Purpose, Planet, People and Partnership. This last area of action includes taking into account the concerns and interests of external stakeholders. Since 2023, the positive and/or negative effects must be presented in all proposals. This applies to strategic and operational activities, as well as to investments that are submitted to the Board of Directors for approval, acknowledgement or resolution.
- In order to ensure the integrity and credibility of sustainability reporting, the Board of Directors has instructed Swissgrid's Executive Board to implement an appropriate internal control system for non-

financial reporting and to have an annual audit of key figures carried out by an external auditor. The external auditor presents the results of the audit to the FPA and the Chairman of the Board of Directors. The measures implemented to strengthen the internal reporting processes were validated by Internal Audit in February 2024.

- In addition, the Board of Directors discusses current topics of relevance to the company in greater depth at ordinary meetings or at extraordinary events such as workshops and visits. It regularly consults with both internal and external experts for this purpose. New members of the Board of Directors are familiarised with company-specific topics in an onboarding session. All members of the Board of Directors completed training on the prevention of corruption in the 2024 financial year to enhance their knowledge of sustainability.

As part of Strategy 2027, the Board of Directors has delegated responsibility for the operational implementation of the sustainability strategy and cross-departmental management to the Executive Board.

GRI 2-12, 2-13, 2-23, 2-24, 3-3

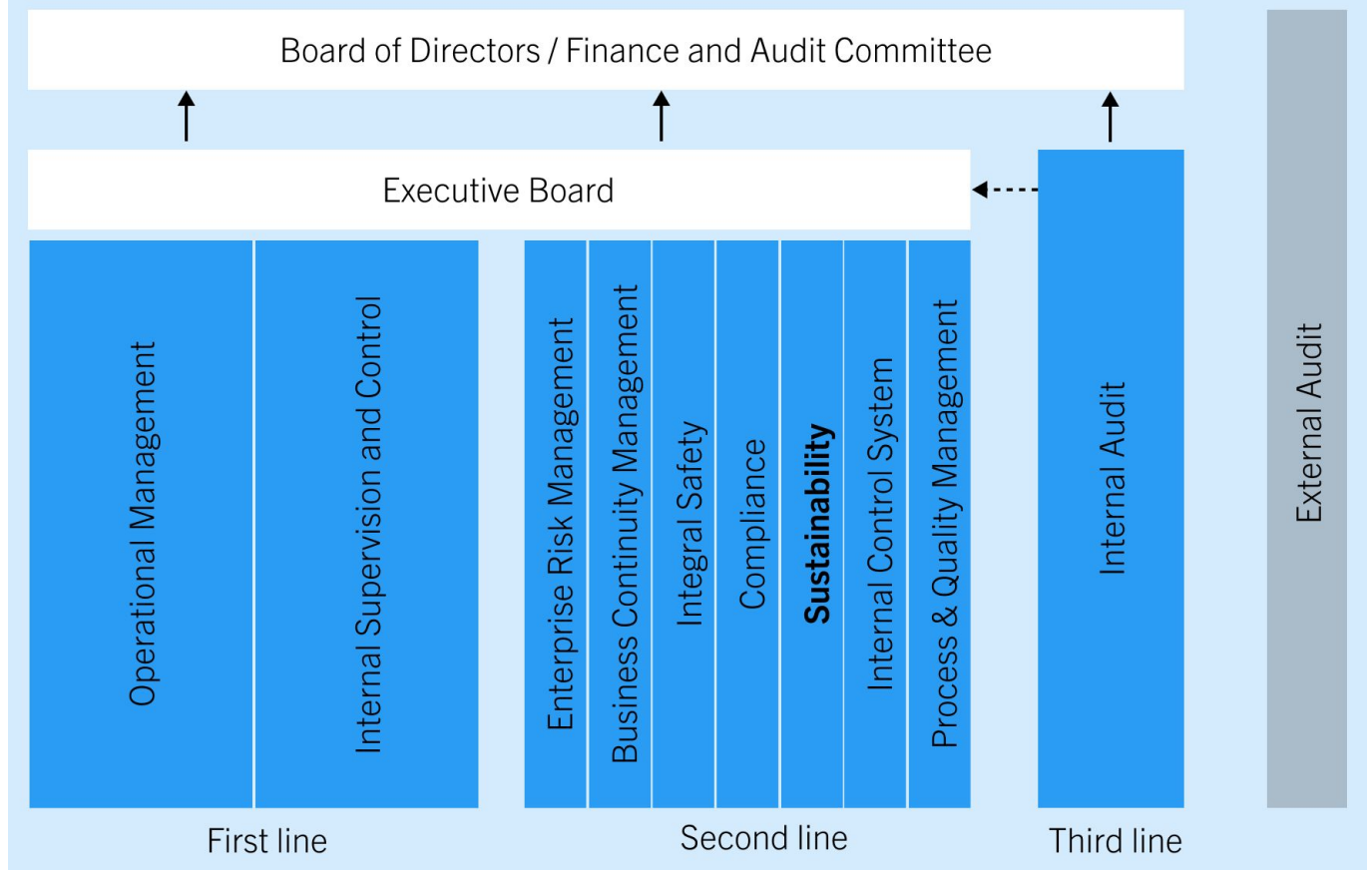
The role of the Executive Board with regard to sustainability

The Executive Board is responsible for Swissgrid's operational business activities. This includes implementing the sustainability strategy, achieving targets by drawing up and implementing action plans, and managing sustainability issues effectively along the value chain by means of suitable processes and control mechanisms. The Executive Board also encourages the integration of sustainability into the company's business and decision-making processes and ensures that a sustainable corporate culture is firmly established within Swissgrid. In order to fulfil this role, the Executive Board organises regular reviews of effectiveness and progress in the priority areas and defines responsibilities and competencies related to sustainability. The Executive Board uses established reporting processes to inform the Board of Directors at least once a year about risks, opportunities and implementation progress as far as sustainability is concerned.

The three-line governance model

Operational responsibilities in the area of sustainability are allocated based on the three-line governance model. This model serves as a framework for systematically managing sustainability issues and taking them into account in decision-making, ensuring the control of high-risk areas of responsibility, verifying compliance with legal and internal regulations, driving forward strategic development, and identifying, rectifying and learning from errors or irregularities. Sustainability is one of the second-line governance domains.

Swissgrid's three-line governance model



First-line responsibilities: the operating business units are responsible for the further development and implementation of sustainability measures and targets in their business areas, for compliance with accountability (for instance by means of controls and reporting) and for identifying and managing potential and actual risks to people and the environment arising from operating activities.

Second-line responsibilities: the Sustainability governance domain supports the operating business units, the Executive Board and the Board of Directors by performing the following tasks:

- Helping the Board of Directors and the Executive Board to identify, mitigate and manage sustainability issues;
- Developing and operating a cross-departmental sustainability and environmental management system;
- Driving the operational development of the sustainability strategy and the implementation of company-wide sustainability initiatives;
- Advising and helping the business units to conceptualise and implement strategies, measures and training in relation to sustainability.

Other second-line governance domains that are relevant to sustainability issues are ERM, compliance and integral security. These domains support the Board of Directors and the Executive Board by means of effective management systems to mitigate and control potential impacts and risks, to ensure compliance with the applicable legal framework and ethical principles, and to protect Swissgrid's employees, installations, systems and information from adverse effects.

Third-line responsibilities: Internal Audit supports the Board of Directors, its committees and the Executive

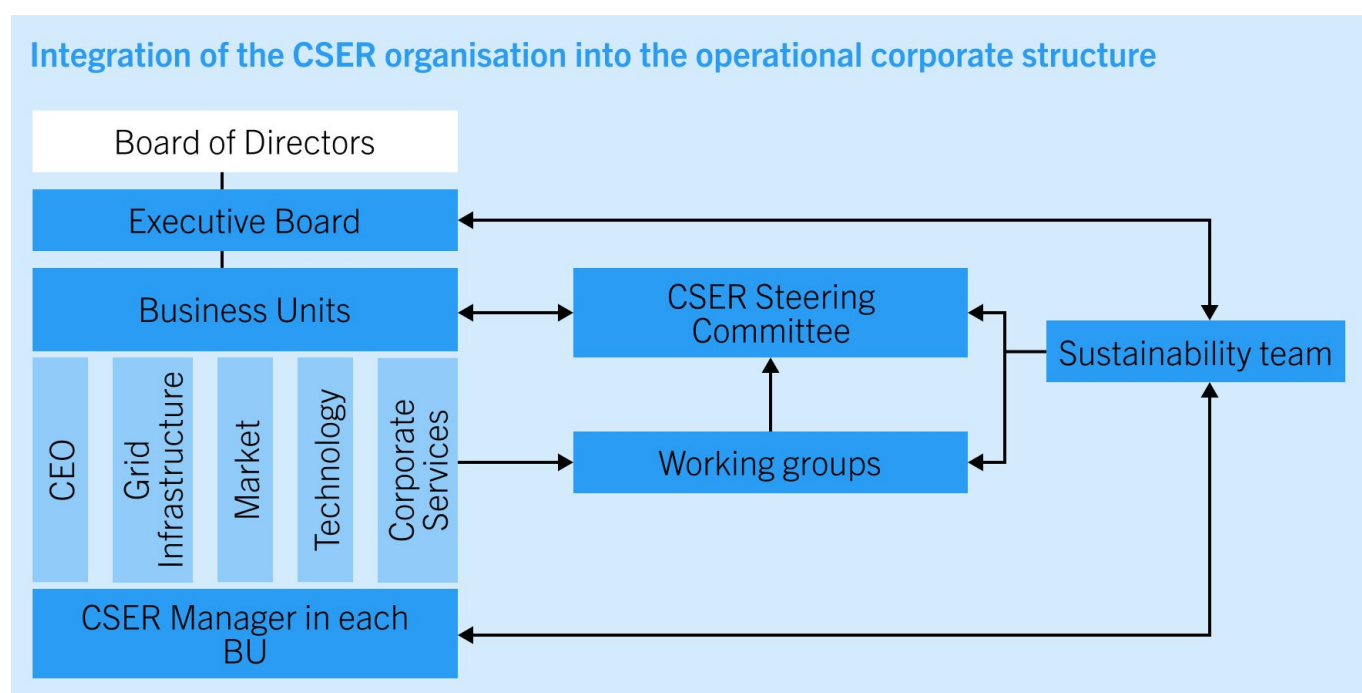
Board by providing independent and objective auditing and advisory services. Internal Audit gives these bodies the assurance that corporate supervision is guaranteed and processes are adhered to. The aim is to identify potential weak points and risks, thereby avoiding damage, optimising processes and creating added value.

GRI 2-13, 3-3

Cross-departmental CSER organisation

In October 2023, the Swissgrid Executive Board created a dedicated Sustainability team that reports directly to the CFO and Head of Corporate Services at Swissgrid. In the 2024 financial year, the Executive Board also approved the following CSER organisations in an effort to drive forward cross-departmental management and establish sustainability within all business areas:

- CSER Steering Committee, consisting of members of senior management, to support the further development of the sustainability commitment in an advisory and steering capacity;
- CSER managers, consisting of employees from each business unit, to coordinate and establish sustainability activities within the operational business units;
- CSER working groups, consisting of employees with expertise in the relevant priority subjects, to provide technical support for the development of strategies targeting specific topics.



GRI 2-1, 2-2, 2-3, 2-4, 2-5, 2-14

Context of non-financial reporting

The Board of Directors of Swissgrid Ltd approved the integrated Annual and Sustainability Report on 14 April 2025 for publication on 16 April 2025, and submitted it to the General Assembly on 20 May 2025 for acceptance. The integrated Annual Report is published electronically on the [Swissgrid website](#).

Non-financial reporting takes place once a year. This report covers the period from January to December 2024 and comprises the business activities of Swissgrid Ltd. The activities of Pronovo AG were excluded from

the financial and non-financial consolidation in accordance with Art. 64 Para. 5 of the Energy Act.

Swissgrid's non-financial reporting was prepared in accordance with the requirements set out in Article 964 of the Swiss Code of Obligations (CO) and the Ordinance on Climate Disclosures. This report therefore provides an account of sustainability issues in accordance with Art. 964b CO (environmental concerns, including climate concerns, social concerns, employee concerns, respect for human rights and combating corruption).

The Sustainability Report is structured according to the material topics identified in Swissgrid's materiality analysis. For transparent reporting purposes, Swissgrid reports in accordance with the standards of the Global Reporting Initiative (GRI), the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) and the Ordinance on Due Diligence and Transparency in relation to Minerals and Metals from Conflict-Affected Areas and Child Labour (DDTrO). Swissgrid does not import or process any conflict minerals or metals as defined in the law and the ordinance and is therefore exempt from the reporting obligations regarding minerals and metals. Reporting on the exercise of due diligence with regard to child labour is integrated into the «Sustainable supply chain» section.

Swissgrid made methodological changes to selected key figures in the 2024 financial year to improve the quality and accuracy of the data collected. Where relevant and possible, the key figures for 2022 and 2023 were adjusted accordingly to ensure comparability. Any material adjustments (i.e. with an impact of +/- 5%) are shown for the relevant key figures in the corresponding sections of the Sustainability Report. The most important methodological change affecting the key figures for the financial years 2022 to 2024 concerns the limitation of Scope 2 and Scope 3 emissions in relation to the emission factors used for electricity, heating and cooling consumption. As a result of this adjustment, the greenhouse gas emissions reported for the 2022 and 2023 financial years have been reduced for Scope 2 emissions and increased for Scope 3 emissions.

Swissgrid has tasked PricewaterhouseCoopers with conducting a limited assurance audit of selected key figures in accordance with the «Independent Auditor's Report» in order to ensure the reliability of the most important key figures on greenhouse gas emissions, energy consumption, occupational safety, employees and diversity. The externally audited key figures are labelled accordingly in the report (✓) and relate to the 2024 financial year.

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Planet

This section covers the topics of climate change, biodiversity and environmental protection.

Climate change

Climate change is one of the most pressing challenges of our time and affects not only global ecosystems, but also security of supply and the resilience of the energy sector. As the link between production and consumption, Swissgrid is not only affected by the effects of climate change and emits greenhouse gases itself, but is also actively shaping the paradigm shift towards a climate-friendly and resilient electricity supply. By ensuring stable and efficient grid operations, the resilience of its grid infrastructure and the needs-based expansion of the grid, Swissgrid is making a decisive contribution to a climate-friendly energy transformation. This commitment is not only one of the priorities of Swissgrid's sustainability strategy, but also part of its social, legal and business responsibility.

GRI 3-3

Ambition and goals

Swissgrid is committed to reducing greenhouse gas (GHG) emissions along its value chain in line with Switzerland's net-zero target. At the beginning of 2025, Swissgrid therefore set itself the goal of reducing its direct and indirect GHG emissions (Scope 1 and Scope 2) by 50% by 2030 and by 90% by 2040 compared to the base year 2023. Swissgrid will offset the remaining emissions through the use of negative emission technologies so that the net-zero target can be achieved from 2040. In addition, Swissgrid plans to define a reduction target for its Scope 3 GHG emissions in the 2025 financial year in line with scientific and legal

requirements. This will be based on the Scope 3 emissions reported in this section, which were comprehensively recorded for the first time for the 2024 financial year.

GRI 3-3

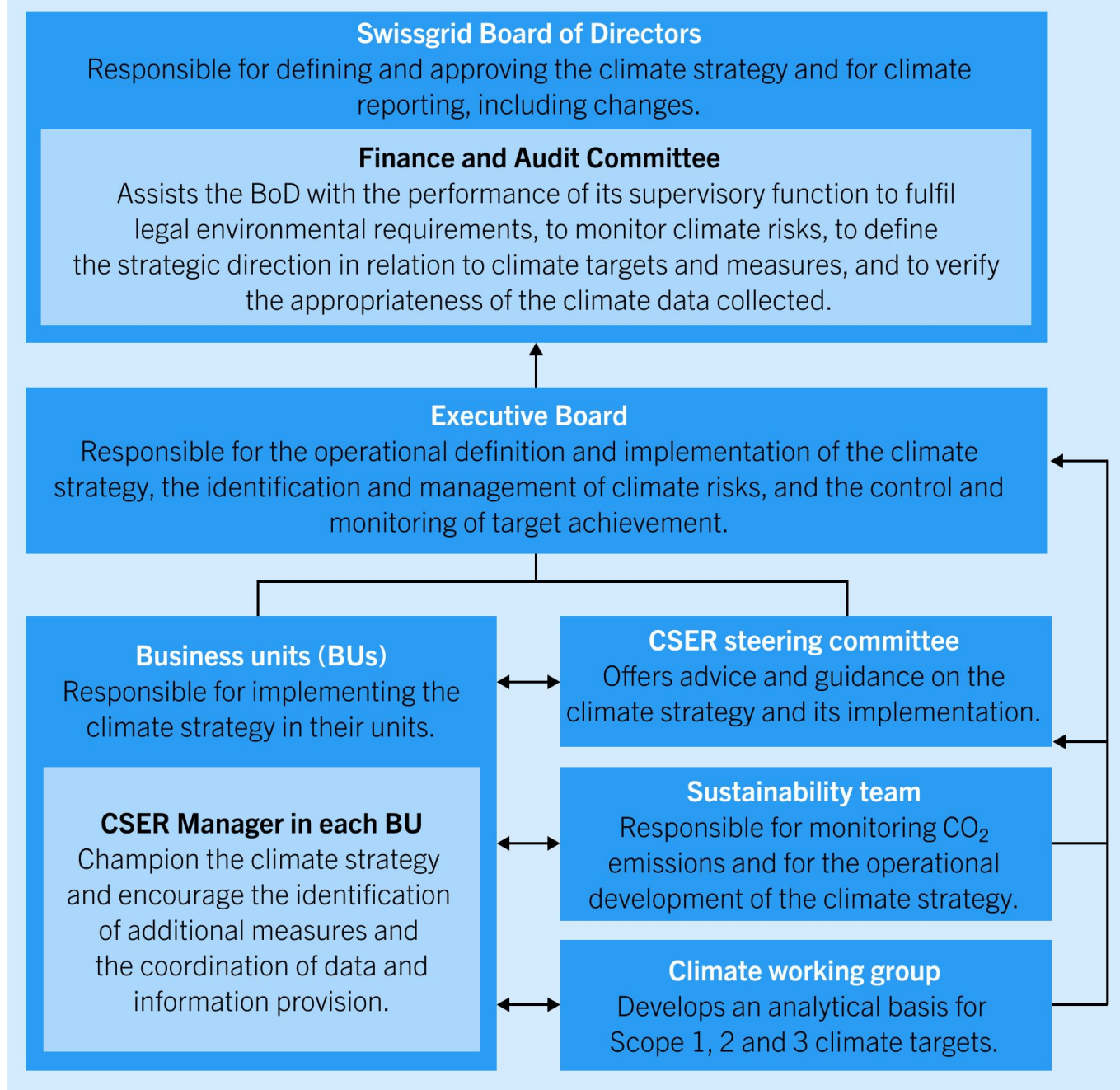
Management approach

Swissgrid's climate reporting complies with the provisions of the Swiss Code of Obligations and implements the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Governance of climate-related risks and opportunities (TCFD Governance)

The responsibilities and supervisory functions with regard to climate-related impacts, risks and opportunities (climate issues), including the implementation of Swissgrid's climate strategy, are integrated into the corporate governance structure and shown in the following diagram.

Governance structure in the climate sector



Climate strategy: the Board of Directors is responsible for the long-term climate strategy and objectives, while the Executive Board is responsible for the operational design and implementation of the strategy. The Executive Board also ensures the regular verification of target achievement and the effectiveness of Swissgrid's climate strategy. Any necessary adjustments and control measures are developed by the cross-divisional CSER Committee for the attention of the Executive Board and are approved by the Board of Directors as required.

Risk and opportunity management: the Board of Directors is responsible for risk management and defines the risk strategy. Risk management is implemented by the CEO, who appoints a Head of ERM responsible for the management system. All relevant risks, including climate-related impacts, risks and opportunities, are assessed every six months as part of the ERM process and annually as part of the dual materiality analysis and submitted to the Executive Board and the Board of Directors for approval.

Strategic, operational and financial planning: all proposals to the Board of Directors and the Executive Board must include a qualitative assessment of the positive and/or negative impacts on the climate and the environment. This concerns investments, projects or operational implementation strategies. The costs of mitigation and adaptation measures must be submitted to the Executive Board and the Board of Directors for approval as part of the regular budget process. Swissgrid does not currently use an internal CO₂ price.

GRI 201-2

Procedure for identifying the impacts, risks and opportunities of climate change

Risk management system (TCFD Risk Management)

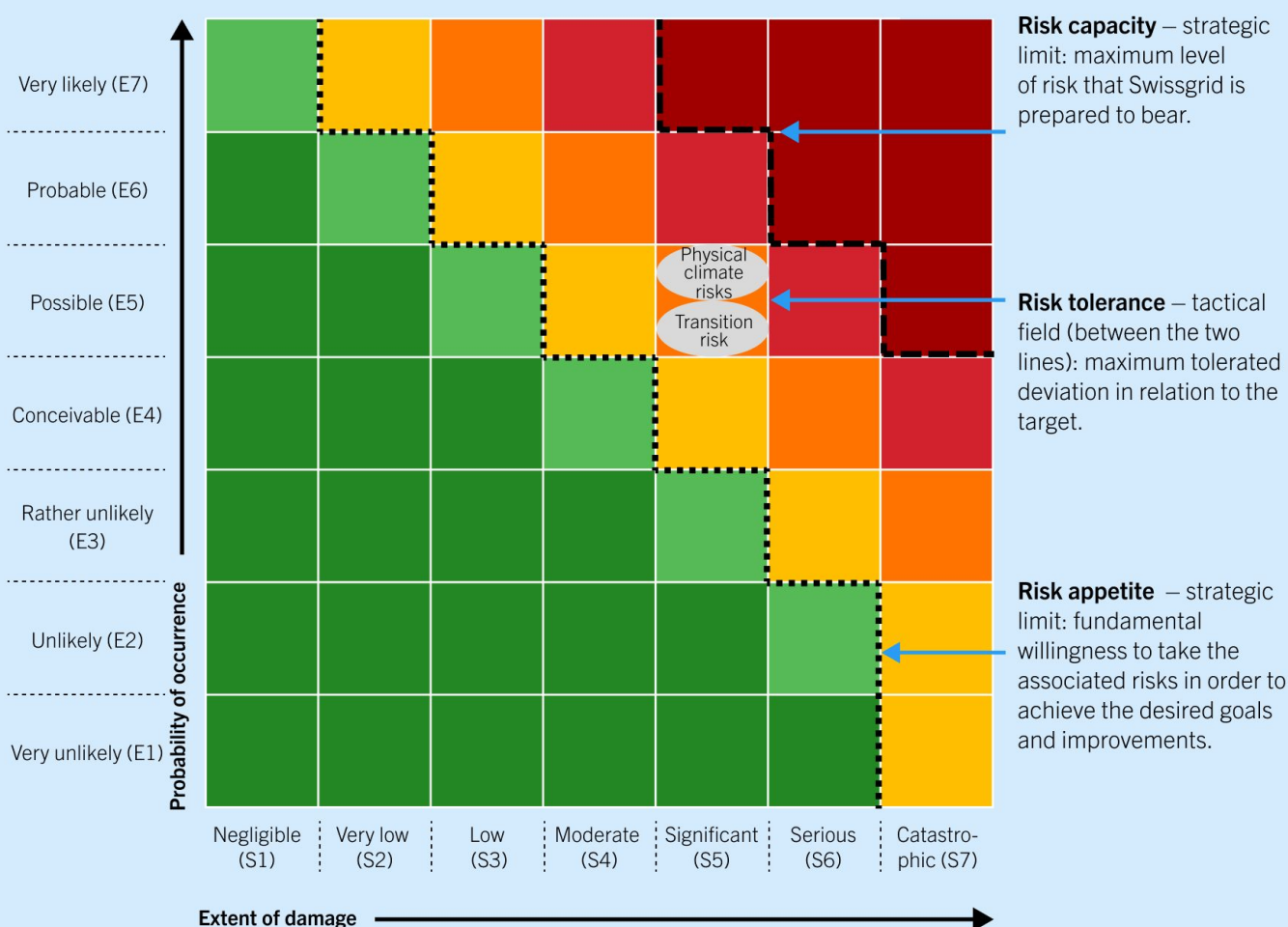
Swissgrid identifies and assesses climate issues as part of its ERM system and in the dual materiality analysis. The results are submitted in consolidated form to the FPA and the Board of Directors for discussion and approval.

Process for identifying and assessing climate-related risks in the ERM system: climate-related risks are identified and assessed from the company's perspective as part of the ERM process. Identified climate-related risks are assigned to a «risk owner», who is responsible for analysing the risk in detail. This includes describing the causes and consequences, assessing the impact on the corporate objectives (e.g. influence of climate-related natural hazards on security of supply), allocating the risk to one of the nine ERM categories (see «Sustainability at Swissgrid») and assessing the risk in terms of probability of occurrence and extent of damage. The assessment is carried out on the basis of one or more risk scenarios using standardised seven-point assessment scales. Overall, risk assessment is used to prioritise risks on the basis of their financial, strategic or operational materiality. As far as climate-related risks are concerned, the focus is primarily on the operational impact on the efficiency of the transmission grid.

The risk assessment also forms the basis for determining the risk strategy in line with the company's risk appetite. As part of the ERM process, the strategy and the associated risk management measures are defined by the risk owner, assigned to a «measure owner» and, depending on the assessment of the risk, include acceptance of the risk or measures to minimise, pass on or avoid the risk. The measure owner helps the risk owner to implement the risk strategy, which is reviewed and managed across different divisions as part of the ERM process.

The diagram «Aggregated climate-related risks according to the ERM process» shows the categorisation of the physical climate risks and transition risks that were identified and assessed as part of the company-wide ERM process in the 2024 financial year. The highest-rated risk is presented in each case: for physical climate risks, this is «damage to the grid infrastructure due to natural hazard events», which is categorised as a «high» business risk due to the considerable extent of damage and its potential probability of occurrence. The highest-rated transition risk is the «threat to system operation between forecast and real time» recorded in the ERM process, which is also categorised as a «high» business risk. This means that both climate-related risks are within the tactical risk tolerance range and are mitigated by means of suitable measures (see the «Overview of climate risks» and «Overview of transition risks» tables).

Aggregated climate-related risks according to ERM methodology



Climate-related impacts and risks according to the materiality analysis: in addition to climate-related risks from Swissgrid's perspective, the climate-related impacts on people and the environment are identified and assessed as part of the dual materiality analysis. To this end, Swissgrid considers the effects along its impact chain, which include the company's direct and indirect GHG emissions (Scope 1 to 3), as well as the socio-economic effects of power outages caused by weather- and climate-related natural hazards. Swissgrid assesses the materiality of climate issues according to the following procedure:

- Identification and classification of climate-related risks (positive or negative, potential or actual).
- Categorisation of the timeframe of climate-related impacts.
- Definition of risk scenarios.
- Assessment of the impact (inside-out) according to its extent, scope, irreversibility and probability of occurrence on the basis of a five-point scale. To assess the extent of the impact, Swissgrid relies on the RCP scenarios (RCP 2.6, 4.5, 6.0 and 8.5) of the Intergovernmental Panel on Climate Change for categorising the risk of climate and weather-related power outages. Whether global warming remains above or below 2°C plays a decisive role in assessing the risk of damage to infrastructure due to climate-related natural hazards. As part of the materiality analysis, Swissgrid used RCP scenario 4.5, i.e. global warming above 2°C, as the main scenario for determining the external impact.
- Assessment of the materiality of climate risks to Swissgrid (outside-in) on the basis of the highest climate-related ERM risk.
- Assessment of climate-related opportunities for Swissgrid (outside-in) according to opportunity scenarios and the ERM methodology.

Asset-specific risk assessment: in the 2024 financial year, Swissgrid carried out an asset-specific risk assessment of all its routes as part of its asset performance management. To do so, the company calculated a Risk Criticality Index (RCI) for around 12,000 electricity pylons, taking three aspects into account:

- Criticality of the route, influenced by the relevance of the lines running along the route.
- Potential hazards emanating from the pylon in relation to people, infrastructure, transport routes and location.
- Hazard potential acting on the pylons with regard to climate and weather-related risks.

The risk assessment of climate and weather-related risks takes into account ice load, avalanches, permafrost, rockfall, landslides, flooding and wind exposure. The calculation of climate-related risks is based on national and cantonal hazard maps and/or models by federal research institutions that include a risk-specific hazard assessment (e.g. frequency, hazard levels, loads, exposure, etc.) and takes place per pylon.

Identified climate-related risks and opportunities (TCFD Strategy)

On the basis of the risk management system described above, Swissgrid has identified various physical climate risks and transition risks, and defined corresponding measures. The time horizon of the risks considered includes short-term risks and opportunities whose effects materialise within one year, medium-term risks with a time horizon of 2027 to 2030, and long-term risks until 2040.

Physical climate risks: the transmission grid is already affected by a large number of physical climate risks. These include the increase in extreme weather events, the thawing of the permafrost and the increase in rockfalls and landslides, which have a significant impact on the structural requirements and protection measures to ensure the resilience of Swissgrid's infrastructure. The following table gives an overview of the physical climate risks and their operational and financial impact on Swissgrid.

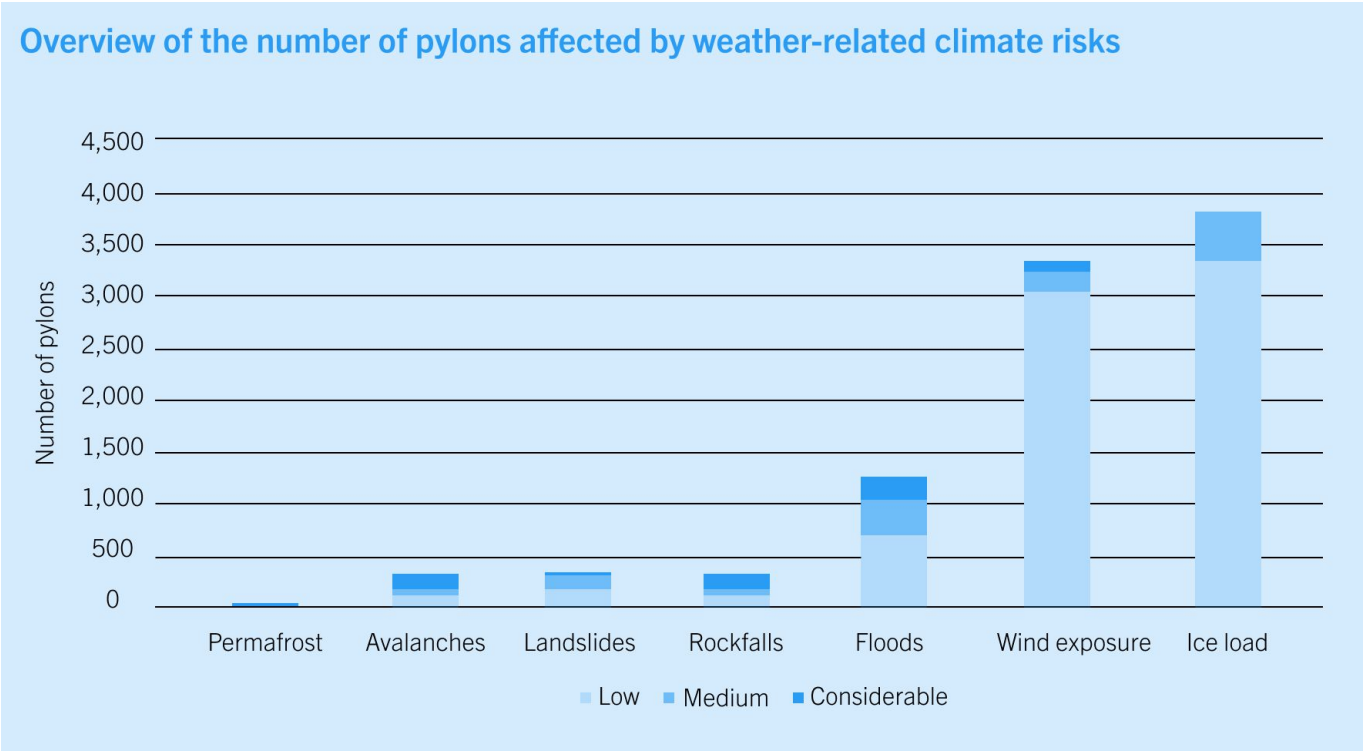
Due to Swissgrid's regulated business model, the costs of necessary climate-related adaptation measures to ensure resilient grid operation do not have a significant impact on Swissgrid's operating profit. Although the company has qualitatively identified the potential and actual financial impacts of climate-related risks and opportunities, and integrated them into the regular budget process, it has not quantified them in monetary terms separately from other operating and capital costs. Consequently, there is not yet a data basis for making a comprehensive and solid assessment of the financial impact of climate change on Swissgrid.

Overview of physical climate risks

	Risk	Potential operational impact	Adaptation measures	Timeframe	Classification	Potential financial impact
Physical climate risks	Acute	Increase in extreme weather events (e.g. storms and floods)	- Regular hazard assessment by means of updated hazard maps - Established processes in the area of business continuity management - Monitoring of lines, including the recording of weather data and its impact on the infrastructure	Short term	High	Additional costs due to repairs, reinforcements, relocations and/or maintenance work
	Chronic	Thawing of the permafrost	- Targeted monitoring of pylon stability due to changes in permafrost soils - Inclusion of risk in new planning	Long term	High	Additional costs due to relocations
		Increase in forest fires due to greater dryness	- Targeted vegetation management - Specific use of operating facilities with increased fire resistance requirements	Short term	Moderate	Operating costs
		More rockfalls, landslides or avalanches	- Regular hazard assessment by means of updated hazard maps - Selective erection of protective structures - Targeted real-time monitoring of pylons in landslide areas - Cooperation with cantons and municipalities for stabilisation measures (e.g. Brienzer landslide slope relief tunnel)	Short to long term	High	Additional costs due to repairs, reinforcements, relocations and/or maintenance work
		Change in snow and ice loads and shift in snow limits	Verifications and, if necessary, adaptation of static engineering requirements during the planning stage	Medium to long term	Moderate	Operating costs

Extent of the hazard potential due to physical climate risks: the evaluation of the climate and weather-

related hazard potential on routes as part of the RCI has shown that in terms of the number of pylons affected (i.e. extent of the risk), the greatest hazard potential (i.e. medium to considerable risk) is due to flooding (5% of pylons), ice load (4% of pylons), wind exposure (2.5% of pylons) and avalanches (2% of pylons).



Transition risks: in addition to physical climate risks, Swissgrid is also affected by the challenges of the transition to a climate-friendly future and the decarbonisation of the energy system. Examples of challenges include stricter legal requirements in the climate sector, technological and regulatory restrictions (e.g. the availability of alternative insulating gases at the highest voltage level or the use of photovoltaic plants to cover the company’s own requirements), the increasing dependence of electricity generation on supply, and the rising expectations of society, politicians and investors in terms of climate protection. The transition risks and their operational and financial impact on Swissgrid are summarised in the following table. Their financial impact has not yet been quantified due to a lack of data.

Overview of transition risks

		Risk	Potential operational impact	Measures	Timeframe	Classification	Potential financial impact
Transition risks	Legal and political	New regulatory requirements for the use of sulphur hexafluoride (SF6)	Impact on the planning and maintenance of operating facilities with SF6, including risks in terms of the availability of alternatives, cost increases and time horizons	• Measures to reduce SF6 emissions (see the «Measures» section) • Roadmap for the use of alternative insulating gases	Medium and long term	Moderate	Higher procurement costs
		Narrow regulatory scope for reducing GHG emissions	Effects on the type of emission reduction measures that can be used by Swissgrid	• Regular dialogue with the regulatory authority • Regular review of Swissgrid's climate strategy	Short to long term	Moderate	Opportunity costs associated with a lack of alternatives and the financial impact of no tariff reimbursement
		Lengthy procedures for the approval of grid projects	Slow expansion and modernisation of the grid with potential delays in the integration of renewable energy sources Economic and social impact of delays and potential impact on Swissgrid's reputation	• Transparent information and involvement of affected population groups • Commitment to more efficient approval processes to speed up grid renovation and expansion	Short to long term	High	Additional operational and legal expenses and costs due to delays
	Technological	Increasingly volatile electricity generation due to the growing proportion of renewable energies	More demanding planning and greater vulnerability / higher risks for grid stability	• Strategic measures related to «Grid transfer capacity» • Long-term planning for several years, «Strategic Grid 2040», and implementation of Swissgrid's voltage maintenance concept • Improvement of forecasts, including corresponding data processing and decision-making bases (e.g. via mathematical algorithms) • Closer cooperation and coordination with grid operators in Europe and Switzerland	Short to long term	Moderate	Costs of additional measures for voltage maintenance, investments in innovation and digitalisation, operational planning costs
		Market and reputation	Increasing requirements in terms of sustainability reporting and target-setting on issues including the climate	Further development of sustainability reporting standards (Swiss, EU and ESG rating agencies) placing increasing demands on Swissgrid's data and information management	• Optimisation of data collection processes • External and internal «health checks» on the maturity of non-financial reporting • Development of an internal control system for non-financial reporting • Exchange of experience and cooperation with industry partners and affected companies	Short to medium term	Low

Climate-related risks along the supply chain: climate-related risks also affect Swissgrid's supply chain. These include, in particular:

- Interruptions, delays or price fluctuations in the delivery of critical grid components due to extreme natural events and/or transition risks.
- Influence of climate-related hazards on the safety of service providers carrying out construction and repair work.
- Availability of climate-friendly alternatives.
- Reputational risks due to insufficient ambition or compliance of direct suppliers with climate-related regulations and expectations.

Swissgrid uses risk-based measures to mitigate material risks along its value chain as part of its sustainable procurement approach (see the [«Sustainable supply chain»](#) section).

Climate-related opportunities: the climate-related transition to a decarbonised supply of electricity is opening up new fields of action for Swissgrid. These include the industry-wide need to invest in grid-related innovation and digitalisation, the increasing availability and use of new and sustainable technologies for grid stability (see the [«Energy transition»](#) section) and the decarbonisation of electricity generation in Switzerland and Europe. This last trend has an impact on the ambition and feasibility of Swissgrid's climate targets: due to the exogenous decarbonisation of the transported electricity mix, Swissgrid's internal modelling shows that emissions caused by active power losses could be reduced by up to 58% by 2040.

Overview of climate-related opportunities

	Opportunity	Potential operational impact	Measures	Timeframe	Classification	Potential financial impact
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Climate-related opportunities	Resource and energy efficiency	Availability of products and buildings with higher energy efficiency	Lower active power losses and own consumption at plants and bases	• Energy efficiency criteria for the procurement of products	Short to medium term	Moderate	Lower energy costs Lower costs for compensation of active power losses
		Availability of recycling over the product life cycle	Higher proportion of recycled raw materials used for procured products and disposal	• Recycling criteria for the procurement and disposal of products	Short to medium term	Moderate	Lower procurement and disposal costs
	Products and services	Availability of innovative products and flexible solutions for grid stability	Additional tools for balancing out fluctuations in the transmission grid	• «Equigy» crowd balancing platform (www.equigy.com) • Innovative measures and projects for the digitalisation and automation of grid operations • PV4Balancing project	Medium to long-term	High	Positive impact on the costs of control energy
		Availability of products with a lower CO ₂ footprint	Positive impact on Swissgrid's greenhouse gas emissions (all scopes)	• CO ₂ criteria in the procurement of products • Performance of life cycle assessments when selecting variants at the planning stage	Medium to long-term	High	Potentially lower costs for the reduction of CO ₂ emissions
	Market	Decarbonisation of electricity generation	Positive impact on Swissgrid's Scope 2 greenhouse gas emissions and on active power losses in particular	• Swissgrid's climate strategy, taking into account decarbonisation scenarios	Medium to long-term	High	Lower costs of the compensation of active power losses with certified CO ₂ -free electricity

Climate scenarios and their inclusion in strategic, operational and financial planning (TCFD Strategy)

Swissgrid takes into account the identified impacts, risks and opportunities of climate change in its strategic, financial and operational planning from a short, medium and long-term perspective (see tables showing the overview of physical climate risks, transition risks and opportunities). The costs of climate-related mitigation and adaptation measures are submitted to the Executive Board and the Board of Directors as part of the regular budget process and grid planning. Swissgrid has also carried out a qualitative climate scenario analysis for the period up to 2040 to strategically classify and align its adaptation measures.

Scenario 1: net-zero target pathway (1.5°C – 2°C pathway)

Scenario assumption: the energy transition is implemented in line with the net-zero target pathway and the Federal Government's Energy Strategy 2050. According to the «ZERO Basis» scenario of Energy Perspectives 2050+, the proportion of electricity generation from new renewable energy sources will increase to 36% by 2040, while the proportion of nuclear power plants will fall to zero from 2034. Global GHG emissions are therefore reduced in line with the net-zero target pathway in this scenario.

Inclusion of the scenario in strategic and operational planning: grid-related support of the Federal Government's Energy Strategy 2050 and the efficient management of the effects of the energy transition on grid stability are core elements of Swissgrid's Strategy 2027. The company is meeting the challenges of the increasing volatility of electricity being fed in to the grid from renewable energies and unplanned electricity flows by making long-term investments in improved system controllability and resilience. In particular, these include investments in the digitalisation of system operation, as well as in the development and integration of new platforms for the use of decentralised flexibility. Additional information can be found in the «[Energy transition](#)» section. Swissgrid's long-term grid development plan, the «[Strategic Grid 2040](#)», represents another core strategic element in support of the energy transition in Switzerland. The «[Strategic Grid 2040](#)» identifies and plans the optimisation and enhancement requirements of the Swiss transmission grid for the target year 2040. Swissgrid completed the planning of the Strategic Grid in the summer of 2024 and submitted the final report, including the planned grid construction projects, to ElCom for a review of its relevance and appropriateness.

Inclusion of the scenario in variable remuneration: achieving the climate targets in line with the net-zero target pathway is one of the strategic priorities of Swissgrid's CSER commitment. The importance of climate issues is also reflected in the variable remuneration of the Executive Board and Swissgrid's specialist and management staff. As part of its corporate objectives for 2024, Swissgrid defined climate-related milestones with a direct impact on the amount of the variable salary component – which apply regardless of the climate scenario. They include key performance indicators on the reduction of GHG emissions, the application of criteria for the sustainable procurement of products, and the development of sourcing strategies such as the reduction of GHG emissions and the approval of the climate strategy for Scope 1 and Scope 2 GHG emissions as part of Swissgrid's CSER concept. In total, these three key performance indicators account for 10% of the variable remuneration of the Executive Board and management staff that is linked to the corporate objectives.

The Board of Directors' fees are fixed, irrespective of corporate targets.

Scenario 2: Moderate decarbonisation and greater need for adaptation (2°C – 3°C pathway)

Scenario assumption: the transition to renewable energies and the reduction of global GHG emissions is progressing more slowly in this scenario than in the net-zero target pathway (scenario 1). In the medium term (from 2030), this will lead to an increasing need for adaptation to ensure the resilience of the grid infrastructure due to an increase in climate-related natural hazards (see climate risk overview tables).

Inclusion of the scenario in asset management and monitoring: Swissgrid already plans, builds and operates its grid infrastructure on the basis of risk-based asset performance data. The risk factors taken into account include weather and climate-related natural hazards. In particular, potential natural hazards are considered during planning and operation on the basis of the Swiss hazard maps and the risk assessment of installations. Based on the results, real-time monitoring instruments are used and/or adaptation measures (e.g. protective structures) are introduced. In addition to geological measurement data, another example of an innovative real-time monitoring tool is «Pylonian», which uses Internet of Things (IoT) sensors on electricity pylons to constantly measure changes in potentially dangerous environmental influences over the entire life cycle of the electricity pylon. Additional information can be found on the Swissgrid website under [Pylonian: monitoring electricity pylons using IoT sensors](#). As shown in the «Overview of physical climate risks» table, the increase in climate-related natural hazards in this scenario leads to additional costs due to repairs, enhancements, relocations and/or maintenance work to ensure the resilience of the grid infrastructure.

Scenario 3: High emissions and exponential need for adaptation (> 3°C pathway)

Scenario assumption: the global concentration of greenhouse gases continues to rise in this scenario, leading to global warming well above 2°C (corresponds to IPCC scenarios RCP 6.0 and RCP 8.5). As a result, there is a significant increase in extreme weather events.

Inclusion of the scenario in the risk assessment: Swissgrid considers scenario 3 as part of the risk scenario assessment in its materiality analysis. According to the analysis, the risk of recurring potential impacts on grid-related security of supply is rising due to the increase in extreme weather events. More investment would then be needed in adaptation measures in the planning and operation of the grid infrastructure in order to ensure the long-term resilience of the transmission grid. Swissgrid plans to enhance the climate scenario analysis, including a change in accordance with IPCC scenarios RCP 6.0 and 8.5, over the next two to three years.

Greenhouse gas balance, measures and key figures (TCFD Metrics and Targets)

Swissgrid has set itself the goal of reducing its GHG emissions along the value chain in line with the net-zero target. This is based on a regular, comprehensive survey of GHG emissions, supplemented by specific key figures for the most important emission sources.

GRI 305-1, 305-2, 305-3, 305-4, 305-5

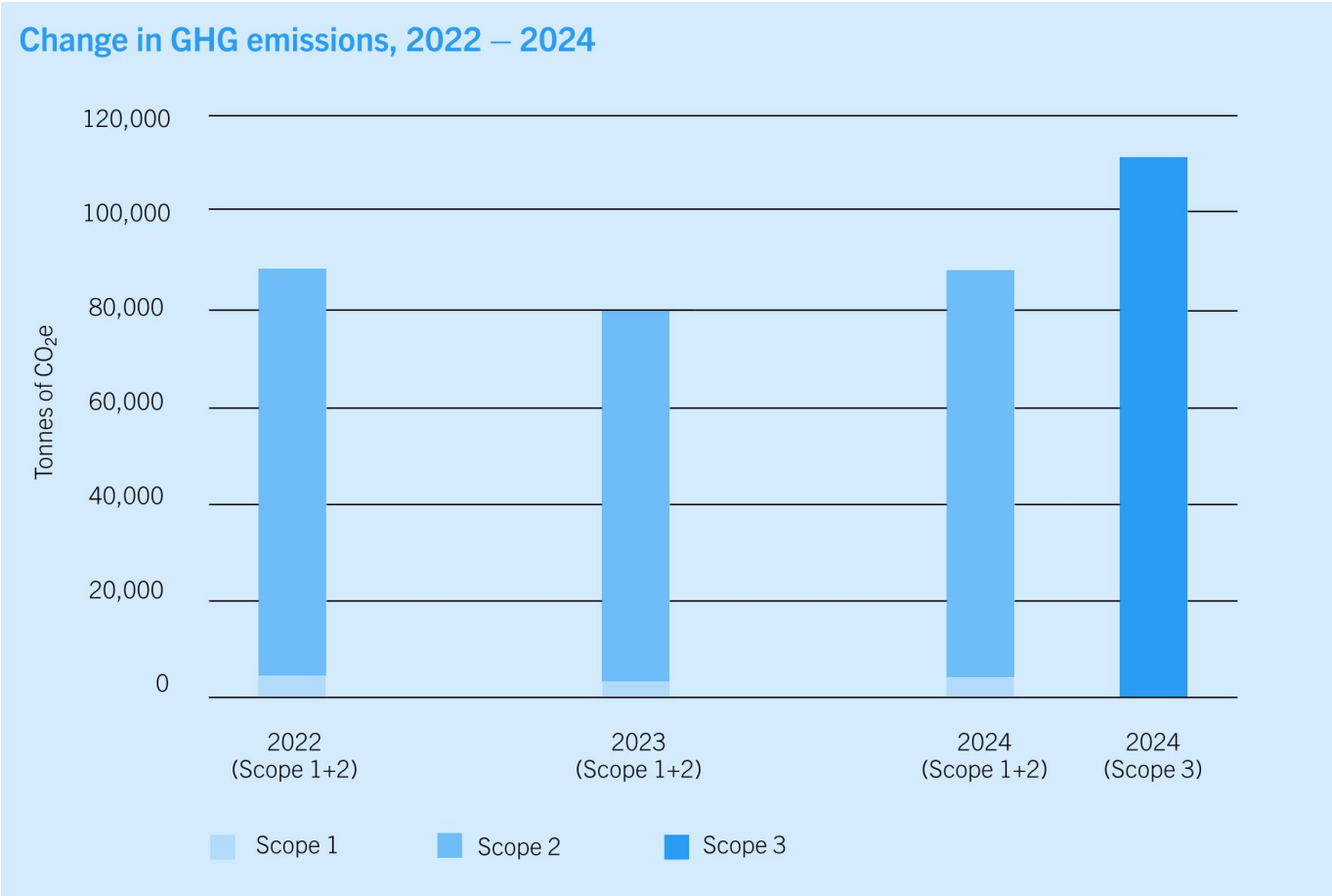
Greenhouse gas balance and emission intensity

Swissgrid collects figures on its direct and indirect GHG emissions in accordance with the requirements of the Greenhouse Gas Protocol (GHG Protocol) and has had this data audited by an external auditor since 2023 (see the «[Independent Auditor's Report](#)» in the Notes). Swissgrid is reporting Scope 2 emissions according to the location-based and market-based approach for the first time for the 2024 financial year, and has carried out a comprehensive survey of its indirect Scope 3 GHG emissions. The explanations and key figures in this

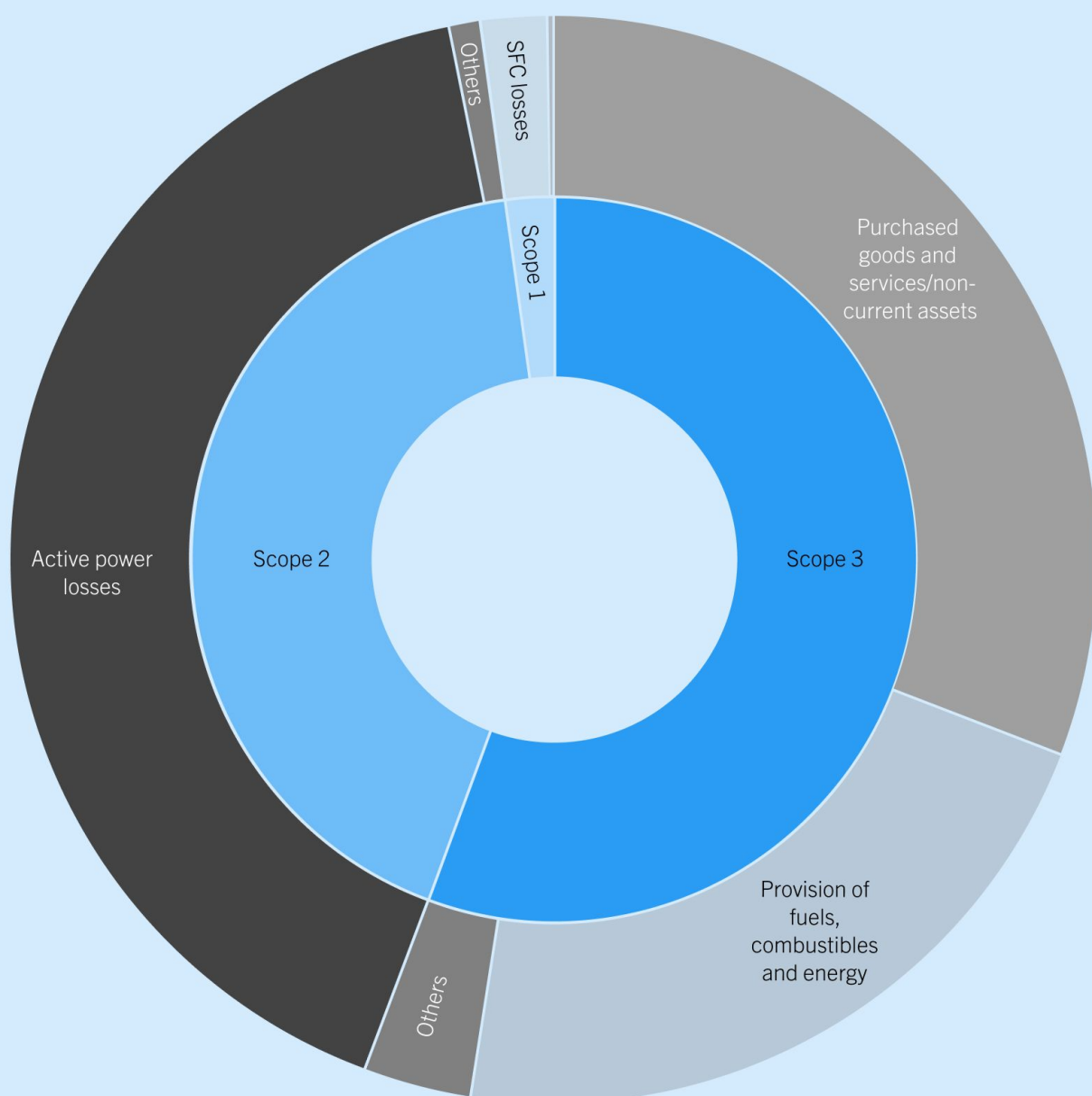
section are based on the location-based approach, unless they are explicitly indicated to be market-based.

A total of 197,453 tonnes of CO₂ equivalents (CO₂e) were generated across all three scopes in the 2024 financial year. Swissgrid’s direct and indirect Scope 1 and Scope 2 emissions accounted for 87,576 tonnes of CO₂e. This corresponds to 44% of GHG emissions across all three scopes. The largest sources of emissions in Scope 1 and Scope 2 are active power losses (93%), followed by sulphur hexafluoride (SF6) emissions (4.4%) and energy consumption in substations (1.6%). These three emission sources are responsible for 99% of Swissgrid’s total Scope 1 and Scope 2 GHG emissions. The indirect Scope 3 emissions in Swissgrid’s upstream and downstream value chain accounted for 56% of GHG emissions across all three scopes. Scope 3 is dominated by emissions from purchased (capital) goods and services (55%), followed by fuel and energy supply activities (39%). These two categories are responsible for 94% of total Scope 3 emissions.

In the 2024 financial year, Swissgrid’s Scope 1 and Scope 2 emissions increased by 8.5% in relation to the previous year. This was mainly driven by the 7.1% rise in Scope 2 emissions from active power losses and the increase in direct Scope 1 emissions due to the 46% higher GHG emissions from SF6 losses. The reasons are explained in more detail below.



Overview of emission sources in 2024



2024 greenhouse gas footprint in tonnes of CO ₂ e (✓ PwC Assurance)	2024	2023*	2022*	Change (2024 vs. 2023)
Total Scope 1 and 2	87,576	80,690	87,276	↗
Scope 1 (direct emissions)¹	4,264	2,999	4,011	↗
SF6 losses ²	3,865	2,643	3,688	↗
Fuel consumption of the Swissgrid vehicle fleet (diesel/petrol) ³	352	319*	302*	↗
Fuel consumption of emergency power systems (diesel) ⁴	47	37*	21*	↗
Scope 2 «location-based» (indirect emissions)¹	83,312	77,691	83,266	↗

2024 greenhouse gas footprint in tonnes of CO ₂ e (✓ PwC Assurance)	2024	2023*	2022*	Change (2024 vs. 2023)
Active power losses from energy transmission ⁵	81,477	76,061*	81' 643*	↗
Electricity consumption of substations ^{5,6}	1425	1,253*	1,253*	↗
Electricity consumption of locations, bases and data centres ⁵	357	325*	314*	↗
Electricity consumption of the Swissgrid communication network ^{5,7}	16	16*	16*	→
Electricity consumption of the Swissgrid vehicle fleet ⁵	1.3	1.1*	n/a	↗
District heating of locations and bases ^{8,9}	29	29*	30*	→
District cooling of locations and bases ^{8,10}	6	7*	10*	↘
Scope 2 «market-based» (indirect emissions)¹	82,785			
Active power losses from energy transmission ⁵	81,477	—	—	—
Electricity consumption of substations ^{6,11}	1,110	—	—	—
Electricity consumption of locations, bases and data centres ¹¹	162	—	—	—
Electricity consumption of the Swissgrid communication network ^{5,7}	16	—	—	—
Electricity consumption of the Swissgrid vehicle fleet ⁵	1.3	—	—	—
District heating of locations and bases ^{9,12}	17	—	—	—
District cooling of locations and bases ^{10,12}	0.18	—	—	—
Total Scope 3 (indirect emissions from the supply chain)¹³	109,877			
Goods and services / non-current assets ¹⁴	60,904	—	—	—
Activities for the provision of fuels, combustibles and energy ¹⁵	42,666	39,777*	42,593*	↗
Business trips ¹⁶	258	257*	221*	↗
Processing of waste and recyclable materials ¹⁷	1,114	—	—	—
Employee commuting ¹⁸	756	—	—	—
Investments ¹⁹	4,178	—	—	—
Total Scope 1, 2 and 3 (Scope 2 location-based)	197,453	—	—	—
Total Scope 1, 2 and 3 (Scope 2 market-based)	196,925	—	—	—

¹ Emissions are consolidated based on operational control in accordance with financial reporting.

² Calculated with a Global Warming Potential (GWP) of 23,500 according to IPCC.

³ Emission factors according to mobitool 3.0.

⁴ Emission factor according to DETEC life cycle assessment data DQRv2:202.

⁵ Emission factor according to DETEC life cycle assessment data DQRv2:2022 with a distinction between Scope 2 and Scope 3 emissions.

⁶ Emissions based on measured electricity consumption values, where available, and supplemented by extrapolations based on the technical design data of the substations.

⁷ Calculated per site using an efficiency calculation, taking into account the number and type of devices.

⁸ Emission factor according to DETEC life cycle assessment data DQRv2:2022 with a distinction between Scope 2 and Scope 3 emissions.

⁹ Based on measurements for the Aarau site and supplemented by extrapolations for other sites, taking into account the size and average heat requirements for office space in Switzerland according to the Applied Energy Journal (2021), Volume 288.

¹⁰ Based on measurements for the Aarau site; for the other sites, the cooling requirements are covered by the electricity consumption and reported accordingly.

¹¹ Emission factor according to DETEC life cycle assessment data DQRv2:2022 and treeze (2021): the life cycle inventories of Swiss electricity mixes 2018.

¹² Emission factor based on specific supplier data and DETEC life cycle assessment data DQRv2:2022 with a distinction between Scope 2 and Scope 3 emissions.

¹³ Emissions from upstream transport and distribution (Scope 3 category 4 according to the GHG Protocol) are included in the goods and services / capital goods category. Scope 3 categories 8 – 14 according to the GHG Protocol are not relevant for Swissgrid.

¹⁴ Emissions based on life cycle assessment data for grid components (where available) and expenditure-based emission factors according to the CEDA database.

¹⁵ Emission factors according to mobitool 3.0 and DETEC life cycle assessment data DQRv2:2022 with a distinction between Scope 2 and Scope 3 emissions.

¹⁶ Emission factors according to mobitool 3.0.

¹⁷ Emission factors according to DETEC life cycle assessment data DQRv2:2022. Office waste is not included as it is not material.

¹⁸ Emission factors according to mobitool 3.0 and commuter mobility statistics from the Federal Statistical Office.

¹⁹ Emission factors according to the CEDA database.

* Restatements of the years 2022 and 2023: in order to ensure comparability of the key figures, Swissgrid has recalculated the figures marked with an (*) for the financial years 2022 and 2023 to take into account changes to methodology. The most significant change concerns the differentiation of Scope 2 and Scope 3 emissions for the emission factors used for electricity, heating and cooling requirements under Scope 2 in accordance with the GHG Protocol. This has led to a reduction in the Scope 2 emissions reported in previous years, as the upstream proportion of GHG emissions must be recognised under Scope 3. Further adjustments were made to the values from 2022 and 2023 for the emission factors used for mobility, fuels and combustibles in order to ensure the consistency of the data sources and the data collection approach. These adjustments have led to a slight reduction in the Scope 1 emissions reported for fuels and an increase in GHG emissions for combustibles, as well as a rise in the Scope 3 emissions reported for business travel.

The increase in Scope 1 and Scope 2 emissions is also reflected in Swissgrid's emission intensity figures: in the 2024 financial year, Scope 1 and Scope 2 GHG emissions per MWh of transported electricity amounted to

1.26 kg CO₂e/ MWh. This corresponds to an increase of 16% due to the higher GHG emissions and a simultaneous reduction of 6% in the volume of electricity transported. In relation to Swissgrid's net turnover, the emission intensity decreased by 27% due to the growth in net turnover (see the «Financial Report»).

Emission intensity (✓ PwC Assurance)	2024	2023	2022
Scope 1 and Scope 2 emissions in relation to the volume of electricity transported (kg CO ₂ e/MWh) ¹	1.26	1.09	1.17
Scope 1, Scope 2 and Scope 3 emissions in relation to the volume of electricity transported (kg CO ₂ e/MWh) ¹	2.84	–	–
Scope 1 and Scope 2 emissions in relation to revenue (tCO ₂ e/CHF million) ¹	48	66.2	88.4
Scope 1, Scope 2 and Scope 3 emissions in relation to revenue (tCO ₂ e/CHF million) ¹	108	–	–

¹ Scope 2 emissions according to the location-based approach are used for the key figures on emission intensity.

GRI 2-25, 3-3, 305-4, 305-5

Emission reduction measures and key figures

Scope 1 GHG emissions

The most important source of Swissgrid's direct GHG emissions is SF₆ losses, which account for 91% of Scope 1 emissions. SF₆ is a highly insulating gas that is used by Swissgrid in switchgears in the extra-high-voltage range. The disadvantage of this insulating gas is that it has a high greenhouse gas potential: according to the IPCC, SF₆ is approx. 23,500 times more harmful than the greenhouse gas CO₂ and has a lifespan of 3,200 years in the earth's atmosphere. For applications above 220 kV, the availability of tested and marketable alternatives with SF₆-free insulating gas is currently very limited. Despite preventive measures, the risk of SF₆ escaping cannot be completely ruled out. Leaks in small quantities can occur due to sealing technology and gas handling.

Measures to reduce SF₆ emissions in the 2024 financial year

Preventive measures

In order to reduce SF₆ losses, Swissgrid monitors all gas rooms using leakage sensors, defines internal guidelines and trains the relevant persons to handle SF₆ gas. In addition, Swissgrid defines maximum permissible SF₆ loss requirements for the procurement of relevant operating equipment and ensures the proper refilling, recycling and disposal of SF₆ gas.

Cooperation with partners

Swissgrid is a member of the [SF6 industry solution](#). The aim is to limit aggregated SF6 emissions from the manufacture and operation of high- and medium-voltage installations to less than one tonne per year. This corresponds to a theoretical loss rate of 0.13% based on the amount of SF6 installed by Swissgrid. Swissgrid is also working closely with other European transmission system operators to drive forward the piloting and introduction of alternative insulating gases in switchgears at the highest voltage level.

Long-term reduction in the total amount of SF6

Since the beginning of the 2024 financial year, air-insulated switchgears have been given priority over gas-insulated switchgears in new grid construction projects wherever this is operationally possible. Swissgrid has also prepared a roadmap for the introduction of operating facilities with alternative insulating gases to ensure their efficient utilisation and availability.

Key figures on SF6 emissions

Swissgrid checks the effectiveness of the measures implemented by regularly collecting SF6 data from the substations. In the 2024 financial year, the company emitted a total of 164 kg of SF6, which corresponds to an increase in SF6 losses of 46%. This marked increase is mainly attributable to an accident in a switchgear system with SF6 leakage and increased losses from isolated leaking operating facilities, which could not be replaced promptly due to long delivery times, but could not be taken out of operation either. Despite the increase in SF6 losses, Swissgrid's SF6 loss rate of 0.07% is still well below the theoretical target value of the SF6 industry solution of < 0.13%.

SF6 key figures for Swissgrid (✓ PwC Assurance)	2024	2023	2022
Total amount of SF6 (kg)	230,952	232,420*	230,905*
SF6 losses (kg)	164	112	157
SF6 loss rate (%)	0.07	0.05	0.07
Greenhouse gas emissions due to SF6 losses in relation to the volume of electricity transported (kg CO ₂ e/MWh)	0.06	0.04	0.05

* The total SF6 amount for the years 2022 and 2023 was updated to include SF6 reserves to ensure data completeness and consistency.

Scope 2 GHG emissions

Active power losses, which totalled 985 GWh in the 2024 financial year, are by far the largest source of Scope 2 GHG emissions. This corresponds to an increase of 7% compared to the previous year. Active power losses in the high-voltage grid occur during electricity transmission due to the electrical resistance of the lines and losses in grid components. The level of active power losses is heavily dependent on the volume of energy transported, including transits through Switzerland. Other factors also play a role, such as the voltage and current, the design of the electrical conductor, the distance covered by the energy transported, the grid topology and climatic conditions. Swissgrid currently purchases grey electricity for 100% of its active power

losses, i.e. the required volume of electricity is procured on a non-discriminatory basis without quality requirements or guarantees of origin via tenders and the spot market. The average emission factor of the consumer electricity mix in Switzerland (including imports, less exports) is used to calculate the associated CO₂ emissions.

In the 2024 financial year, GHG emissions caused by active power losses increased by 7% to 81,477 tonnes of CO₂e in proportion to the volume of active power losses. Overall, compensation of active power losses was responsible for around 98% of Scope 2 emissions and around 93% of Swissgrid's aggregated Scope 1 and Scope 2 emissions. Electricity consumption in substations is the second most important indirect source of emissions, accounting for 1.7% of Scope 2 emissions.

Measures to reduce Scope 2 emissions

Reduction of active power losses

As part of the Strategic Grid, Swissgrid has planned a series of measures, some of which have already been implemented or initiated, which have a positive impact on the containment of active power losses. In particular, they include increasing the voltage of lines to 380 kV. As the active power losses of overhead lines are generally lower at higher voltage levels, there is an important synergy between climate measures and the planning of the Strategic Grid. Applying energy efficiency criteria in the procurement of critical grid components is another important measure which can have a significant influence on the level of electric system losses. For this reason, Swissgrid assesses the loss rate of the components offered when procuring new transformers and overhead lines and defines maximum consumption values for devices for the remote control of grid systems (Substation Automation System, SAS) (see the [«Sustainable supply chain»](#) section).

Reduction of electricity and energy consumption at substations, sites and bases

The main building in Aarau is [Minergie-P](#) certified, obtains its electricity from 100% hydropower and utilises waste heat from the waste incineration plant via the district heating system. Demand is also covered by 100% hydropower in 15 other substations and locations with the highest electricity consumption. Swissgrid also further expanded its equipment with LED lighting and electric charging stations for vehicles in the 2024 financial year and takes energy efficiency criteria into account when procuring system components and IT products.

Key figures on active power losses

The effectiveness of measures is monitored indirectly via the daily measurement of active power losses. Indirectly, because key aspects relating to the GHG emissions of active power losses are beyond Swissgrid's control – i.e. the volume of electricity demanded, the corresponding production mix and demand curves, as well as the import, export and transit of electricity.

Although Swissgrid transported less electricity in the 2024 financial year, active power losses and the associated GHG emissions increased by 7%. As active power losses depend on a variety of factors, the reasons for this increase cannot be clearly identified.

Active power losses at Swissgrid (✓ PwC Assurance)	2024	2023	2022
Active power losses (GWh)	985	919	987
Active power loss rate (%)	1.41	1.24	1.33
Greenhouse gas emissions from active power losses in relation to the volume of electricity transported (kg CO ₂ e/MWh)	1.17	1.03	1.10

GRI 302-1, 302-2, 302-3, 302-4

Key figures on energy and electricity consumption

Swissgrid records its energy and electricity consumption as well as key figures relating to energy intensity across all three scopes in order to obtain a comprehensive picture of the most important sources of consumption and potential savings. In the 2024 financial year, Swissgrid covered more than 99% of its energy losses and energy requirements with electricity. Compared to the previous year, Swissgrid's energy consumption increased by 7%, driven by higher active power losses.

Overview of energy consumption in MWh (✓ PwC Assurance)	2024	2023*	2022*	Change (2023 vs. 2024)
Total primary energy consumption within the organisation	2,655,435	2,476,175	2,653,641	↗
Total fuel consumption within the organisation from non-renewable resources	1,563	1399	1,271	↗
Fuel consumption of the Swissgrid vehicle fleet, diesel ¹	1,357	1,223*	1,147*	↗
Fuel consumption of the Swissgrid vehicle fleet, petrol ²	36	40*	48*	↘
Fuel consumption of emergency power systems (diesel) ¹	171	136*	76*	↗
Total fuel consumption within the organisation from renewable resources	0	0	0	→
Electricity consumption within the organisation (primary energy)³	2,653,298	2,474,198	2,651,680	↗
Active power losses from energy transmission	2,595,964	2,423,384	2,601,226	↗
Electricity consumption of substations ⁴	45,403	39,928	39,928	↗
Electricity consumption of locations, bases and data centres	11,383	10,344	10,010	↗
Electricity consumption of the Swissgrid communication network ⁵	508	508	515	→
Electricity consumption of the Swissgrid vehicle fleet ⁶	40	34	n/a	↗
Thermal energy consumption within the organisation (primary energy)³	371	369	379	↗
District heating ⁷	371	369	379	↗
Cooling energy consumption within the organisation (primary energy)³	203	209	311	↘
District cooling ⁸	203	209	311	↘

Overview of energy consumption in MWh (✓ PwC Assurance)	2024	2023*	2022*	Change (2023 vs. 2024)
Total primary energy consumption outside the organisation	10,541	n/a	n/a	
Preparation of fuels and combustibles ^{1,2}	1,592	1,426*	1,296*	
Waste ⁹	4,163	n/a	n/a	
Business trips ¹⁰	1,026	1,030*	876*	
Employee commuting ¹¹	3,760	n/a	n/a	
Total primary energy consumption (within and outside the organisation)	2,665,976	n/a	n/a	

¹ Diesel conversion factor according to mobitool 3.0.

² Petrol conversion factor according to mobitool 3.0.

³ Conversion factor for primary energy based on DETEC life cycle assessment data DQRv2:2022.

⁴ Electricity consumption based on measured values, where available, and supplemented by extrapolations based on the technical design data of the substations.

⁵ Electricity consumption is determined for each location using a power calculation, taking into account the number and type of devices.

⁶ Electricity consumption of electric vehicles according to mobitool 3.0.

⁷ Based on measurements for the Aarau site and supplemented by extrapolations for other sites based on their size and the average heat requirements for offices in Switzerland according to the Applied Energy Journal (2021), Volume 288.

⁸ Based on measurements for the Aarau site; for the other sites, the cooling requirements are covered by the electricity consumption.

⁹ Energy factors according to DETEC life cycle assessment data DQRv2:2022.

¹⁰ Based on energy factors from mobitool 3.0.

¹¹ Energy factors from mobitool and commuter mobility statistics from the Federal Statistical Office.

* Restatements for the years 2022 and 2023: in order to ensure comparability of the key figures, Swissgrid has recalculated the figures marked with an (*) for the financial years 2022 and 2023 to take into account changes to methodology. This affects the key figures for business trips due to an adjustment of the energy factor used from person-km to vehicle-km and the underlying data source (mobitool). For reasons of consistency, the same data source (mobitool) is now used for all data relating to fuels. Due to these adjustments, the energy consumption reported in connection with business travel has increased for 2022 and 2023.

Primary energy consumption within Swissgrid increased by 14% compared to the volume of electricity transported in the 2024 financial year and fell slightly by 1.32% in relation to the number of employees.

Key figures on energy intensity (✓ PwC Assurance)	2024	2023	2022
Primary energy consumption within the organisation per volume of electricity transported [MWh consumed/ MWh transported] ¹	0.038	0.033	0.036
Primary energy consumption within the organisation per employee (MWh/employee)	2,865	2,903	3,605

¹ Includes fuel, electricity, heating and cooling.

Scope 3 GHG emissions

Swissgrid carried out the comprehensive collection and reporting of its Scope 3 emissions for the first time for the 2024 financial year. Scope 3 emissions represent 56% of total emissions and therefore have a significant impact on Swissgrid's CO₂ footprint along its value chain. A combination of life cycle assessments and an expenditure-based approach is used to calculate GHG emissions.

Emissions from goods, services and capital goods procured represent 55% of total Scope 3 emissions, making them the largest source of Swissgrid's indirect emissions arising in the company's upstream and downstream value chain. In the 2024 financial year, the main drivers of GHG emissions in this category were conductors (15%), switchgears (4.3%), cables (2.5%) and pylons (1.8%). The second most important category comprises energy, fuel and fuel treatment, which accounts for around 39% of Scope 3 emissions. Upstream emissions in connection with active power losses play the largest role within this category.

Measures to reduce Scope 3 emissions in the financial year

When procuring goods and services, Swissgrid systematically takes into account ecological criteria that help to reduce the CO₂ footprint of the components. These criteria are described in the [«Sustainable supply chain»](#) section. In October 2024, the Executive Board commissioned the cross-divisional Climate working group to develop Scope 3 climate targets and a specific roadmap of measures in the 2025 financial year. This should be done in accordance with the legal obligations, taking into account the scientific requirements according to SBTi and the benchmark with comparable companies in Switzerland and Europe.

Scope 3 emission intensity (✓ PwC Assurance)	2024
Scope 3 emissions per km of conductors procured (t CO ₂ e/km of conductors)	156
Scope 3 emissions per material input flow (t CO ₂ /t material)	0.94

GRI 3-3

Outlook: climate targets and transition plan (TCFD Strategy)

Net-zero emissions target by 2040

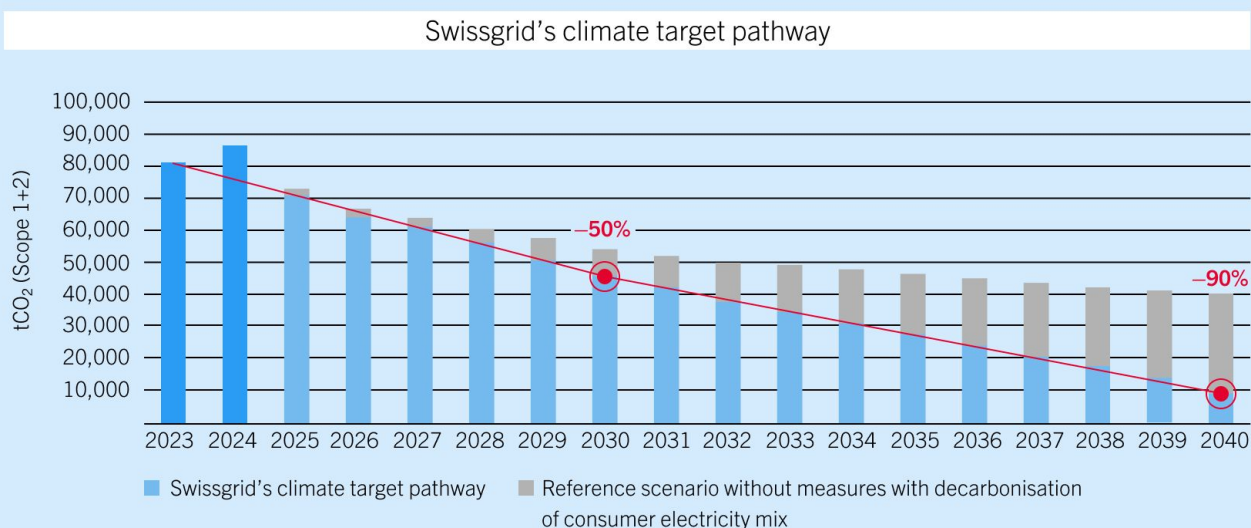
In line with the scientifically required goal of limiting the global temperature increase to 1.5°C compared to pre-industrial levels and in accordance with the legal requirements in force in Switzerland, the Swissgrid Board of Directors approved the following medium and long-term climate targets for Swissgrid's Scope 1 and Scope 2 GHG emissions in January 2025:

- 50% reduction target by 2030 (compared to 2023) with a linear reduction path of –6% per year from 2025

to 2030.

- 90% reduction target by 2040 (compared to 2023) with a linear reduction path of –4% per year from 2031 to 2040.
- From 2040, the remaining GHG emissions will be offset by the use of certified negative emission technologies in order to achieve the net-zero target.

Swissgrid's climate target: net zero by 2040 for Scope 1 and Scope 2 emissions



Roadmap of measures for achieving the set targets

The roadmap of measures for achieving the set targets focuses on Swissgrid's three main emission categories because together they are responsible for more than 98% of the combined Scope 1 and Scope 2 emissions for the reference year 2023.

Measures concerning active power losses

The roadmap for reducing and decarbonising active power losses builds on measures that have already been initiated, and combines them with new measures. Measures include technical measures to reduce active power losses by implementing the planned voltage increases in accordance with the Strategic Grid and the systematic application of efficiency criteria when procuring critical grid components. In addition, Swissgrid will cover a linearly increasing share of compensation of active power losses with certified low CO₂ electricity instead of grey electricity from 2025. Swissgrid is guided by the Swiss production mix in accordance with the criterion of non-discrimination for ancillary services.

Measures concerning SF6 emissions

The roadmap for reducing SF6 losses in switchgears takes advantage of the existing synergy, consisting of measures that have already been initiated and implemented as part of the strategic planning and operation of grid installations. Measures include the prevention of SF6 losses and the long-term reduction of SF6 thanks to the use of air-insulated switchgears and the gradual introduction of alternative insulating gases.

Measures concerning own consumption in substations

The measures adopted to reduce electricity consumption in substations include technical unbundling and the installation of smart measuring instruments, the use of efficient system components and the decarbonisation of electricity consumption with certified electricity from renewable energies, including hydropower.

Analysing the effectiveness of the timetable: Swissgrid's predicted emission trends and the effectiveness analysis take into account various emission and cost scenarios, different developments of exogenous influencing factors (e.g. sensitivity analysis of the speed and scope of decarbonisation of the production mix in Switzerland and abroad), as well as possible risk factors that could influence the implementation, efficiency or effectiveness of the planned measures. These include regulatory and technological risks, market and reputational risks and financial risks.

Implementation and monitoring: operational implementation takes place as part of the multi-year planning for grid projects and procurement planning in connection with active power losses. The climate target pathway will be managed as a top KPI within the strategic corporate objectives from 2025 onwards and will influence the variable remuneration of the Executive Board and Swissgrid's specialist and management staff. Regular, centrally managed monitoring and a comprehensive review of the climate strategy are carried out to check implementation progress. The monitoring and audit results and any modifications are submitted to the Board of Directors for discussion and/or decision.

Environmental protection

Protecting the environment is an integral part of Swissgrid's mission. As a sustainable company, Swissgrid not only ensures the safe and reliable operation of the transmission grid, but also takes responsibility for protecting the environment in which its grid infrastructure is embedded. This is both an integral part of Swissgrid's mission and legal responsibility and an essential basis for ensuring the social acceptance of grid projects.

GRI 3-3

Ambition and goals

Swissgrid has set itself the goal of systematically taking environmental interests into account in its activities and minimising potentially harmful effects on land, air and water. To this end, Swissgrid operates a comprehensive environmental management system and endeavours to continuously reduce wastewater, noise and other emissions.

GRI 3-3

Management approach

Swissgrid's integrated management system

In the 2024 reporting year, the Executive Board commissioned the Sustainability team with the management and further development of the environmental management system at Swissgrid. This organisational change is intended to further the integration and harnessing of synergies from the management systems for sustainability, environmental protection and occupational safety. The existing Health, Safety and Environment management system (HSE for short) continues to form the framework for the targeted implementation and continuous improvement of environmental protection at Swissgrid, compliance with legal requirements and the establishment of environmental protection within the corporate culture. The management system is based on the PDCA management model («plan-do-check-act») to support the continuous improvement of HSE performance.

The integrated management system is certified in accordance with the ISO 14001 and 45001 standards by an accredited auditing body. In the 2024 financial year, a monitoring audit was carried out in accordance with the standardised three-year audit cycle. The existing HSE management system was confirmed to be suitable, appropriate and effective. No deviations were identified in the area of environmental protection, and the external auditors underlined the extensive HSE expertise of the Swissgrid employees involved, some of whom have been with the company for many years.

Identified impacts, risks and opportunities

Swissgrid identifies and assesses the impacts and risks of its business activities on the environment as part of the dual materiality analysis and the environmental impact analysis. The environmental impact analysis determines the effects of operational activities and processes on materials/raw materials, water, energy consumption, emissions, soil, non-ionising radiation, waste, noise, nature conservation and the landscape, as well as other risk factors. On this basis, the materiality analysis assesses identified environmental impacts according to their extent, scope, the irreversibility of the impact and the probability of occurrence. In addition, Swissgrid conducts regular stakeholder analyses as part of its HSE management system and materiality analysis in order to determine and take into account the expectations and requirements of stakeholder groups. The materiality analysis and environmental impact analysis are updated annually. The results are incorporated into Swissgrid's ERM system and form the basis for deriving and implementing risk-based measures as part of the HSE management review.

The potential and actual environmental risks and impacts identified include the disturbance and damage of protected habitats, negative impacts on fauna and flora due to the construction and operation of installations, the release of environmentally hazardous substances, and environmental damage due to the incorrect handling of contaminated material. Furthermore, the visual impact on the landscape, electromagnetic fields and noise are among the most frequent concerns of the population with regard to extra-high-voltage lines. Swissgrid proactively addresses environmental risks, impacts and concerns with the aim of either eliminating them by taking adequate measures or minimising them to an acceptable residual risk.

GRI 2-25, 2-26, 413-1, 413-2

Systematic inclusion of environmental protection in grid construction projects

The potential and actual effects on the environment can be considerable, especially in grid construction projects. Swissgrid systematically considers and minimises the environmental impact when planning and implementing grid infrastructure. Compliance with environmental protection laws and ordinances is a matter of course for the company.

Compliance with environmental regulations is verified by the Federal Office for the Environment (FOEN) when approving grid construction projects. The process consists of several phases in which the concerns of various interest groups are also taken into account (see the «Stakeholder engagement» section). When major projects are being carried out, for instance to build a new extra-high-voltage line, all the phases must be complied with; when implementing smaller projects, relevant environmental protection measures are implemented in accordance with the legal requirements.

Overview of the inclusion of environmental aspects in the approval of grid construction projects

Phase	Activities	Inclusion of environmental aspects
Needs analysis	Future grid development requirements are analysed as part of the planning for several years, known as the Strategic Grid. The planning of the Strategic Grid is based on the scenario framework for Switzerland, which is drawn up by the Swiss Federal Office of Energy (SFOE).	- The future grid is planned according to the NOVA principle (grid optimisation before grid enhancement before grid expansion). This means that the impact of grid expansion on the environment and the landscape can be kept to a minimum. - The environmental and landscape impact is optimised by bundling infrastructure such as transmission lines with national roads and railway lines. One example of this is the second tube of the Gotthard Road Tunnel, where the line from Göschenen to Airolo, which is approximately 18 km long, is combined with a national road.
Preparation	In this phase of each relevant grid construction project, Swissgrid prepares various underground cable and overhead line corridors for the areas in which lines are planned.	A preliminary <u>environmental impact assessment</u> is carried out taking into account the following impacts: air, noise and vibrations, non-ionising radiation, groundwater and springs, surface water and aquatic systems, drainage, soil, contaminated sites, waste, environmentally hazardous substances, environmentally hazardous organisms (neophytes), disturbances, forests, flora, fauna and habitats, landscape and townscape (incl. light emissions), cultural assets and archaeology.
Inclusion in the federal Transmission Lines sectoral plan (SÜL)	Swissgrid submits the application for the SÜL procedure. This is the federal government's overarching planning and coordination tool for the expansion and new construction of transmission lines. At the end of this phase, the Federal Council determines the corridor for the line and the technology (overhead line, underground cable or a combination of the two).	- A support group appointed by the SFOE with representatives of the Swiss government, cantons, environmental protection organisations and Swissgrid discusses the proposed options and submits a recommendation. - The Swiss government's evaluation scheme for the transmission lines plays a key role in this respect. Regional development, the environment and economic viability are factors which are taken into consideration in addition to technical aspects. - A public consultation and participation procedure allows affected parties to make their views known (consultation and participation procedure in accordance with Art. 15 ff. of the Electricity Act).
Construction project	Swissgrid prepares the specific construction project within the planning corridor defined by the Federal Council.	- In this phase, Swissgrid appoints a project advisory council for selected projects in order to integrate the concerns of the population and other stakeholder groups into project planning. - Swissgrid also carries out a detailed environmental impact assessment, taking into account the above-mentioned aspects. The environmental impact assessment is part of the planning application that Swissgrid submits for the planning approval procedure.
Planning approval procedure	Swissgrid submits an application for planning permission to the relevant authorities. At the end of this phase, the authorities – either the Federal Inspectorate for Heavy Current Installations (ESTI) or the SFOE – issue Swissgrid with the planning approval decision, including the construction permit, and may impose additional conditions that must be included in the project planning.	- In this phase, the public presentation of the project takes place, if required by the procedural regulations, including the environmental impact assessment. - Directly affected parties, environmental organisations, cantons and municipalities have the opportunity to lodge objections and to appeal before the courts. - Approval is granted by the federal authorities and usually includes additional environmental requirements for the construction of the line.

Construction

- Once the legally binding construction permit has been granted, the construction work can begin. Swissgrid procures the necessary supplies and services in accordance with the provisions of public procurement law.
- Swissgrid procures materials and services taking environmental aspects into account (see the [«Sustainable supply chain»](#) section).
- Swissgrid implements ecological protection, restoration and/or alternative measures in accordance with the environmental impact report and the official requirements.
- Construction projects are subject to external environmental construction/ecological supervision and/or soil science construction supervision – on behalf of Swissgrid – in order to ensure the implementation of protective measures and environmental compliance.

GRI 2-26, 3-3, 416-1

Measures and key figures

Environmental protection measures

In accordance with the statutory national and cantonal requirements, Swissgrid consistently and systematically implements measures to avoid, minimise and compensate for the environmental impact of the planning, construction, maintenance and servicing of grid projects. Specific examples of environmental protection measures for ongoing grid projects are described on the Swissgrid website ([Project overview](#)).

Preventive measures

Swissgrid attaches great importance to preventive protective measures in an effort to avoid negative effects on the environment. These include:

- The systematic inclusion of environmental impacts in the preliminary project phase in order to compare the ecological impacts of different variants and to consider this aspect as part of the decision-making process. This is done by conducting an environmental conflict analysis, the results of which are incorporated into the subsequent project phases. Furthermore, since the beginning of 2024, Swissgrid has been using a data-based tool called «Pathfinder», which takes ecological and regional planning aspects into account in addition to technical criteria to help select optimal line routes (see the box on data-based route planning with «Pathfinder»).
- The implementation of measures to prevent the release of environmentally hazardous pollutants (e.g. insulating oils). This includes the implementation of safety precautions and monitoring systems to detect and prevent potential leaks or accidents at an early stage, as well as the establishment of special storage and disposal areas for contaminated materials to prevent improper handling.
- Building up capacity and expanding the expertise of local site managers to ensure full implementation of the laws, requirements and specific measures, including those relevant to the environment, in all implementation projects.
- Regular training of the relevant employees on the safe handling of hazardous materials and work equipment. In addition, employees and external parties have the opportunity to submit reports, indications and/or suggestions for improvement regarding environmental risks via the «RiskTalk» app.
- The implementation of prevention measures during the implementation of approved grid projects and work. Examples include prior vegetation surveys, the planning of material storage areas or construction slopes, the covering of green areas during corrosion protection work and/or strict compliance with regulations for the storage and use of hazardous substances and machinery.

Measures concerning noise emissions

Due to corona discharge, power lines can generate localised noise emissions in the form of crackling or humming, especially in damp weather conditions. In addition, there may be temporary noise pollution during the construction or maintenance of systems. Swissgrid is implementing the following measures to reduce noise emissions while complying with the statutory immission limit of 45 to 55 decibels in residential zones:

- Reduction of the strength of the electric field on the surface of the conductor by optimising the conductor arrangement.
- Inclusion of technical criteria for noise emissions in the procurement of conductors and transformers.
- Structural and operational measures to limit noise emissions (e.g. use of noise-reducing technologies and processes during the operation and maintenance of systems).

Measures concerning electromagnetic fields

Electric and magnetic fields are generated wherever electricity is produced, transported and used. Swissgrid adheres to the strict Swiss limits in this respect. Additional information is available on the Swissgrid website under [Emissions](#). Swissgrid implements technical measures to ensure that electromagnetic fields are kept as low as possible:

- Optimisation of the phase position in the grids in order to minimise electromagnetic fields.
- Implementation of protective measures (e.g. choice of route and pylon locations, height of lines) to minimise the exposure of people and the environment to electromagnetic fields.

Implementation of restoration and alternative measures

If protective measures to avoid negative environmental impacts are not possible, restoration measures are taken. These measures are designed to repair temporary interventions into nature. For example, a meadow that was used for an access track during the construction phase must be restored once the work has been completed. If this is not sufficient, Swissgrid will implement ecological alternative measures as a last resort. These measures ensure that the overall ecological balance of the region is preserved. One example is the reforestation of a comparable forest if permanent clearing is required under a new line.

Environmental supervision

Environmental supervision ensures that environmental issues are managed and monitored during construction projects and helps Swissgrid to guarantee the legally compliant and environmentally compatible implementation of projects. It ensures compliance with environmental laws, regulations, guidelines, instructions and requirements of the planning approval decision. It advises and supports the parties involved, observes and evaluates environmental problems at the construction site and ensures that the project is implemented in a legally compliant manner.

GRI 2-27

Key figures on environmental protection

The effectiveness of protection, restoration and alternative measures is assessed in detail during the approval process. The implementation of measures is also monitored by regular HSE inspections and external environmental construction supervision. Random checks can be carried out by the cantonal authorities once grid projects have been completed. In addition, specific control measurements are carried out, e.g. to ensure compliance with the imission limits for electromagnetic fields and noise, as well as ground measurements to determine pollution levels.

In the 2024 reporting year, there were no significant judgements or monetary fines against Swissgrid for compliance violations in relation to environmental protection. Swissgrid carried out a total of 396 HSE inspections, in the course of which no potential high-risk environmental deviations were identified.

Despite the preventive measures implemented, three incidents with a potentially negative impact on the environment occurred in grid operations during the 2024 financial year due to the leakage of oil in two cases and the loss of SF6 due to an accident in a switchgear in the third case. In all three instances, immediate measures were taken (removal and proper disposal of the contaminated soil, switching off of equipment) and internal investigations were initiated.

Key figures on environmental protection	2024	2023	2022
Significant ¹ violations of environmental protection laws and ordinances (including monetary and non-monetary sanctions)	0	0	0
Fines paid or deferred for significant ¹ environmental violations committed in previous years	0	0	0
Number of HSE inspections carried out	396	357	368
Number of HSE inspections with potential deviations in relation to environmental protection with medium risk	2	0	7
Number of HSE inspections with potential deviations in relation to environmental protection with high risk	0	1	0
Number of events with a potentially negative impact on the environment	3	n/a	n/a

¹ A penalty of CHF 10,000 was defined as the materiality threshold for reporting.

Data-based route planning with «Pathfinder»

Swissgrid uses «Pathfinder» to develop and analyse route variants for new high-voltage lines in the preliminary project phase (SIA 31). «Pathfinder» is a tool that facilitates planning by integrating technical, environmental and regional planning criteria and illustrating their interrelationships (see the illustration, «Fictitious example of route planning with Pathfinder»). Quantitative factors such as life cycle assessments and life cycle costs are calculated automatically. In terms of environmental and biodiversity protection, «Pathfinder» makes these aspects both visible and comparable.

How «Pathfinder» works

«Pathfinder» combines geodata with powerful algorithms to calculate optimal routes:

- **Resistance analysis:** criteria such as topography, protected areas and residential areas are evaluated and shown on a resistance map that highlights the routes that are more or less suitable.
- **Route suggestions:** based on the map, the tool creates specific routes, including pylon locations, thereby enabling precise and transparent planning.

Automatic analysis of costs and environmental impacts

The tool then analyses the costs and environmental impacts:

- **Cost analysis:** calculation of investment and life cycle costs (CAPEX and LLC).
- **Environmental assessment:** consideration of GHG emissions, the landscape, nature conservation areas, biodiversity protection and compatibility with regional planning objectives.

Planning advantages

The results from «Pathfinder» represent a data-based decision-making tool that helps Swissgrid to finalise the entire preliminary project phase and submit a well-founded route proposal.

Fictitious example of route planning with Pathfinder

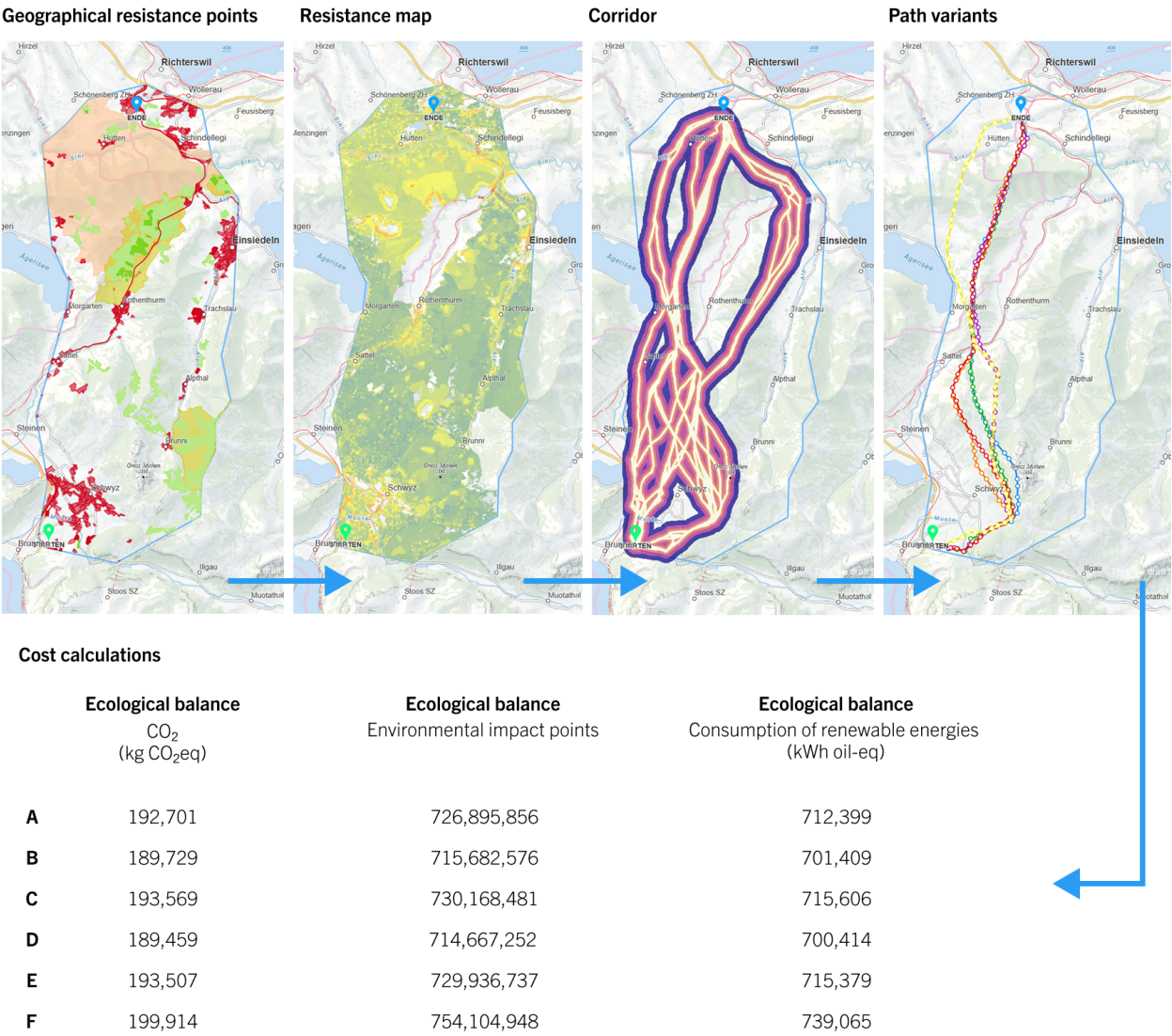


Figure: the five steps of route planning with «Pathfinder», illustrated using a fictitious project: analysis of geographical resistance, creation of a resistance map, definition of suitable corridors, development of route variants and calculation of costs.

Biodiversity

The health and resilience of nature and its biodiversity are important prerequisites for the well-being and resilience of society, the economy and infrastructure. This also applies to Swissgrid's transmission grid: its resilience is better protected against flooding and other extreme weather-related events by an intact ecosystem. As the operator of a national infrastructure, Swissgrid takes its duty to preserve biodiversity seriously as part of its legal and social responsibility.

GRI 3-3

Ambition and goals

Swissgrid is committed to the preservation of biodiversity. As required by law, Swissgrid applies the mitigation hierarchy according to the «no net loss» principle: avoid, minimise, restore and – where unavoidable – compensate.

GRI 3-3

Management approach

GRI 304-2

Identified impacts and risks

Swissgrid identifies and assesses the impacts and risks of its business activities on biodiversity as part of the dual materiality analysis and environmental impact analysis, as described in detail in the «Environmental protection» section. The expected impacts of specific grid projects and compliance with the legal provisions on the protection of the environment and biodiversity are analysed and presented as part of the environmental impact report and the environmental impact statement. As far as biodiversity is concerned, the effects on groundwater and springs, surface waters and aquatic systems, drainage, soil, environmentally harmful organisms (neophytes), forests, flora, fauna and habitats are analysed. The identification and mitigation of impacts on biodiversity are part of Swissgrid's legal obligation for the approval and implementation of a grid project.

The environmental impact analysis classes the planning and construction phase of routes as one of the activities with the highest relevance for biodiversity and ecosystems, in the same way as the maintenance of underground cables. As part of the materiality analysis, the impacts are considered to be largely local or regional, long-term (i.e. longer than five years) and to have a relatively high degree of irreversibility, partly due to the long service life of Swissgrid's infrastructure. However, the specific impacts on biodiversity are highly dependent on the location and the type of grid project or maintenance work, and can affect forests, flora and/or fauna. For example, keeping vegetation levels down can disturb the habitat of plants and animals. The same applies to clearing work near lines which is necessary for their safe operation, or keeping the ground above cable conduit blocks free of tall or deep-rooted trees. In addition, forest aisles for laying underground cabling or installing overhead lines can favour the spread of invasive neophytes, and lines can represent a collision risk for birds. When laying underground cables, the aisles in forests required for safe operation, access roads and additional compensation systems and transition structures leave their mark on the landscape (see «Technologies in the extra-high-voltage grid»).

GRI 304-1

Inventory of grid infrastructure in protected areas

According to the Transmission Lines sectoral plan, protected areas of national or cantonal importance are also taken into account when considering planning areas and analysing corridor variants. It is not always possible to completely avoid a protected area when planning and installing a line. In these cases, Swissgrid examines and implements protection, restoration and/or alternative measures.

In Switzerland, national protected areas cover around 6.2% of the total national territory. Of the extra-high-voltage infrastructure networked throughout Switzerland, a total of 2,806 pylons (24%) and 19 substations (15%) are located in one or more protected areas (without counting any elements twice).

Overview of protected areas and grid infrastructure¹

Protected areas	Type of protected area	Protection status	Pylons	Substations
Federal Inventory of Landscapes and Natural Monuments ²	Landscapes of national importance	National legislation	1,214	7
Moorlands	Landscapes of national importance	National legislation	186	1
Floodplains	Biotopes of national importance	National legislation	114	0
Raised and transitional bogs	Biotopes of national importance	National legislation	5	0
Low-moor bogs	Biotopes of national importance	National legislation	54	0
Amphibian spawning areas	Biotopes of national importance	National legislation	112	0
Dry meadows and pastures	Biotopes of national importance	National legislation	136	0
Emeralds	National protected areas	<u>Berne Convention</u> (international agreement)	208	3
Hunting ban areas	National protected areas	National legislation	346	2
Swiss parks	Landscapes of national importance	National legislation	1,204	10
Water and migratory bird reserves	National protected areas	National legislation	41	1
Biosphere reserves	Landscapes of national importance	<u>UNESCO</u> (international programme)	78	0
Ramsar	National protected areas	<u>Ramsar Convention</u> (international agreement)	52	1
Infrastructure in protected areas of national importance (number) ³			2,806	19
Infrastructure in protected areas of national importance (%) ³			24%	15%
Surface area of railway lines in protected areas of national importance ⁴ (km ²)			22	n/a
Surface area of pylons in protected areas of national importance ⁴ (km ²)			0.4	n/a

¹ To determine the locations of pylons and substations in protected areas, the 11,879 pylon locations and 126 substations were cross-referenced with the GIS data of the protected areas. The data shown includes pylons and substations within landscapes and biotopes of national importance and within national protected areas.

² According to the [Federal Inventory of Landscapes and Natural Monuments \(BLN\)](#).

³ Pylons and substations in the vicinity of protected areas are not included. Each pylon and substation is only counted once.

⁴ The area for routes and pylons was calculated based on average values. Due to the complexity of data collection in relation to substations, which are often shared with other partners and are less standardised, the area was not surveyed.

GRI 304-3

Measures and key figures

The Federal Act on the Protection of Nature and Cultural Heritage follows the zero-balance approach. This means that the ecological value after the intervention should be the same as before. Swissgrid consistently complies with the strict legal requirements for the conservation of biodiversity and implements measures in accordance with the principle of «avoidance – protection – restoration – replacement».

Measures in protected areas

Swissgrid consistently implements the measures for the protection and preservation of biodiversity defined in the approval processes for each grid project and complies with the relevant legal requirements. Examples of measures implemented in the main protection areas include:

Protected area	Measures
Measures in protected areas and preservation of livelihoods	• Choice of line corridors taking into account the consequences for biodiversity (see the box on data-based route planning with «Pathfinder») • Placement of installation areas outside special protection zones, such as biotopes of national importance • Minimisation of impact areas • Protection of existing earthworks, (small) bodies of water (amphibian habitats), hedges, trees and other habitat structures (e.g. dry stone walls and cairns) by marking, blocking off or covering them during construction • Determination of construction times with consideration for hoofed game
Measures to protect forests	• Restoration of temporarily required forest areas • Real replacement or equivalent measures in favour of nature and landscape conservation • Additional alternative measures if clearing affects habitats in need of special protection
Measures to protect flora	• Use of excavator mats to protect vegetation • Protection of rare and protected plants around pylons via coordinated development and construction site planning (including information for all the parties involved) • Professional control of neophytes at pylon sites and substations (see: Control of invasive neophytes). • Green space maintenance concepts at substations

Measures to protect • Bird protection measures (see: [What's all that chirping?](#))

fauna

- Routing to bypass highly sensitive areas (e.g. water and migratory bird reserves)
 - Line markings to reduce the risk of collision
 - Avoidance of disturbance by carrying out work outside breeding and setting phases
 - Partnership with external initiators to install nesting boxes for particularly endangered bird species (e.g. jackdaws or kestrels)
 - Minimisation of impact areas, in particular reptile priority areas
 - Creation of small structures in substations (piles of stones, deadwood, etc.)
 - Creation of new homes for cavity-nesting birds in suitable locations
 - Adaptation of the mowing frequency at substations
 - Promotion of structures at substations made of piles of sand and stones to protect species such as wild bees (see: [Wild bees under tension](#))
-

Route management measures

Route management on existing lines currently includes keeping down the trees under the lines, as regulated in the easements with the landowners, recorded in servitude agreements or ordered during the planning approval procedure. Vegetation does not need to be kept down under all lines, as many of them do not touch or span forest areas.

Swissgrid's internal foresters plan this work along the lines. This ensures that the lines can be operated safely at all times. The vegetation management carried out by Swissgrid's foresters is not only important for security of supply, but can also create ecological added value by encouraging greater biodiversity. One example of this is a Swissgrid pilot project in which the management of the extra-high-voltage line was adapted to keep down vegetation in an area where the Alpine longhorn beetle has found a suitable habitat in deadwood (see: [«New life in deadwood»](#)).

Cooperation with external partners

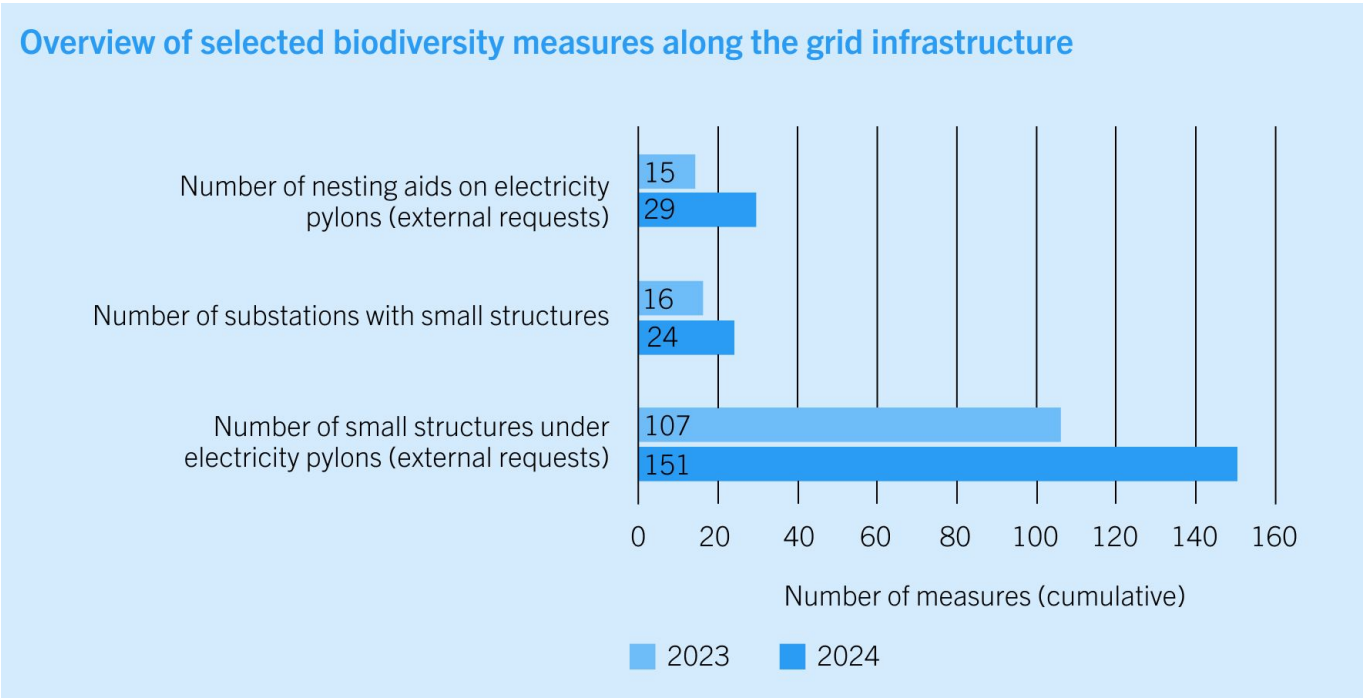
Swissgrid works with external partner organisations to protect, maintain and enhance the ecological infrastructure in Switzerland, above and beyond regulatory and official measures. The installation of small structures under pylons is an example of this cooperation work. Piles of branches and stones or small ponds are used to create habitats for amphibians, reptiles, insects or other invertebrates and small mammals. Swissgrid assists the nature conservation organisations that supervise these projects by providing the necessary geodata and specifying the conditions that must be met to ensure the safety of the lines.

To date, a total of 151 small structures have been built under electricity pylons thanks to partnerships of this kind. Nesting aids have also been installed on 29 pylons. The number of enquiries from nature conservation organisations has steadily increased in recent years. The figure for the installation of small structures under electricity pylons rose by 41% in 2024 in relation to the previous year.

Key figures on biodiversity

Environmental protection measures that also focus on the preservation of biodiversity are defined in the approval process. The means of monitoring the effectiveness of measures is explained in the [«Environmental protection»](#) section. Swissgrid strictly complies with the legal requirements in order to maintain the natural value of biodiversity in accordance with the overarching net-zero target. However, the effectiveness of measures is not analysed in detail by measuring species diversity or other biodiversity aspects. The following

diagram and key figures provide an overview of selected biodiversity measures that are being implemented along Swissgrid’s grid infrastructure.



Circular economy

The circular economy is becoming increasingly important as a key concept for a resource-conserving and sustainable economy. This concept plays a major role for Swissgrid, as the construction, operation and maintenance of its infrastructure is associated with a high material input. The application of the circular economy approach along the value chain of its systems enables Swissgrid to utilise valuable resources efficiently and to reduce the environmental footprint over the life cycle of its infrastructure.

GRI 3-3

Ambition and goals

Swissgrid is committed to making responsible use of natural resources. To this end, it integrates the principles of the circular economy along the value chain in order to optimise resource efficiency, promote the reuse and recycling of materials, and reduce waste.

GRI 3-3, 306-1

Management approach

Identified impacts and risks

Swissgrid determines and assesses the impact of its business activities in relation to the circular economy as part of the dual materiality analysis and the environmental impact analysis (see the [«Environmental protection»](#) section). The main impacts occur along the value chain of grid projects. The planning and design phase in particular has a major influence on the type and quantity of materials, raw materials and auxiliary materials used. This affects both the environmental footprint of the grid components procured by Swissgrid and the extent of the potential environmental and social risks in the upstream value chain, particularly with regard to primary raw materials (see the [«Sustainable supply chain»](#) section). The waste-related impacts caused by dismantling systems dominate the end of the life cycle of Swissgrid's plants. In this respect, the proper handling and disposal of hazardous waste is a key concern for Swissgrid, for instance to avoid potential contamination of soil and water.

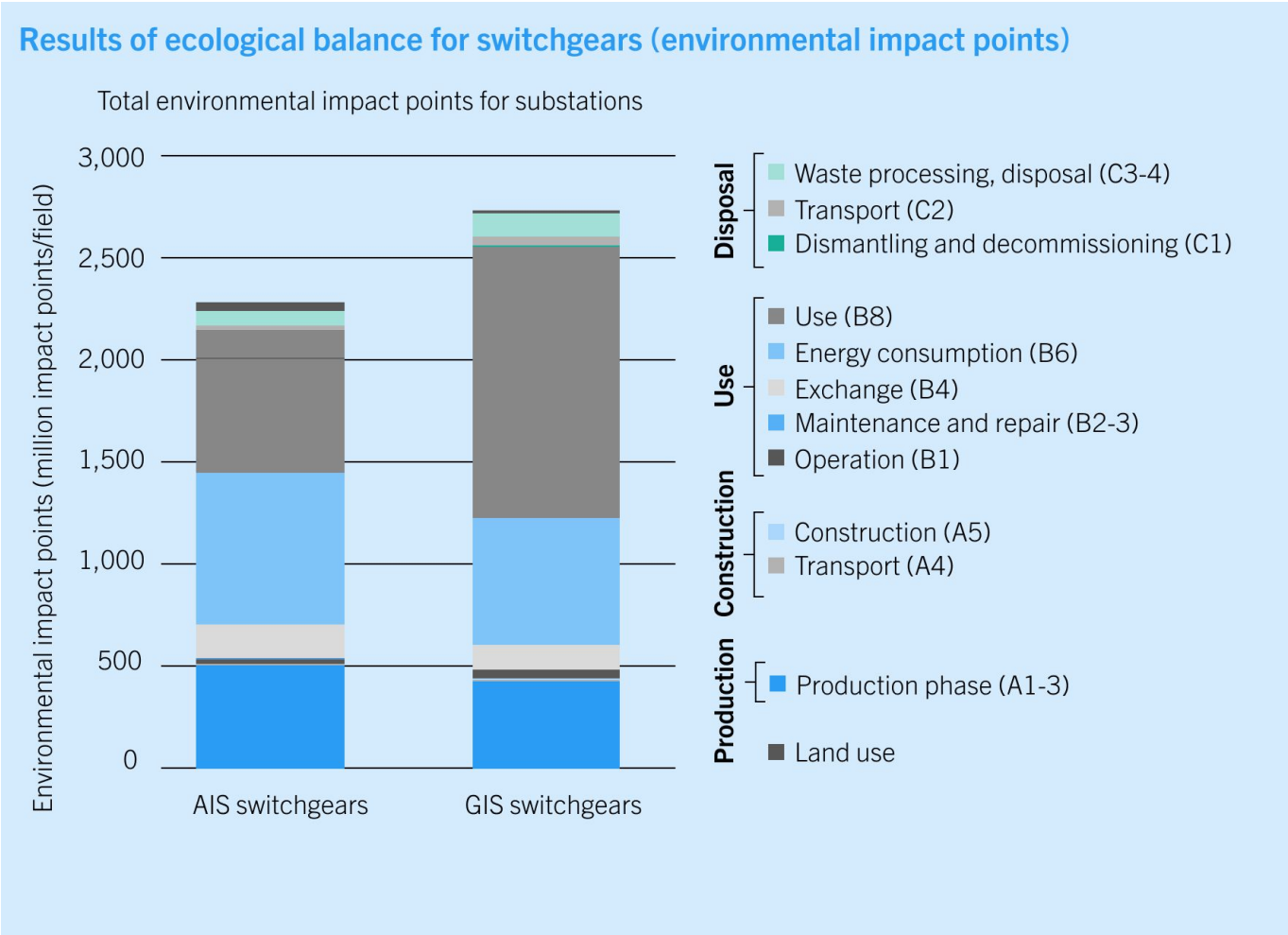
Procedure in the planning phase

Swissgrid uses various management approaches as early as the planning phase in order to promote and optimise the use of resources in support of the circular economy.

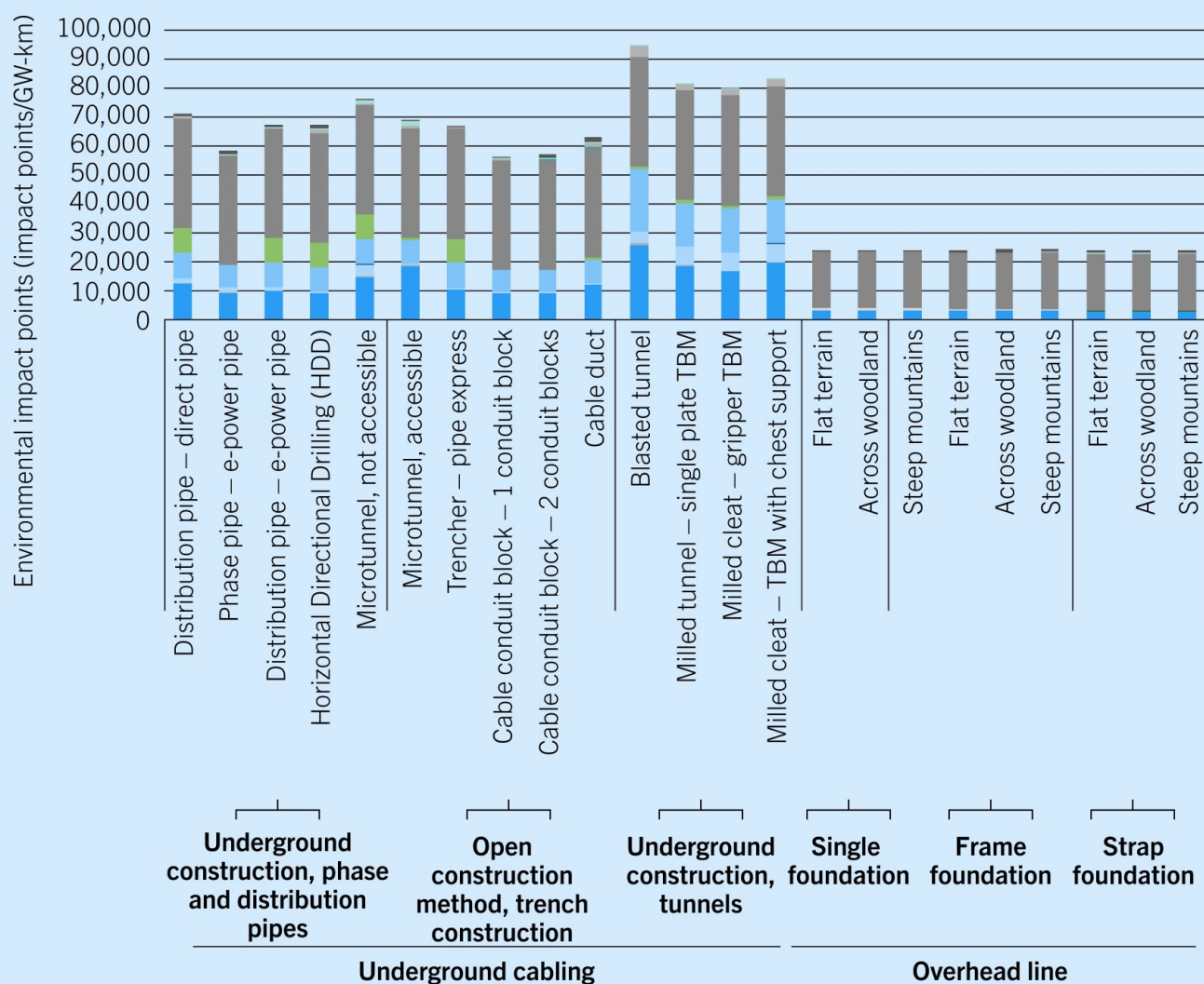
NOVA principle: Swissgrid pays attention to resource conservation and minimal environmental impact during grid planning. Swissgrid always applies the NOVA principle for this purpose. The NOVA principle stands for grid optimisation before grid enhancement before grid expansion. It aims to minimise the impacts of grid expansion on the environment and the landscape. If more efficient grid operations (e.g. topological measures, redispatching or use of flexibilities) are not sufficient to control the congestion identified, grid optimisation is carried out first and, if this is not effective, grid enhancement is used (e.g. more powerful conductors, higher voltage). The last option envisaged is material-intensive grid expansion (new route). Permanently unnecessary lines are dismantled wherever possible.

Life cycle assessments: if grid expansion is necessary, Swissgrid examines various options, taking into account the results of life cycle assessments. This means that Swissgrid analyses the environmental impact of key systems or individual system components over their entire life cycle and compares various alternatives. After analysing the environmental impact of transmission technologies in the previous year, Swissgrid prepared a life cycle assessment of substations in the 2024 financial year to evaluate the environmental aspects of air-insulated switchgears (AIS) and gas-insulated switchgears (GIS), among other things. The

results of life cycle assessments of this kind are incorporated into the decision-making process during the planning phase. The following illustrations of the results for switchgears and transmission lines show that, with the technologies currently available for extra-high-voltage systems, the environmental footprint is particularly important in the manufacturing phase and during utilisation. Assuming that, in the future, only alternative gases will be used for insulating and that the proportion of renewable energies in the electricity mix increases steadily at the same time, the production phase will become dominant in terms of the environmental impact of substations.



Results of ecological balance for lines and cables (380 kV)



Production

Production phase (A1-3)

Construction

Construction (A5)
Transport (A4)

Use

Use (B8)
Energy consumption (B6)
Exchange (B4)
Maintenance and repair (B2-3)

Disposal

Waste processing, disposal (C3-4)
Transport (C2)
Dismantling and decommissioning (C1)

Land use

Operation (B1)

Procedure in the procurement phase

As part of the procurement process, Swissgrid applies technical requirements/specifications and criteria to maximise the service life of the products and materials used and reduce the need for resource-intensive repairs and alternative measures. As part of a partnership with other transmission system operators, Swissgrid developed approaches to promote the circular economy in the procurement of key grid components in the 2024 financial year. The aim is to harmonise and raise the expectations of suppliers with regard to the environmental footprint of grid components and to strengthen the effectiveness of procedures

by adopting a coordinated approach.

Procedure when dealing with contaminated sites and waste

Swissgrid consistently implements legal requirements relating to contaminated sites and waste and puts them into practice by means of internal directives, manuals and operating instructions. The environmental impact assessment estimates the amount of construction waste such as excavated material, road debris and demolished concrete that will be produced by grid projects and defines methods for its further processing or disposal. Metals and materials such as ceramics are processed and remain in circulation. Around two thirds of demolished concrete is recycled in Switzerland, the rest is sent to landfill. Excavated material is reused on site or stored temporarily and utilised in other regional, mostly external projects. Contaminated materials are professionally disposed of and documented by the relevant service providers or specialised companies.

Swissgrid maintains a register of contaminated sites and pollutants for the professional handling of hazardous substances and contaminated sites. Excavated materials from contaminated sites and transformer oil represent significant volumes. Around 90% of transformer oil is recycled by external service providers. Problematic contaminated sites are cleaned up on an ongoing basis, at the latest when renovation work is carried out. For example, heavy metal contamination in the soil around pylon sites is treated during dismantling or disposed of and professionally replaced by a certified service provider.

Waste from sites and bases, mainly from office operations, is disposed of separately. An external facility management company takes care of professional disposal, which involves disposing of non-recyclable municipal waste in waste incineration plants with energy recovery.

GRI 301-1, 301-2, 306-2, 306-3, 306-4, 306-5

Measures and key figures

Application of the NOVA principle with innovative technologies

Swissgrid is examining the use of new technologies in order to reduce material consumption, meet the increased legal requirements and fulfil the growing demand for electricity. In the 2024 financial year, Swissgrid completed the test for the use of High Temperature Low Sag (HTLS) cables. Thanks to their characteristics, HTLS cables can help to optimise the grid in accordance with the NOVA principle and avoid more material-intensive enhancement or expansion work. The carbon-core conductors have a high current-carrying capacity, are lightweight and can therefore be installed with greater ground clearance and less impact on the pylons. This means that pylons can be made smaller and shorter, using less material. In renovation projects, HTLS cables can also help to reduce the need to replace pylons. Following the completion of the preliminary project investigation, Swissgrid is working on the specific application of HTLS technology in the current financial year.

Materials used in the 2024 financial year

In the 2024 financial year, Swissgrid prepared a comprehensive material flow analysis to assess the material turnover along its value chain. The material inputs and outputs of all ongoing grid projects, including dismantling, were taken into account. Material flows in other areas such as buildings, administration and mobility are of secondary importance. In total, Swissgrid installed around 117,000 tonnes of material in the 2024 financial year. The three most important materials were concrete (72%), gravel (22%) and steel (5%).

Materials used in 2024 (in tonnes)	2024*
Non-renewable materials	117,094
Normal/stainless steel	6,076

Materials used in 2024 (in tonnes)	2024*
Non-ferrous metals (Al, Cu, Zn)	561
Concrete	83,878
Gravel, aggregates	25,365
Asphalt, tar	596
Porcelain, glass	52
Thermoplastics, polymers, thermosetting plastics, elastomers and plastic packaging	133
Paint, protection against corrosion	21
Transformer oil/insulating oil	402
SF6 gas	3
Other materials	7
Renewable materials	104
Wood, paper, cardboard	104
Total weight of renewable and non-renewable materials	117,198

* Due to a change in methodology and enhancement of the material flow analysis compared to previous years, the values for previous years are not listed because they would not be comparable. For projects lasting longer than one year, the proportion for the 2024 financial year was calculated in relation to the project duration.

Based on the material flow analysis and average values for the market-compliant proportion of recycling of the materials used, the percentage of recycled raw materials/recyclable materials/metals used to manufacture Swissgrid's most important products and services is around 28%.

Procurement criteria used in the 2024 financial year

In the 2024 financial year, Swissgrid used various criteria to promote the circular economy, resource optimisation and sustainable waste management. For example, it demanded proof of the sustainable disposal and/or reuse and recycling of components, recyclable materials and/or construction waste during planning and dismantling work; (capitalised) transport optimisation for the delivery and/or acceptance of selected grid components; the availability of a life cycle assessment in accordance with ISO 14044:2006 or ISO 14040:2006 for the components offered (e.g. circuit breakers, transformers, disconnectors/earth electrodes, SAS); and requirements for the service life of components.

Composition of waste in the 2024 financial year

Based on the material flow analysis, Swissgrid compiled key figures on the waste generated from grid projects. With regard to materiality, regular municipal waste from office operations was not taken into account. In total, Swissgrid produced around 75,000 tonnes of waste from grid projects in the 2024 financial year, 42% of which was disposed of and 58% of which was reused or recycled. The most important waste categories are excavation (78%), building rubble/road debris (19%) and metals and ceramics (3%).

Composition of waste from grid projects in 2024* (in tonnes)	Total waste	Reuse/recycling	Disposal
Excavated material	58,123	32,192	25,931
Building rubble/road and track debris	13,821	8,677	5,144
Metals and ceramics	2,319	2,273	46
Plastics	48	0	48
Wood, cardboard and paper	87	0	87
Solids containing toxic substances and water-polluting liquids	163	148	17
Gases (SF6 etc.)	1	1	0
Total	74,563	43,289	31,274

* Due to a change in methodology and enhancement of the material flow analysis, the values for previous years are not listed because they would not be comparable.

Of approximately 43,000 tonnes of waste diverted from disposal, 16% is processed for reuse and 84% is recycled.

Total weight (tonnes) and category of reprocessed or recycled waste in 2024*

Category	Hazardous waste	Non-hazardous waste
Processing for reuse ¹	0	7,014
Recycling ¹	147	36,129
Total	147	43,143

* Due to a change in methodology and enhancement of the material flow analysis, the values for previous years are not listed because they would not be comparable.

¹ Reuse and recycling of all waste take place outside Swissgrid's sites and plants.

Of approximately 31,000 tonnes of waste sent for disposal, around 99.5% was sent to landfill, 0.4% was incinerated with energy recovery and 0.1% was disposed of using other processes.

Total weight (tonnes) and category of waste disposed of in 2024*

Category	Hazardous waste	Non-hazardous waste
Incineration (with energy recovery) ¹	0	135
Landfill ¹	0	31,122
Other disposal methods ¹	17	0

Category	Hazardous waste	Non-hazardous waste
Total	17	31,257

* Due to a change in methodology and enhancement of the material flow analysis, the values for previous years are not listed because they would not be comparable.

¹ All waste is disposed of outside Swissgrid's sites and plants.



People

The material topics for Swissgrid in relation to «People» are «Occupational health and safety», «Attracting, retaining and developing skilled workers» and «Diversity and inclusion». As the operator of a critical infrastructure, Swissgrid insists on a high level of safety and reliability, and consequently on the occupational health and safety of its employees. Furthermore, the company is dependent on highly qualified, diverse and motivated employees in order to develop into an innovative, highly digitalised and sustainable company.

Employer attractiveness

Swissgrid is dependent on highly qualified and motivated employees in order to successfully implement its complex mission and corporate strategy. In view of the shortage of skilled workers, particularly in the fields of IT and technology, it is essential for the company to position itself as an attractive employer on the competitive labour market. Diversity and inclusion are also important topics for Swissgrid in order to create a diverse and inclusive corporate culture.

GRI 3-3

Ambition and goals

Attracting, retaining and developing employees

As part of its Strategy 2027, Swissgrid is aiming to establish itself as one of the best employers in Switzerland in order to ensure that the company has the necessary skills to meet future challenges. To do so, Swissgrid creates a modern corporate culture, guarantees attractive working conditions and helps employees to develop their skills.

Diversity and inclusion

Swissgrid strives to be an innovative, diverse and inclusive company that all employees feel comfortable to work for and that allows them to develop their full potential regardless of their ethnic origin, sexual orientation, religion, age, gender, disability or other aspects of diversity.

Goals for the 2027 strategy period

This ambition is substantiated by quantitative targets that were updated and approved by the Personnel Committee of the Board of Directors in the 2024 financial year.

Area	2025 – 2027 target figures	2024 status*
Employee development	Two thirds of vacant management positions are filled internally	●
	Employee survey: increase of +2 points in relation to «Employee development»	●
Working conditions	Employee survey: increase of +2 points in relation to «Work and leisure»	●
	Departure rate < 7.5%	●
Diversity and inclusion	Employee survey: increase of at least +2 points in the approval rate with regard to «Diversity & inclusion»	●
	Increase in the proportion of women to 25% of the total number of employees	●
	Increase in the proportion of women in management positions to 20%	●
	Certified equal pay	●
	No confirmed cases of violation of personal integrity (bullying, discrimination or sexual harassment)	●

* Colour code: green = target met, orange = progress made but target not yet met.

GRI 3-3

Management approach

Organisation and responsibilities

The organisation and tasks in the area of Human Resources (HR) are based on national employment law, Swissgrid's human resources policy, the company-wide Code of Conduct and various internal directives and regulations.

The Human Resources department is responsible for the operational implementation of personnel development at Swissgrid. The Head of HR is a member of the extended Executive Board. The interests of employees in decision-making processes related to participation and personnel within Swissgrid and with regard to the Executive Board are safeguarded by seven staff representatives who are elected by the employees. They must represent the German, French and Italian-speaking regions of Switzerland and both

genders. Two of the seven representatives also represent the employees on the pension committee.

Management approach to attracting, retaining and developing employees

Swissgrid's human resources policy is geared towards attracting qualified employees, retaining them in the long term and developing their skills sustainably in order to meet Swissgrid's dynamically changing needs. Swissgrid is implementing three comprehensive packages of measures to achieve the goals defined in Strategy 2027:

- **Employer of Choice:** In order to retain employees and attract new recruits, Swissgrid wants to continue to establish itself as an attractive employer on the labour market and meet the expectations of employees in the areas that are important to them. Swissgrid's internal development prospects are identified by means of career planning for senior and specialist managers, and measures are implemented via succession planning.
- **Fit for Future:** Implementing the company's strategy will require new skills, some of which are not yet available in the organisation to the extent required. Competency management is used to define the required skills and develop them where necessary. Last but not least, the digital transformation and the associated pressure to innovate are increasingly demanding and promote agile and self-organised working principles.
- **Future of Work:** The changing demands that are placed on today's working environment must be taken into account. The company aims to achieve a flat hierarchy and to streamline processes. This type of decentralised self-management and organisation is reflected in the participation of employees in the decision-making process.

Principles in favour of diversity and inclusion

Swissgrid is convinced that diversity in perspectives, backgrounds, experiences and skills enriches the company, promotes innovation and strengthens social cohesion. In order to maximise the opportunities offered by diversity, Swissgrid has adopted the following principles as part of the Code of Conduct approved by the Board of Directors, the company-wide guiding and management principles, the diversity and inclusion strategy and the internal directive on the protection of personal integrity:

- Swissgrid recognises its responsibility to protect the personal integrity of all employees. It does not tolerate any endangerment, impairment or violation of personal integrity of any kind, such as discrimination, bullying or sexual and non-sexual harassment. The Executive Board has enshrined these principles in the Code of Conduct in a directive on the protection of personal integrity.
- Swissgrid guarantees non-discriminatory access to all roles and draws on a diverse talent pool when filling vacant positions. The development of all employees at Swissgrid is based on transparent and comprehensible criteria and is planned and implemented jointly by management and employees.
- By providing the best possible working conditions, Swissgrid employees develop their full potential and can carry out their work to the best of their ability and achieve the goals they have set.
- Leaders ensure an inclusive leadership culture in all areas and teams. The aim is to guarantee equal opportunities and the associated framework conditions and to create an atmosphere in which employees feel comfortable, contribute ideas, take responsibility and openly address challenges or conflicts. Inclusive management at Swissgrid is based on the guiding and management principles, which define aspects such as communication, a sense of responsibility and the actions of managers.

Identified risks and opportunities

The biggest challenge in terms of attracting, retaining and developing employees is the growing shortage of skilled workers, particularly in the fields of technology and IT. In this context, Swissgrid has identified two material risks as part of the ERM process: the first is a lack of expertise, which could result in Swissgrid not being able to meet future challenges or perform key tasks to the appropriate quality standard. If this lack of expertise has to be bridged by external resources, it could lead to additional costs. The second risk is insufficient innovation due to unsuitable framework conditions, and in particular a lack of expertise, motivation or talent pooling among employees and an unsuitable working environment. This can also have a potential impact on the secure and stable operation of the grid and lower competitiveness on the labour market. As part of the ERM process, Swissgrid has also categorised the risk of employee absences due to mental stress as material and has taken appropriate health protection measures to avoid and/or reduce factors that can lead to occupational illnesses as far as possible. Health protection measures are described in the «Occupational health and safety» section.

GRI 3-3

Measures and key figures

GRI 2-7, 2-8

Swissgrid employees

As at the reporting date on 31 December 2024, 927 people were employed by Swissgrid (207 women and 720 men). Compared to the previous year, the number of internal employees has risen by 9%. The continuous growth in the number of employees is driven by Swissgrid's increasing areas of responsibility, the internalisation of tasks previously performed by external service providers, the strengthening of critical functions to reduce the risk of failure, and the company's increasing need for digitalisation and innovation.

At the end of the year, 712 external employees were registered with Swissgrid. External employees with a contract via a staff leasing company or a service provider are usually employed for temporary projects that require technical competences that are only available to a limited extent within Swissgrid. The number of external employees has barely changed in relation to the previous year.

Overview of Swissgrid employees (✓ PwC Assurance)	2024				2023				2022			
	Women	Men	Total	Proportion	Women	Men	Total	Proportion	Women	Men	Total	Proportion
Total internal employees ¹	207	720	927	100%	180	673	853	100%	163	573	736	100%
Full-time employees	111	577	688	74%	93	555	648	76%	83	481	564	77%
Part-time employees	96	143	239	26%	87	118	205	24%	80	92	172	23%
Permanent employees	189	652	841	91%	161	622	783	92%	144	535	679	92%
Temporary employees ²	16	59	75	8%	18	41	59	7%	19	30	49	7%
Without guaranteed working hours ³	2	9	11	1%	1	10	11	1%	0	8	8	1%
< 30 years	36	93	129	14%	34	81	115	13%	27	57	84	11%
30–50 years	142	414	556	60%	122	397	519	61%	112	344	456	62%
> 50 years	29	213	242	26%	24	195	219	26%	24	172	196	27%
Executive Board (EB)	2	3	5	1%	2	3	5	1%	1	4	5	1%

Overview of Swissgrid employees (✓ PwC Assurance)	2024				2023				2022			
Managers excl. EB	17	97	114	12%	13	99	112	13%	12	81	93	13%
Employees without a management function	172	568	740	80%	149	532	681	80%	137	460	597	81%
Employees in training or paid by the hour	16	52	68	7%	16	39	55	6%	13	28	41	6%
Total external employees¹	127	585	712	100%	124	585	709	100%	113	530	643	100%
Contracts via staff leasing companies ⁴	23	115	138	19%	11	56	67	9%	8	34	42	7%
Contracts via service providers ⁴	104	470	574	81%	113	529	642	91%	105	496	601	93%

¹ Data is given as numbers of employees (headcount) and not as full-time equivalents. All employees work in Switzerland.

² The temporary positions are mainly internships, which form part of Swissgrid's recruitment efforts.

³ Employees without guaranteed working hours are employees who are on call for visitor tours or for specific temporary and support work.

⁴ External employees with a contract via a staff leasing company or service provider. One example is external employees who are not employed directly by Swissgrid, but who carry out specialised digitalisation and automation activities under contract via a service company.

GRI 401-1

Overview of new employees and employee turnover

In total, Swissgrid was able to recruit 168 new employees in the 2024 financial year, while 94 employees left the company in the same period. Of the vacant management positions in the 2024 financial year, 18% were filled by external candidates and 82% by internal candidates. The corresponding target value (internal employees taking on 66% of the management positions to be filled) was therefore exceeded. In terms of fluctuation, Swissgrid also achieved the target value of <10% in the 2024 financial year with a fluctuation rate of 6.2% (employees with a fixed, long-term contract only).

New employees and employee turnover (✓ PwC Assurance)	2024							2023			2022			
New employees and employee turnover	Women		Men		Total			Women	Men	Total	Women	Men	Total	
New hires														
< 30 years	17	10%	46	27%	63	38%		13	40	53	15	32	47	
30–50 years	30	18%	58	35%	88	52%		22	69	91	17	61	78	
> 50 years	2	1%	15	9%	17	10%		0	15	15	2	7	9	
Total	49	29%	119	71%	168	100%		35	124	159	34	100	134	
Fluctuations, including retirements														
< 30 years	11	12%	27	29%	38	40%		5	18	23	14	17	31	
30–50 years	11	12%	29	31%	40	43%		9	11	20	7	18	25	
> 50 years	1	1%	15	16%	16	17%		2	13	15	3	14	17	
Total	23	24%	71	76%	94	100%		16	42	58	24	49	73	

GRI 2-9, 405-1

Overview of employee diversity

Swissgrid's employees come from 39 different nations. The majority, 67%, are from Switzerland, and 17% are from Germany.

Country of origin ¹ of employees (✓ New employees and employee turnover (✓ PwC Assurance))	Number	%
Switzerland	623	67%
Germany	161	17%
France	27	3%
Italy	18	2%
Spain	12	1%
Austria	9	1%
Various (33 countries)	77	8%

¹ Multiple citizenships are not recorded.

At the end of the 2024 financial year, Swissgrid employed a total of 207 women (22% of employees including the Executive Board), 9% of whom have management responsibility, 83% of whom are in roles without management responsibility and 8% of whom are in training or are paid by the hour. The majority of corporate functions at Swissgrid are performed by women (57% of corporate functions), while 85% of technical functions continue to be carried out by men. In the 2024 financial year, 15% of management positions at Swissgrid were held by women, which represents a slight increase compared to the previous year but remains below the target value of 20%.

As at 31 December 2024, Swissgrid's Executive Board consisted of five members from Switzerland, three of whom were men and two women from German-speaking Switzerland, French-speaking Switzerland and Romansh-speaking Switzerland. The Board of Directors is the company's supreme supervisory body and has nine members, one of whom is a woman. Further information on the composition of the Board of Directors can be found in the [Corporate Governance Report](#).

Diversity in supervisory bodies and among employees in 2024 (✓ PwC Assurance)	Board of Directors		Executive Board		Employees with a management function		Employees without a management function		In training/paid by the hour	
	Number	%	Number	%	Number	%	Number	%	Number	%
Men	8	89%	3	60%	97	85%	568	77%	52	76%
Women	1	11%	2	40%	17	15%	172	23%	16	24%
< 30 years	0	0%	0	0%	1	1%	73	10%	55	81%
30–50 years	1	11%	1	20%	79	69%	471	64%	5	7%
> 50 years	8	89%	4	80%	34	30%	196	26%	8	12%
Total	9	100%	5	100%	5	100%	740	100%	68	100%

Diversity in supervisory bodies and among employees in 2024 (✓ PwC Assurance)	Board of Directors		Executive Board		Employees with a management function	Employees without a management function	In training/paid by the hour
German-speaking Switzerland	6	67%	2	40%			
French-speaking Switzerland	1	11%	2	40%			
Italian-speaking Switzerland	1	11%	0	0%			
Romansh-speaking Switzerland	1	11%	1	20%			

Diversity of employees per employee category in 2024 (✓ PwC Assurance)	Technical functions ¹		Corporate functions ²		Total	
	Number	%	Number	%	Number	%
Men	650	85%	70	43%	720	78%
Women	115	15%	92	57%	207	22%
Total	765	100%	162	100%	927	100%
< 30 years	112	15%	17	10%	129	14%
30–50 years	446	58%	110	68%	556	60%
> 50 years	207	27%	35	22%	242	26%

¹ This includes activities focussing on the planning, operation, use and maintenance of buildings, facilities and equipment, ICT infrastructure and applications, as well as business assurance and operations.

² This includes activities in the areas of administration, communication, corporate and business development, finance and accounting, HR, legal services and procurement.

Measures and key figures on attracting and retaining employees and diversity

Graduate programme

As well as continuing its employer branding measures, Swissgrid has expanded its presence at Swiss universities of applied sciences and universities, thereby seeking direct contact with students and graduates. A new channel for attracting talent was created by launching an 18-month graduate programme. Five talented young graduates took part in the programme in the 2024 financial year. There are also plans to offer participants in this programme a six-month exchange with a European transmission system operator.

The effectiveness of the measures to position Swissgrid as an attractive employer for graduates is reflected in the results of the 2024 Universum survey. In a survey of 8,745 students, Swissgrid was ranked 16th (+12 places compared to 2023) in the «Engineering» category and 40th (+33 places) in the «Natural Sciences» category. According to the survey, Swissgrid remains the best rated company in the energy sector.

Training of apprentices

Swissgrid offers various apprenticeships, such as computer scientist with a federal certificate of proficiency (EFZ) specialising in platform development EFZ, digital business developer EFZ or commercial clerk EFZ. Swissgrid has joined forces with the training partner libs (Industrielle Berufslehren Schweiz) in this area. Eight apprentices undertook training in 2024 and two graduated during the reporting year. Swissgrid took on both apprentices as employees after they graduated.

Fair remuneration

Swissgrid offers employees market-based, fair and industry-standard remuneration. A salary band system, which is regularly reviewed and adjusted, serves as the basis for remuneration. Swissgrid's remuneration model sets out conditions for individual and performance-related remuneration for the Executive Board and management staff (senior and specialist managers), which is based on the achievement of personal and corporate objectives (including sustainability targets). Employees without a management function may be awarded special remuneration, which is dependent on their personal target achievement. In addition, Swissgrid's remuneration policy provides for individual, performance-related salary increases as part of employees' annual salary reviews.

In 2024, the total annual remuneration, including performance-related remuneration, of the highest-earning person at Swissgrid was 5.76 times higher than the average total annual remuneration of all employees excluding the highest-paid person. In 2024, the average salary increase rate for all employees excluding the Executive Board was 1.6%. Due to the targeted and selective application of salary increases, the median annual remuneration of all employees (excluding the highest-paid person) has not changed in relation to the previous year.

Overview of key figures on remuneration (PwC Assurance)	2024	2023	2022
Ratio between the total annual remuneration ¹ of the highest-paid person and the median of all employees	5.76	5.89	5.55
Increase in total annual remuneration of the highest-paid person (%)	–2%	0%	6.38%
Average increase in total annual remuneration of all employees ² (%)	1.6%	0.8%	0.8%
Median increase in total annual remuneration of all employees ² (%)	0%	0%	0%
Ratio of the percentage increase in total annual remuneration of the highest-paid person in relation to the median increase of all employees ²	0	0	7.98

¹ The total annual remuneration comprises salaries, bonuses, share bonuses, option bonuses, remuneration under a non share-based bonus plan, changes in pension value and non-qualified retrospective remuneration, as well as all other remuneration.

² All employees excluding the highest paid person.

Equal pay

Equal pay for work of equal value is a matter of course for Swissgrid. Swissgrid ensures transparency on equal pay by means of role-based salary bands. In the 2024 financial year, the Swiss Association for Quality and Management Systems (SQS) once again audited wages at Swissgrid. SQS confirmed in this maintenance audit that Swissgrid continues to provide pay equity between women and men. With a deviation rate of 0.5%, the result of the audit remains well below the threshold of 5%. The remuneration of all employees was audited, with the exception of interns and employees paid by the hour. Swissgrid can therefore continue to use the SQS «Fair Compensation» certificate in accordance with the criteria of the Association of Compensation & Benefits Experts without any restrictions.

Deviation rate for equal pay based on gender according to Logip (PwC Assurance)

	2024	2023	2022
Deviation rate (%)	0.5	3.5	3.8

Flexible working models

Swissgrid provides working conditions that take account of the changing needs of employees. Ensuring employees' work-life balance (especially with regard to their families) is a cornerstone of Swissgrid's HR strategy. The company therefore offers various options for flexible and hybrid working, which are generally open to all employees. Swissgrid advertises all full-time positions as 80 to 100%. New and current employees can adjust and choose the percentage of working time that suits their needs. Alternative working models, such as job sharing, are also available. In the 2024 financial year, around 26% of Swissgrid employees worked part-time (see the «[Overview of Swissgrid employees](#)» table). The company also gives its employees the option of working for up to 50% of their working hours from home, at their second place of residence, abroad, in co-working spaces or other suitable remote locations, provided that this allows them to fulfil their function and is implemented in accordance with the legal framework and internal HR regulations. Swissgrid allows its employees to care for their children, spouses or life partners and relatives (e.g. parents or parents-in-law) in the event of illness according to conditions for care leave, workload adjustments and/or voluntary benefits set out in the employment regulations that go beyond the statutory framework. Swissgrid offers support and care services for children and family members with external partners such as Profawo. Swissgrid employees also have the opportunity to take sabbaticals.

The effectiveness of the various measures to enable employees to reconcile work with other aspects of their lives is reflected in the results of the 2024 employee survey: the average figure for «Work and leisure» increased by 8 points compared to the score obtained in the previous survey in 2022. The result is therefore above the target figure (+2 points).

Parental leave

Parental leave is granted in accordance with the statutory provisions (14 weeks) and, in the case of paternity leave, an extra week is granted on top of the statutory two weeks. The adoption of a child under the age of five is treated in the same way as a birth in terms of parental leave. These provisions apply irrespective of the employment relationship (i.e. full-time or part-time work, temporary or permanent contract). In the 2024 financial year, 8 female employees and 24 male employees became parents at Swissgrid. With one exception, all employees resumed their roles at the end of their parental leave. The retention rate of employees 12 months after resuming work was 88% during the 2024 reporting year. This corresponds to a reduction in the retention rate in relation to the two previous financial years.

Key figures on parental leave (PwC Assurance)

	2024			2023			2022		
	Women	Men	Total	Women	Men	Total	Women	Men	Total
Employees entitled to parental leave	8	24	32	4	20	24	5	19	24
Employees who have taken parental leave	8	23	31	4	20	24	5	19	24
Employees who are still on parental leave ¹	4	0	4	0	0	0	0	2	2
Employees resuming their function after agreed parental leave	4	23	27	4	20	24	4	17	21
Return rate	100%	100%	100%	100%	100%	100%	80%	100%	95%
Employees who were still employed twelve months after their return to work	2	19	21	4	17	21	6	16	22
Retention rate	50%	95%	88%	100%	100%	100%	100%	100%	100%

¹ As at the end of the relevant reporting year.

Women at Swissgrid

Women@swissgrid is an initiative by female employees for networking, inspiring each other and learning from each other. The committee organises annual lectures and workshops on topics such as «unconscious bias». Swissgrid's membership of «Women in Power» and «Women in Tech» has expanded the opportunity for female employees to connect with each other and exchange ideas in industry networks.

Employee satisfaction

Every two years, Swissgrid conducts a comprehensive employee survey to review the effectiveness and perception of strategic measures and to identify opportunities for improvement. The results of the survey conducted in the 2024 financial year show that employee satisfaction remains high, with an average score of 78 (see table). In addition, 85% of employees perceive Swissgrid as an attractive employer, and 89% would recommend the company as an employer. The targets for «Employee development» and «Diversity & inclusion» were met in the 2024 financial year with an improvement of 3 points in each area.

Overview of satisfaction according to a representative employee survey (📊✅ PwC Assurance)

Employee satisfaction ¹	2024	2023 ²	2022
Women	78	80	80
Men	79	78	78
Various	87	n/a	n/a
Total	78	78	78

¹ Employee satisfaction is assessed on a scale of 0 to 100 in comparison with the «Swiss Employer Award» benchmark using a questionnaire.

² As the employee survey is conducted every two years, the results are carried over from the previous year.

Measures and key figures on employee development

Regular performance appraisals

All employees with a permanent employment contract with Swissgrid receive regular performance appraisals. These meetings are mandatory and take place at least once a year. A performance management system is in place so that employee performance can be assessed in a consistent manner, and employees and line managers are given regular training. Performance appraisals are checked for consistency via a bottom-up calibration process (from department to company level). The aim is to ensure that individual performance and target achievement are assessed as objectively as possible.

Regular performance appraisals (PwC Assurance)	2024	2023	2022
Employees with regular performance appraisals	93%	94%	94%
Women	92%	91%	92%
Men	93%	94%	95%
Permanent employees	100%	100%	100%
Temporary employees	24%	25%	33%

Skills management

The further development of employees is a key concern for Swissgrid and is included in its Strategy 2027. The desired digital transformation of the company requires corresponding skills. For this reason, Swissgrid launched a skills management programme in 2023 with the aim of defining the skills that will be required in the company in the future and identifying gaps. In the 2024 financial year, 100% of employees (who had held a permanent position for at least six months before the start of the skills management cycle) were assessed to determine whether their current skills match the target skills that will be required in the future. Swissgrid has thereby created the basis for the systematic personal development of employees, tailored to their individual needs. Recognised development potential is addressed as part of individual development plans.

Specialist and management training

In the 2024 reporting year, specialist training hours (external and internal) were recorded primarily in the categories «Operator training» (32%), «Safety & security» (25%) and «IT and tool training» (14%). Other important topics include compliance, project management, processes and principles. Since the 2024 financial year, newly appointed managers have been prepared for their role as managers thanks to a special management development programme tailored to their needs. Peer coaching sessions are used to encourage the mutual exchange of ideas on management issues.

External training and further education opportunities

Whenever training needs cannot be covered internally, Swissgrid facilitates attendance of external training courses. In 2024, 41 employees completed further training at universities of applied sciences or universities. The majority obtained Certificates of Advanced Studies or Masters of Advanced Studies.

Promotion of language skills

Swissgrid's corporate languages are defined as German and French. Knowledge of several languages is required due to employees' activities throughout Switzerland and the country's multilingualism. In 2024, 82 people attended a language course in German, 94 in French, 28 in English and 18 in Italian.

Individual development

Since June 2023, Swissgrid has offered a comprehensive range of online training courses focusing on soft skills, health, digital skills and communication. All employees are given the opportunity to undertake a total of 12 hours of individual training per year, without there having to be any operational or functional necessity.

Average hours of training and further education

In the 2024 financial year, Swissgrid employees invested an average of 53 hours or around 1.5 weeks in their training and further education. Approximately 77% of training and development was carried out as part of internal programmes, while almost a quarter was completed externally. The quality of internal training and development is ensured through systematic feedback management and reviews, among other things. The internal training courses were rated as good or very good by 84% of those who provided feedback.

Overview of average hours invested in training and development in 2024 (PwC Assurance)

	Executive Board	Managers ¹	Employees without a management function	Employees in training/paid by the hour ²	Technical functions	Corporate functions	Total
Men	20	42	61	21	58	25	55
Women	15	49	47	20	55	29	44
Total	18	43	58	21	58	27	53

¹ Excluding the Executive Board

² This includes interns, doctoral students, apprentices and employees paid by the hour.

Transition arrangements

Swissgrid offers its employees early preparation for retirement via external courses and events. They also have the possibility to change career direction. This prepares employees for retirement through a targeted reduction in workload and responsibility, and can ease the transition. If Swissgrid is forced to part ways with employees, and believes that these individuals require assistance with their search for new employment, it offers outplacement counselling, an extension of the notice period or bridging benefits.

GRI 303, 405-1

Measures and key figures on the protection of personal integrity and inclusion

Protection of personal integrity

Swissgrid protects the personal integrity of its employees via suitable internal and external points of contact. In the event of breaches of personal integrity, employees can contact an external reporting centre, their line manager, an internal contact person from the HR department, a staff representative or the investigative body, the Compliance function. Swissgrid employees can obtain free expert assistance with personal and business difficulties from the consultancy firm Movis. Counselling is available to employees seven days a week, 24 hours a day in all parts of the country, and is treated confidentially. Whistleblowers (see [swissgrid.integrityline.app/](https://www.swissgrid.ch/integrityline)) who report serious compliance violations are protected by Swissgrid’s Code of Conduct and Whistleblowing Policy. This aims to encourage the reporting of misconduct and defines the confidentiality of reports and the protection of whistleblowers.

Swissgrid conducted an anonymous survey at the beginning of 2024 to determine the status of the protection of the personal integrity of its employees. This survey showed that no breaches had been officially reported and investigated in the last two years. At the same time, however, there have also been isolated cases in which employees have felt that their personal integrity has been breached. As a result, employees and managers were given special training on prevention, behaviour and procedures in relation to breaches of personal integrity in the reporting year. Special attention was paid to the personal responsibility of each individual.

Discrimination reports

In the 2024 financial year, no (potential) cases of discrimination were reported via the official internal and external reporting channels, including the «RiskTalk» app, the Compliance function or the whistleblower system.

Overview of official reports of cases of discrimination (PwC Assurance)

	2024	2023	2022
Reported cases of discrimination	0	0	0

Measures and key figures in other areas

Insurance benefits

The benefits Swissgrid provides to its employees as stipulated in the employment regulations are the same for all levels of employment. Life insurance and health insurance are privately organised in Switzerland. Unemployment insurance and disability insurance are covered by state social insurance, income compensation and disability insurance schemes. In the event of inability to work during the probation period as a result of illness or accident and through no fault of the employee, Swissgrid pays the employee 100% of the annual basic wages for a maximum of 30 days. In the event of inability to work as a result of illness or accident occasioned after the probation period and through no fault of the employee, Swissgrid pays the employee 100% of the annual basic wages for a maximum of 180 days. In the event of inability to work from the 181th day to the 720th day, Swissgrid has taken out a daily sickness benefits insurance which pays out 80% of the insured salary for a maximum of 550 days. In addition, all employees worldwide are privately insured for occupational and non-occupational accidents. The old-age pension scheme includes the AHV, which is also state-funded, as well as the pension fund, which is mandatory for all employees.

Pension plans

Swissgrid is affiliated with the PKE Vorsorgestiftung Energie pension fund. With assets of approximately CHF 12 billion and around 26,000 insured persons, PKE is one of the largest pension funds in Switzerland. Swissgrid's employees are insured according to the statutory provisions and the effective pension regulations. Entry into the pension fund is mandatory for all employees subject to the Federal Law on Occupational Retirement, Survivors' and Disability Pension Plans (BVG). The premiums consist of contributions by the employer and the employees.

Overview of key figures on pension provision at Swissgrid (PwC Assurance)

	2024	2023	2022
Cover ratio of PKE Vorsorgestiftung Energie as at 31.12.2023	120.7% ¹	113.9%	107.7%
Swissgrid risk contributions	0.24%	0.24%	0.24%
Employee risk contributions	0.16%	0.16%	0.16%
Swissgrid savings contributions (% of the insured salary)	7.2 – 22.7%	7.2 – 22.7%	7.2 – 22.7%
Employee savings contributions (% of the insured salary)	4.8 – 10.3%	4.8 – 10.3%	4.8 – 10.3%
Additional voluntary savings contributions by employees (% of the insured salary)	2 – 4%	2 – 4%	2 – 4%

¹ As at 29 September 2024.

Collective agreements and freedom of association

In Switzerland, the right to collective bargaining and freedom of association is enshrined in the constitution and in employment practice. Swissgrid recognises and respects these two fundamental rights of its employees. The interests of employees, including in terms of remuneration policy, are safeguarded by the staff representatives. Swissgrid is not subject to a collective labour agreement. In the event of reports or concerns regarding a potential violation of the right to collective bargaining or freedom of association, employees have access to various confidential and partially anonymised channels, including the Compliance function, the consultancy firm MOVIS, the staff representatives, the «RiskTalk» app or Swissgrid's whistleblower system. The relevant contact details and processes are made available to all employees as part of Swissgrid's Whistleblowing Policy and can be found on the dedicated internal HR and Compliance page.

Protection against mass redundancies

Swissgrid is a stable employer: since its foundation, there have been no mass redundancies in the company. In the event of a mass dismissal of 30 or more employees within 30 days and for reasons not related to their individual performance appraisal, Swissgrid would comply with the statutory provisions applicable in Switzerland. According to the Federal Act on Information and Consultation of Workers in Businesses (Participation Act), staff representatives have the right to information and special participation. This includes participation rights relating to occupational safety and employee protection, the transfer of companies in accordance with Articles 333 and 333a of the Swiss Code of Obligations, collective redundancies and affiliation to an occupational pension scheme. The staff representatives are therefore given a period of 14 days to be heard and have the opportunity to submit suggestions on how redundancies can be avoided.

Occupational health and safety

As the national grid company, Swissgrid is one of Switzerland's critical infrastructure operators according to the Federal Office for Civil Protection and strives to implement a correspondingly high level of security. Safety & Security is therefore a focus of Strategy 2027, has top priority in all activities at Swissgrid and is managed via an integral safety policy. Swissgrid's safety policy defines the framework for consistent and coordinated implementation in accordance with standardised rules. This integral approach comprises seven security domains: operational security, physical security, information security, integral risk management, crisis management/business continuity management, environmental protection, and health and safety. The subject of health and safety is examined in this section.

GRI 3-3, 403-1

Ambition and goals

Swissgrid has set itself the goal of protecting the health and safety of employees, contractors, visitors and neighbours to its infrastructure. In specific terms, Swissgrid has set itself the objective of reducing the number of occupational accidents involving absences of more than five days to zero. This target was achieved in 2024, as in 2023 and 2022.

GRI 2-25, 3-3

Management approach

The Executive Board has delegated the management and development of integral safety management to the Chief Safety & Security Officer (CSO) and the line-independent Integral Safety Committee (ISG), which comprises representatives of the seven security domains. The CSO heads the Integral Safety Committee and reports to the Executive Board on a regular basis. The Executive Board determines the framework for occupational health and safety at Swissgrid and is responsible for making sure that all employees implement and apply safety standards and the relevant laws and ordinances.

Swissgrid is obliged to comply with statutory and industry-standard provisions. In specific areas, these provisions are supplemented with additional corporate standards. The following principles apply at Swissgrid when it comes to occupational health and safety:

- Regardless of the activity, the risk must be minimised as effectively as possible. Safety-conscious behaviour is a basic requirement for employees. The high standard is maintained and continually improved by means of ongoing training.
- Occupational health and safety in the workplace is an important management task. By promoting the health, quality and safety awareness of employees, the line managers fulfil an important role model function and line responsibility.
- Swissgrid lays down occupational health and safety objectives in writing. Occupational safety inspections are carried out regularly to ensure the success of occupational health and safety measures and the fulfilment of legal requirements.
- When planning and introducing new procedures, Swissgrid is guided by the latest state of the art.
- Swissgrid structures workplace conditions in accordance with recognised health and safety principles. Special attention is paid to prevention and precaution.

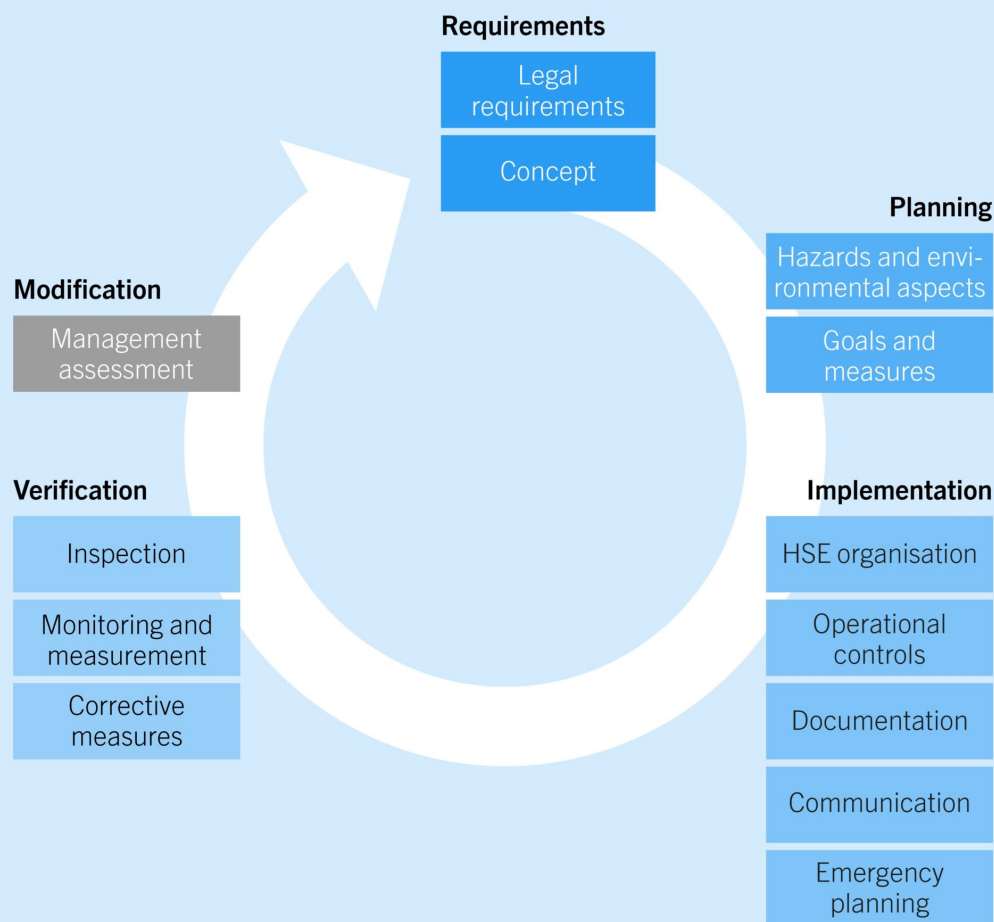
¹ Federal Act on Work in Industry, Trade and Commerce (ArG), Ordinances 1 – 5 to the Labour Act (ArGV 1 – 5), Federal Act on Accident Insurance (AIA), Ordinance on the Prevention of Accidents and Occupational Diseases (OPA), Electricity Act (EleG), Ordinance on High Voltage Systems (StV), Ordinance on the Safety and Health Protection of Workers during Construction Work (BauAV), ESTI Directive 245: Safe working on high-voltage power lines, ESTI Directive 407: Working on or in the vicinity of electrical systems.

GRI 403-1, 403-8

The HSE management system

Swissgrid operates an integrated HSE management system that is certified in accordance with ISO 45001:2018 and ISO 14001:2015. The aim of the HSE management system is to ensure continuous improvement and to promote the organisation's understanding of activities relevant to safety and the environment using a systematic approach, as well as complying with the legal requirements for occupational safety, health and environmental protection. The HSE management system follows the PDCA management model («plan-do-check-act»). This management model is based on continuous improvement in HSE performance.

Swissgrid's HSE management model



Proposals for possible improvement measures are derived from hazard assessments, recorded accidents and near misses, as well as the defined HSE targets. These measures are planned and implemented by Swissgrid's Safety and Environmental Protection Officers in collaboration with the managers and employees concerned. Swissgrid's operational business areas are responsible for implementing the measures.

The measures for achieving the HSE targets are set out in the operational development of the HSE security domain and, in particular, in the Safety Road Map, which is updated annually. Target achievement is continuously evaluated and reported via a key figure cockpit. The implementation of the HSE programme is monitored by the Head of Health & Safety or the Safety and Environmental Protection Officers.

Safety and environmentally relevant key figures for monitoring are defined in a corresponding directive. The accident statistics are integrated into the key figure cockpit and are presented once a year to employees and to the Executive Board in the annual HSE management review. Relevant key figures are summarised in the «Overview of key figures in the area of occupational health and safety».

The HSE management system applies to the entire company. Service providers are obliged by the Code of Conduct for Suppliers and by contractual provisions to ensure the occupational health and safety of their employees and of persons working on their behalf. Compliance is verified by Swissgrid in the course of inspections. See also the explanations in the [«Sustainable supply chain»](#) section.

Scope of Swissgrid's HSE management system (✓ PwC Assurance)	2024	2023	2022
Total Swissgrid employees	927	853	736
Proportion of internal employees covered by the ISO-certified/audited HSE management system	100%	100%	100%
Total external employees ¹	712	709	643
Proportion of external employees covered by the ISO-certified/audited HSE management system	100%	100%	100%
Total internal and external employees	1,639	1,562	1,379
Proportion of external and internal employees covered by the ISO-certified/audited HSE management system	100%	100%	100%

¹ External employees are not directly employed by Swissgrid, but have an employment relationship with a staff leasing company or a service provider. The external employees listed in this table usually carry out work at Swissgrid's office locations and are therefore recorded individually. External employees of suppliers who work on building construction or civil engineering projects for Swissgrid are not included, for example.

Recurring certification: Swissgrid's HSE management system is audited and certified by an accredited external auditor on the basis of ISO standards 14001:2015 and 45001:2018. An audit for recertification of the HSE management system takes place every three years. In the two years in between, a surveillance audit is carried out by the external auditor. In 2024, the Swiss Safety Center confirmed Swissgrid's integrated HSE management system as suitable, appropriate and effective. The result shows further progress compared to the previous year. Particular emphasis was placed on the establishment of regular «Safety & Security Days» within the company, the publication of a detailed and publicly accessible Sustainability Report, the commitment to improving industry-wide security measures for working at height, and the extensive expertise of the employees on construction sites, some of whom have been with the company for many years.

GRI 403-2, 403-3, 403-9, 403-10, 416-1

Risks and hazards

There is considerable potential for serious personal injury, environmental damage and damage to property in Swissgrid's area of activity. Swissgrid has therefore categorised the risks relating to personal safety as «high» to «very high» as part of its company-wide risk management. Swissgrid proactively identifies the relevant risks and hazards, assesses them and eliminates them by introducing adequate measures or at least minimises them to an acceptable residual risk.

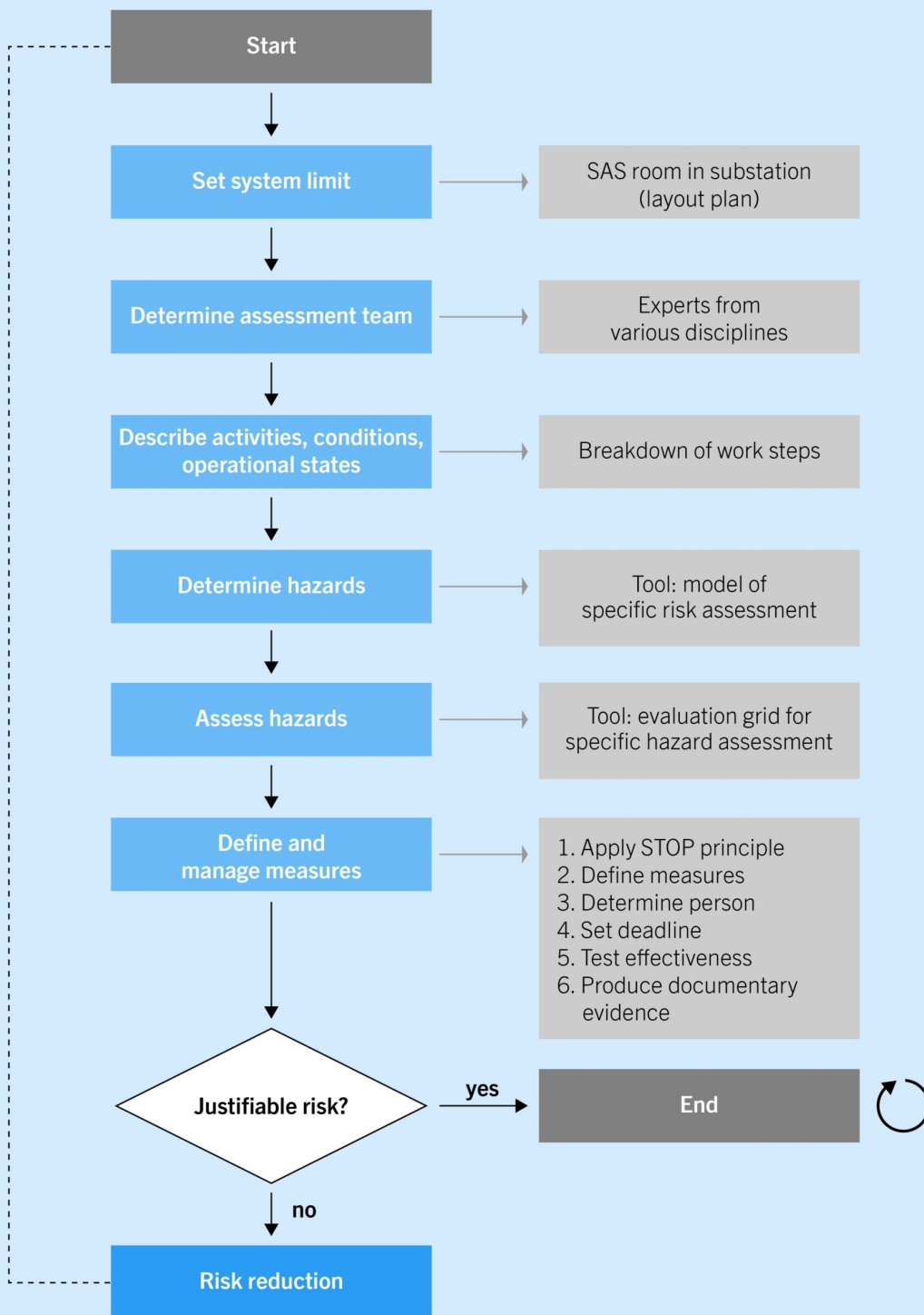
Swissgrid is aware of its responsibility as an employer and ensures the occupational safety and health protection of its employees in accordance with the Accident Insurance Act (AIA) and the Labour Act (ArG). In order to ensure that measures for the protection of its employees are as effective as possible, Swissgrid defines such measures according to the hierarchy of their effectiveness. They range from substitution/replacement measures, technical measures and organisational measures to person-related measures. Swissgrid also raises awareness among its employees and service providers about the application of the STOP principle: stop, think and assess the situation before you act. In this way, Swissgrid wants to ensure that all employees and service providers stop work if they have any safety concerns.

Risk assessment

Various risk assessments are carried out at Swissgrid. Firstly, the basic hazards and general activities at Swissgrid are systematically analysed, assessed and documented in the activity-related risk assessment based on the SUVA hazard portfolio (SUVA 66105). Furthermore, the company checks whether recognised rules are available for the hazards. If this is not the case, the rules must be formulated or, where the hazard potential is high, a risk assessment (SUVA 66099) must be carried out. Standardised measures are derived from the activity-related risk assessment and are valid throughout Swissgrid.

The activity-related risk assessment is regularly reviewed and updated if necessary. However, a review and update may also be necessary due to identified deviations, after an accident or near-miss event, or after a change in the law.

Risk assessment process flow



As well as conducting activity-related risk assessments, Swissgrid also performs project-specific, utilisation-related, order-related and system-specific risk assessments.

The safety specialists from the Health & Safety team are responsible for drawing up templates for risk assessments and for training employees. As coaches, they ensure that methodological expertise is available in the relevant line and provide technical support. If necessary, specialised external experts in the fields of occupational medicine, occupational hygiene and safety engineering are called in.

Incident analyses

In addition to hazard analyses, Swissgrid carries out incident analyses to examine events that had or could have had a significant negative impact on the safety of people and/or grid operations. The aim of these analyses is to identify the main factors that led to the event. They take into account technical, organisational and human aspects, as well as environmental conditions at the time of the event.

The findings form the basis for identifying risks that could increase the likelihood of new incidents or jeopardise Swissgrid's objectives. The way these risks are handled («risk strategy») is determined by the relevant specialist departments. The resulting measures can contribute to the safe operation of the transmission system and help to avoid future incidents outside Swissgrid's risk tolerance levels. They also make it possible to continuously improve grid, system and market operations with regard to the objectives set for operational safety and health and safety.

Occupational accidents involving Swissgrid's own employees whose work has no influence on grid operations are investigated by the Health & Safety team, which works with the operational business areas to define measures to prevent the same or similar cases from happening again and to put in place suitable communication measures. Occupational accidents involving service providers are investigated by their employers or by Swissgrid's Health & Safety team, depending on their severity. At least one analysis is required for each accident in order to examine the causes and the measures defined.

Potential hazards

Swissgrid has identified five potential hazards with a risk of serious injury (cf. table). In 2024, three occupational accidents were caused in one of the identified hazard areas. All accidents involved employees of service providers. One of the accidents occurred while working at height, the second while working near live high-voltage systems, and the third while working with helicopters. An overview of the type and consequences of occupational accidents in 2024 can be found in the «Overview of key figures in the area of occupational health and safety».

Overview of potential hazards, accidents and measures (✓ PwC Assurance)

Hazard potential	Accidents in the reporting period ¹	Measures
Work near live high-voltage systems	1	• Implementation of the legal requirements relating to plant equipment and employee training. • Use and application of equipment by service providers in accordance with the specifications of the Federal Inspectorate for Heavy Current Installations (ESTI). • All work is planned and instructed by means of a written work order. • Restrictive access. • Regular announced and unannounced inspections at the construction and work sites.
Working at height	1	• Promotion of training for authorised trainers in accordance with Directive No. 245 of the ESTI. • All work is planned and instructed by means of a written work order. • Regular announced and unannounced inspections at the construction and work sites.

Forestry work	None	• Use of specialised and experienced contractors.
		• In-house forestry specialists outsource work to specialised forestry companies and regularly instruct and monitor the forestry work carried out. • Regular announced and unannounced inspections at the construction and work sites.
Work with helicopters	1	• All work is planned and instructed by means of a written work order.
		• Restrictive use of helicopters, testing of alternative, lower-risk options. • Regular announced and unannounced inspections at the construction and work sites.
Handling hazardous substances (insulating oils, gases, cleaning agents and coolants)	None	• Implementation of the legal requirements relating to plant equipment and employee training.
		• Regular announced and unannounced inspections at the construction and work sites.

¹ The data includes employees of Swissgrid and of all service providers, including those who carry out work for Swissgrid on construction sites and outside office locations.

HSE inspections

The HSE inspections carried out regularly by Swissgrid are a key part of hazard and incident assessment, serve to mitigate risks, and are an important tool for fulfilling duty of care and compliance. In 2024, a total of 396 HSE inspections were carried out by project employees and the Health & Safety team. The inspections found 27 situations that were categorised as a medium safety risk, and 9 as a high safety risk. In all these cases, measures were agreed upon, documented and implemented to reduce the safety risk to an acceptable level.

Overview of potential hazards, accidents and measures (✓ PwC Assurance)	2024	2023	2022
Number of HSE inspections carried out	396	357	368
Number of HSE inspections with medium risk	27	22	36
Percentage of HSE inspections with medium risk	6.8%	6.2%	9.8%
Number of HSE inspections with high risk	9	8	1
Percentage of HSE inspections with high risk	2.3%	2.2%	0.3%

Measures and key figures

Measures to strengthen the safety culture

Safety Culture Ladder

Swissgrid attaches great importance to continuously strengthening its safety culture. That is why the company introduced the Safety Culture Ladder method in 2020. Swissgrid was successfully certified at level 3 in 2022. Annual recertification audits were carried out in 2023 and 2024, during which Swissgrid was shown to have developed its safety culture by implementing various measures. The introduction of the mandatory «Safety & Security Days» series of events for employees was again seen as particularly positive in the 2024 audit report. The focus of these events in the reporting year was on mental health. In addition, the development of guidelines to promote the safety culture and the organisation of management workshops were perceived as positive.

The team of auditors sees particular potential for improvement in strengthening the feedback culture. Progress needs to be made on promoting the safety culture among service providers. Since the beginning of 2022, Swissgrid has required service providers who carry out activities where occupational safety plays a central role to introduce the Safety Culture Ladder. This requirement is laid down in the relevant contracts. Swissgrid has therefore produced a «[Safety Culture Ladder](#)» guide for service providers. At the end of the 2024 financial year, 14 service providers with an active contract with Swissgrid (initial value of CHF 150,000) were certified in accordance with the Safety Culture Ladder.

Safety training

- **Onboarding of new employees:** All employees receive introductory training on health and safety when they join the company. This provides information on roles and responsibilities in the area of occupational safety, ergonomics in the workplace, Swissgrid's emergency organisation, important environmental protection requirements and insurance basics.
- **Safety & Security Days:** The mandatory «Safety & Security Days» introduced in 2022 were held for the third time in 2024. The aim of the 2024 event was to raise awareness of safety among all employees in the areas of safety culture, cybersecurity, road safety and stress management. Employees learnt about these topics and deepened their knowledge through theoretical lessons and practical exercises. In the area of targeted cultural development, a simulation in a medical context («Room of Horrors») was used to encourage employees to address mistakes and risks, give each other feedback and reflect on human behaviour.
- **Specific training courses:** Employees of the Grid Infrastructure business area who intend to become electrical experts complete a comprehensive training programme with nine training modules. In addition to basic knowledge about health and safety, the programme mainly focuses on electrical safety. The aim is for these experts to be able to manage risks in extra-high-voltage installations. In addition, selected employees also receive one-day training on safety inspections. This training course explains the aim of internal inspections, the duties and powers of inspectors, personal conduct during inspections and the key rules of the Swiss National Accident Insurance Fund (SUVA). A new «Safety on high-voltage pylons» course was launched in the 2024 financial year to strengthen employees' skills associated with working safely on pylons. Swissgrid employees do not usually climb pylons themselves, but must be able to assess the security measures and act appropriately.

Employee participation

Occupational safety and health protection affect the most fundamental interests of employees: their health and physical integrity. Swissgrid employees are therefore entitled by law to receive information and to have a say in all matters relating to health and safety (Art. 6 of the Labour Act and Art. 6a of the Ordinance on the Prevention of Accidents and Occupational Diseases). At Swissgrid, the right to have a say is effected through staff representation. When it comes to their health and safety, Swissgrid employees are allowed to say «STOP». Employees and line managers are made aware of this right at various briefing events. Swissgrid also grants this right to all service providers working on behalf of the company.

«RiskTalk» app

The «RiskTalk» app is a tool for reporting incidents, observations and ideas of any kind in connection with risks and hazards. The aim is to recognise potential hazards at an early stage and to prevent accidents. Every message is processed and answered. Those responsible for the «RiskTalk» app ensure that ideas are scrutinised and implemented if they are found to be suitable. A «RiskTalk» report can be made either by employees or by service providers. In 2024, 37 reports were submitted via the «RiskTalk» app, 24 of which related to safety and security. An investigation was launched for all 24 reports concerning safety and security, 19 of which had been completed by the end of the financial year.

Further measures for health protection

- **Behaviour near lines:** The transmission system partly crosses cultivated land or passes close to populated areas. Swissgrid is therefore very keen to protect not only its own employees and the employees of its service providers, but also the general public. For example, Swissgrid provides comprehensive information on its [website](#) about the safety regulations that need to be observed when planning activities and work near lines, as well as during any sports and leisure activities that are undertaken in these areas.
- **Actions in the event of an emergency:** Swissgrid has compiled a list of regulations and standards for the protection of people and the environment when working on and in the vicinity of its installations. This list is published in a [manual](#) available to the public. It includes a description of responsibilities and correct behaviour in the event of an emergency. Visitors are also provided with an information sheet, while employees can access information on the intranet. They also receive annual training on the correct way to behave in the event of an evacuation. If a hazardous situation arises, all employees of Swissgrid and of service providers are obliged to interrupt their work, to remedy the dangerous situation or, if they are unable to do so, to immediately inform their superiors.
- **First aid at Swissgrid:** Trained first responders and evacuation assistants work at all Swissgrid sites. 78 Swissgrid employees are currently trained as first aiders. This corresponds to 8% of all employees. Repeat courses are organised every two years. In addition, Swissgrid has taught all employees basic first aid and minimum firefighting skills at the «Safety & Security Days».

Completion of health checks

Swissgrid's night and shift workers undergo a compulsory annual health check by an independent, specialised and qualified body. To ensure data confidentiality, Swissgrid does not receive detailed results, but only confirmation of whether the employee is fit to work night shifts. In addition, those employees who have to climb pylons as part of their role also receive a health check. An annual stress test is conducted for employees in the roles mentioned as well as for other employees if required. Swissgrid's hazard portfolio includes the assessment of psychosocial risks, and appropriate measures are defined to protect or improve the health of employees.

Health Committee

A new Health Committee was formed in the 2024 financial year. The Health Committee establishes, operates and continuously develops the company's health management system according to recognised criteria (Friendly Workspace). It plans the annual programmes in consultation with the Integral Safety Committee. Members of all business areas are represented on the Health Committee. It is chaired by Health & Safety, with a deputy from HR. The members of the Health Committee are obliged to maintain confidentiality towards all persons in matters deemed to be confidential and with regard to the personal affairs of employees.

Insurance for occupational and non-occupational accidents

All permanent Swissgrid employees are covered by accident insurance in accordance with the Accident Insurance Act (AIA) and Swissgrid's supplementary accident insurance. These insurance policies include the following benefits to cover the risks of occupational accident and occupational illness: medical costs in a private ward during hospitalisation, daily allowance, disability benefits and costs for services such as rescue, transport and recovery. If they work at Swissgrid for at least eight hours per week, employees also have mandatory insurance for leisure-time accidents (non-occupational accidents), including accidents during the commute to and from work. Accidents during leisure time are excluded for employees who work fewer than eight hours per week. Accidents suffered by these employees on the way to and from work are covered by occupational accident insurance.

Further measures for health protection

Swissgrid covers the costs of the tick vaccination and the annual flu vaccination for its employees if these vaccinations are carried out by recognised health authorities. In addition, Swissgrid ensures that employees are provided with an ergonomic workplace. Various SUVA information sheets and an explanatory video on this subject are available to employees on the i-net. Swissgrid also has internal ergonomics instructors who can help employees to set up an ergonomic workplace on request. In addition, Swissgrid employees benefit from various services to promote their health, including fresh seasonal fruit provided free of charge every day, discounted fitness offers and free online training courses (e.g. on burnout, time management, vitality and resilience). All offers can be consulted via the internal web portal for employees, which includes a dedicated HSE page.

Key figures in the area of occupational health and safety

Occupational accidents: In the 2024 reporting year, there were no occupational accidents involving Swissgrid employees resulting in death or health impairments. One occupational accident resulted in four days of absence, and seven other occupational accidents occurred with no loss of working hours. Consequently, the objective of reducing the number of occupational accidents involving employee absences of more than five days during an operating year to zero was achieved in 2024 (as in the two previous years).

In the same period, six occupational accidents were registered among employees who were working at Swissgrid construction sites and workplaces on behalf of a service provider. One of the accidents had fatal consequences and another accident led to serious health impairments. Swissgrid regrets these accidents and will continue to make every effort to prevent such incidents in the future, insofar as they are within its sphere of influence.

A total of 14 occupational accidents involving employees and external service providers therefore occurred at Swissgrid installations and sites. Extrapolated to 200,000 hours worked, this corresponds to an aggregated occupational accident rate of 0.68.

Occupational accidents involving Swissgrid employees ¹ (✓ PwC Assurance)	2024	2023	2022
Number of hours worked ¹	1,801,199	1,512,785	1,231,256
Number of occupational accidents	8	4	2
Deaths due to occupational accidents	0	0	0
Number of occupational accidents resulting in absence from work and serious health impairments ²	0	0	0
Number of occupational accidents resulting in absence from work and minor health impairments ³	1	0	0
Number of occupational accidents without absence from work	7	4	2
Occupational accidents per 200,000 hours worked (TRIF)	0.89	0.53	0.32
Occupational accident fatality rate ⁴	0	0	0
Rate of occupational accidents resulting in absence from work and serious health impairments ⁴	0	0	0
Rate of occupational accidents resulting in absence from work and minor health impairments ⁴	0.11	0	0
Rate of occupational accidents without absence from work ⁴	0.78	0.53	0.32

¹ Data shown for 927 Swissgrid employees, i.e. 100%.

² No recovery within six months or permanent impairment.

³ Recovery within six months.

⁴ The rate is calculated per 200,000 working hours.

Occupational accidents involving external service providers ¹ (✓ PwC Assurance)	2024	2023	2022
Number of hours worked ¹	2,333,930	n/a	n/a
Number of occupational accidents	6	5	17
Deaths due to occupational accidents	1	0	0
Number of occupational accidents resulting in absence from work and serious health impairments ²	1	0	2
Number of occupational accidents resulting in absence from work and minor health impairments ³	4	5	15
Number of occupational accidents without absence from work	0	0	0
Occupational accidents per 200,000 hours worked (TRIF)	0.51	n/a	n/a
Occupational accident fatality rate	0.09	n/a	n/a
Rate of occupational accidents resulting in absence from work and serious health impairments	0.09	n/a	n/a
Rate of occupational accidents resulting in absence from work and minor health impairments	0.34	n/a	n/a
Rate of occupational accidents without absence from work ⁴	0	n/a	n/a

¹ Data includes all companies contacted by Swissgrid, as well as accidents that occurred during work at Swissgrid construction sites and workplaces. The number of hours worked is based on extrapolations taking into account the contract volume for relevant service categories and the average hourly wage for service activities on behalf of Swissgrid.

² No recovery within six months or permanent impairment.

³ Recovery within six months.

⁴ The rate is calculated per 200,000 working hours.

Causes of occupational accidents: The most common cause of the 14 occupational accidents is «falls» (21%), followed by «overexertion», «colliding with objects», «flying parts/foreign objects» and «stepping on or into something» (14% each).

Cause of accidents (employees and service providers) (✓ PwC Assurance)	2024		2023		2022	
	Number	%	Number	%	Number	%
Falls	3	21%	1	11%	1	5%
Overexertion	2	14%	0	0%	1	5%
Tripping	1	7%	0	0%	2	11%
Colliding with objects	2	14%	2	22%	4	21%
Falling objects	0	0%	1	11%	2	11%

Cause of accidents (employees and service providers) (✓ PwC Assurance)	2024		2023		2022	
Becoming trapped	0	0%	0	0%	3	16%
Flying parts	2	14%	0	0%	2	11%
Stepping on or into something	2	14%	1	11%	3	16%
Being bumped into	0	0%	0	0%	1	5%
Hot parts and fabrics	0	0%	0	0%	0	0%
Injuries caused by animals	0	0%	0	0%	0	0%
Cuts or pricks	0	0%	4	44%	0	0%
Others	2	14%	0	0%	0	0%
Total	14		9		19	

Work-related illnesses: In the last four years (2021 – 2024), there have been no known work-related illnesses among the employees of Swissgrid or of service providers due to the performance of work for Swissgrid.

Key figures on work-related illnesses (✓ PwC Assurance)	2024	2023	2022
Number of deaths due to work-related illnesses of employees	0	0	0
Number of documentable work-related illnesses of employees	0	0	0
Number of deaths due to work-related illnesses of service providers	0	0	0
Number of documentable work-related illnesses of service providers	0	0	0



Purpose

This section covers security of supply and the energy transition.

Security of supply

See the [«Security of supply»](#) section of the Annual Report.

Energy transition

Energy production in Europe is undergoing a rapid transition from large centralised power plants to decentralised, renewable energy resources. Transmission and distribution grids are playing a vital role in this transformation. Firstly, they form the backbone for locally consumed, decentrally produced energy, for example by photovoltaic and hydropower plants. Secondly, they make it possible to connect remote production sites to consumer centres.

What is more, energy production from wind power and photovoltaic plants fluctuates because it is directly dependent on the weather. This makes it difficult to ensure the secure operation of the transmission grid, as energy volumes may be fed into the grid unexpectedly or the electricity available in the grid may be insufficient. Reliable forecasts of the expected volumes of energy produced at all levels of grid operations and an efficient transmission system are key prerequisites for the success of the energy transition.

Swissgrid is affected by the transition to decentralised energy production both as the operator of the Swiss extra-high-voltage grid and as part of the European interconnected grid. Close cooperation between operators at all grid levels, energy producers and consumers is crucial, both nationally and internationally. As the

number of private photovoltaic systems increases, so does the importance of companies and households as energy producers. They feed the energy they have produced directly into the local distribution grid, which is often the responsibility of a regional distribution grid operator. These grid operators will play a much more active role in the future as a result of the energy transition. Greater requirements will be placed on them, particularly with regard to the accuracy of feed-in and consumption forecasts.

In addition to the photovoltaic systems already mentioned, the other components that will play an important role in future grid operations include heat pumps and electricity storage systems, e.g. for electric vehicles. Heat pumps could be programmed to heat buildings at appropriate times, for instance, with the building itself acting as a heat accumulator. The water storage tanks in heat pumps could also serve as buffers. The batteries in electric vehicles can be used both as storage reserves for surplus volumes of energy and as a source of control energy. However, this is subject to technical prerequisites and necessitates intelligent grids (smart grids). Swissgrid calls its strategy for an intelligent transmission grid the «Grid of the future».

Switzerland plays a central role in the European interconnected grid. Firstly, the transmission grid is an important transit axis that also benefits Switzerland. Secondly, Switzerland is dependent on energy exchange with Europe both as a consumer (electricity importer) and as a producer (electricity exporter). The shift towards decentralised energy production is politically desirable both in Switzerland (Energy Strategy 2050) and in Europe, and is a necessity in order to achieve the decarbonisation of the energy system. As the operator of the Swiss transmission system, Swissgrid is supporting this change.

GRI 3-3

Ambition and goals

Swissgrid's aim is to support the transformation of the energy system in Switzerland and to guarantee grid-related security of supply regardless of the degree of integration into EU processes.

GRI 3-3

Management approach

The energy system in Switzerland and Europe is undergoing radical change. The rapid expansion of production from solar power and, in the future, from wind power, poses additional challenges for ensuring the uninterrupted and efficient operation of the extra-high-voltage grid. The electricity market in Switzerland no longer consists of a few large centralised power plants on the supply side and a large number of customers on the demand side. Huge numbers of smaller photovoltaic plants are becoming a significant production factor. Swissgrid is backing this development towards renewable energy resources through its flexible, data-based operation of the transmission grid and is thereby making its contribution to the energy transition.

To help bring about the transition, Swissgrid is implementing tools and measures in the following four areas:

- **Flexibility:** Swissgrid is committed to developing products that provide incentives for making sufficient flexibility available for secure grid operations at all times. This flexibility can also increasingly be provided by small, decentralised producers and consumers.
- **Forecasting capability:** Energy from wind and photovoltaic production is subject to continuous fluctuations. Swissgrid is working with its industry partners to develop reliable forecasting tools based on the exchange of relevant measurement data so that the transmission grid can be controlled efficiently at all times.
- **Infrastructure:** Swissgrid provides an efficient transmission grid that creates the best possible framework conditions for achieving the Confederation's Energy Strategy 2050 and the pan-European energy

transition.

- **Integration into Europe:** Swissgrid's goal is to continue to operate the Swiss extra-high-voltage grid in a secure and stable manner as part of the European interconnected grid. To achieve this, Swissgrid believes that an electricity agreement with the EU is essential.

GRI 3-3, 203-2

Measures and key figures

In the 2024 financial year, Swissgrid initiated and continued to drive forward the following measures to support the grid-related energy transition in Switzerland:

Photovoltaic (PV) forecasting

While the expansion of electricity generation from photovoltaics in Switzerland is progressing, the availability of data on electricity production from photovoltaic plants and forecasts is still lagging behind. This has an impact on the stability of grid operations and may oblige Swissgrid to use more control energy at higher costs in the short term in order to compensate for the imbalance between production and consumption. As a proactive measure to counter this difficulty, Swissgrid developed a PV forecasting model in the 2024 financial year that provides a solid data base for forecasts, nowcasts and backcasts with regional resolution (see also the [«Year in review»](#) section).

PV4Balancing

The aim of the PV4Balancing project is to harness the flexibility potential of photovoltaic plants in Switzerland to stabilise the grid in the future. To this end, Swissgrid launched a project with industry partners in the 2024 financial year to develop a new control power product that will allow the energy produced by photovoltaics to be used as control energy. A pilot project with initial applications in grid operations is planned for the current year. In the long term, the project could help to integrate a larger proportion of photovoltaic electricity generation into the grid whilst mitigating the challenges that volatile electricity production poses to grid stability.

Coordinated use of decentralised energy resources

Cooperation within the electricity sector is a key basis for ensuring the efficient and successful implementation of the Energy Strategy 2050. In the 2024 financial year, Swissgrid worked with industry partners to drive forward the development of a joint market for grid and ancillary services. The aim is to allow the deployment of flexible resources for stable grid operations in a coordinated manner in the future (see also the [«Year in review»](#) and [«Media release»](#) sections).

Innovation and digitalisation

The energy transition requires a robust transmission grid with sufficient capacity, minimal downtimes and stable grid operations. Innovation and digitalisation are vital if Swissgrid is to take a proactive approach to tackling the associated challenges. In the 2024 financial year, the company continued to drive forward innovative digitalisation projects to support the energy transition. These include the Pylonian project with Internet-of-Things sensors on pylons (see the «Year in review» section), the use of drones and AI to efficiently assess the condition of pylons ([insert link after publication of blog post](#)) and the digitalisation of system and operating data (see the «Year in review» section.)

Strategic Grid 2040

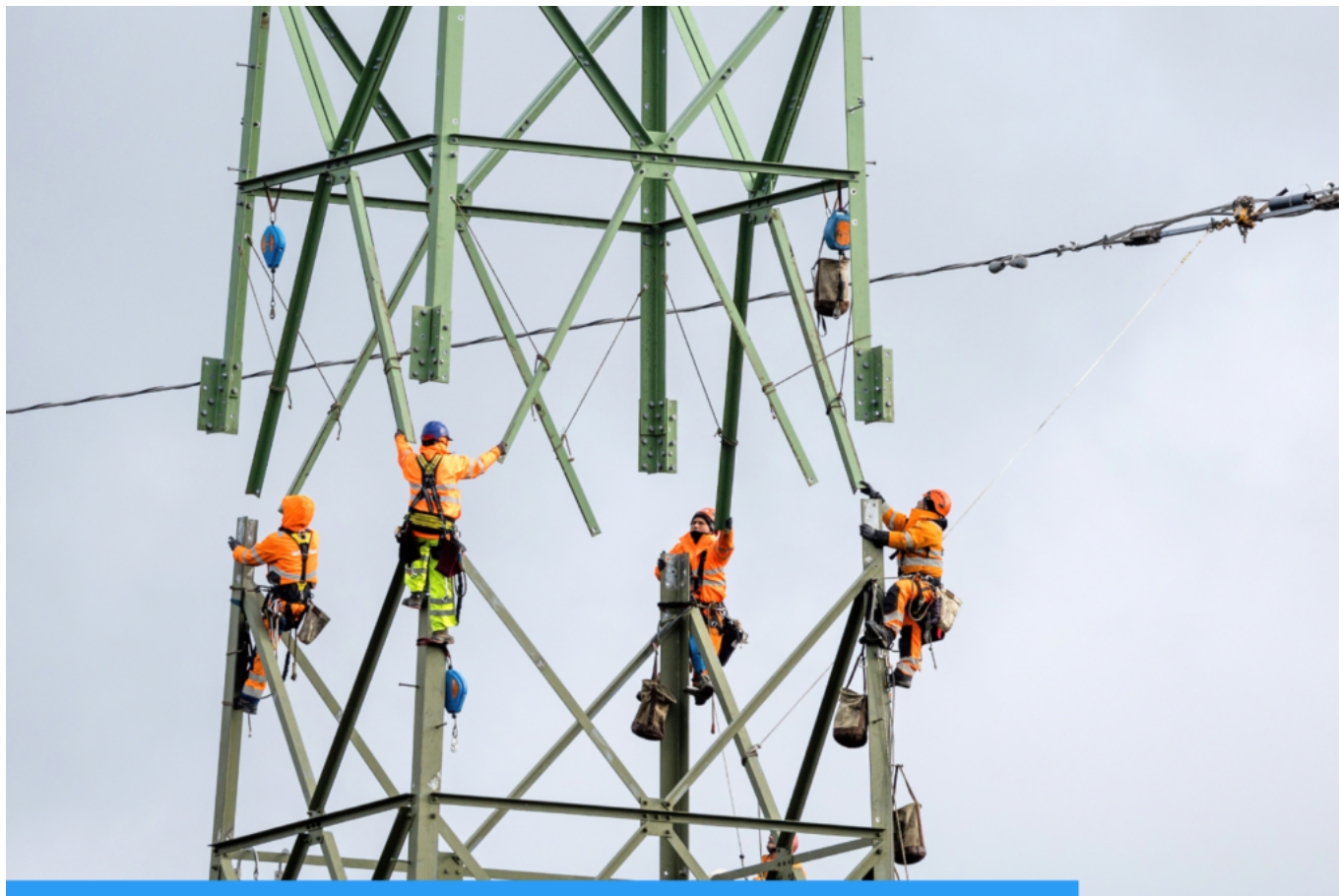
In the summer of 2024, Swissgrid finalised its planning of the Strategic Grid 2040 and submitted it to ElCom for review (see the «Year in review» section). One of the objectives of strategic grid planning is to identify the need for action on the grid side in order to transform the energy system. This will enable Swissgrid to make sure that the transmission grid continues to pave the way for the energy transition in the future.

Key figures for transported electricity volumes and control energy

The cross-border exchange of electricity plays a key role in ensuring security of supply and grid stability and in bringing about the energy transition. Swissgrid ensures the connection of the Swiss transmission grid with the European interconnected grid via 41 international interconnection lines and controls the exchange of electricity with neighbouring countries. In the 2024 financial year, the volume of imported electricity decreased slightly compared to the previous year, while export volumes increased by 19%.

In an energy landscape that is increasingly shaped by renewable production, the availability and use of control energy remain crucial for ensuring the stability and reliability of the supply of electricity. The control energy used by Swissgrid reflects the punctual imbalance between production and consumption. Real-time data and forecasting accuracy, especially in connection with photovoltaic production, are important factors for avoiding the use of large volumes of control energy at high costs. Although there were occasional peaks in the 2024 reporting year, the volumes of positive control energy (requests for production capacity) and negative control energy (reduction of production capacity) both decreased on average over the year.

Electricity volumes and control energy (GWh)	2024	2023	2022
Transported energy	69,609	74,134	74,414
Imported energy	25,262	27,017	32,695
Exported energy	39,175	32,888	28,762
Transit energy	22,155	21,591	23,134
Positive control energy	944	1,033	1,118
Negative control energy	550	694	754



Partnership

This section covers the topics of sustainable supply chain, integrity in corporate governance and stakeholder engagement.

Integrity in corporate governance

The operation of the transmission grid is of great social and economic importance. Ensuring responsible corporate governance, acting in accordance with ethical business practices and complying with legal obligations and internal standards are key concerns for Swissgrid. Behaving with integrity and fairness is the basis for dialogue between Swissgrid and its employees, business partners and the public.

GRI 3-3

Ambition and goals

The Code of Conduct sets out Swissgrid's ambition and principles of integrity in corporate governance. The aim is to ensure that Swissgrid and its employees always act responsibly, professionally and credibly to guarantee a secure and sustainable supply of electricity both now and in the future. To put this ambition into practice in operations, compliance with the Code of Conduct, the statutory provisions and the Articles of Incorporation, internal regulations and directives is crucial. Swissgrid has therefore set itself the goal of ensuring that all employees are familiar with and act according to the relevant principles, and that no significant compliance violations occur.

GRI 2-16, 2-24, 2-25, 2-26, 2-27, 3-3, 205-1

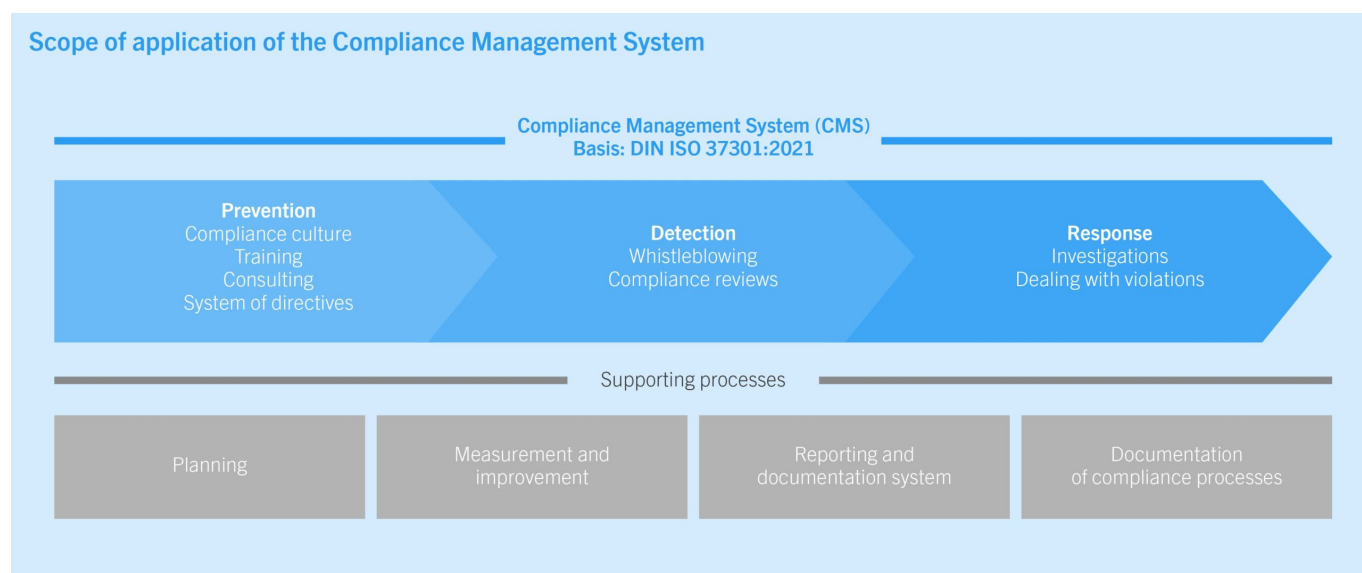
Management approach

As part of Swissgrid's dual materiality analysis, the following subtopics were considered and analysed within integrity in corporate governance: corporate governance, corruption and conflicts of interest, compliance, and political commitment and lobbying. The effects and risks associated with non-compliance with laws and corruption risks in the context of procurement were classified as material. This is due to the potential effects on the quality and costs of the grid infrastructure and ancillary services provided by Swissgrid, as well as to the legal, financial and/or reputational risks for the company.

Governance and responsibilities

Swissgrid's Board of Directors is responsible for overseeing integrity in corporate governance as part of its overall responsibility. As part of the corporate governance structure, it has various monitoring, control and audit functions to ensure compliance with regulatory and internal provisions (see the «[Sustainability at Swissgrid](#)» section). A functioning compliance system within the company is essential in order to monitor and ensure compliance with legal requirements, internal guidelines and ethical standards and to minimise the risks of legal or financial consequences and protect the company's reputation.

The responsibilities, structures and processes related to integrity in corporate governance and compliance are based on the «three-line model» (see the «[Sustainability at Swissgrid](#)» section). As a second-line governance domain, the Compliance function establishes and operates a compliance management system to help the Board of Directors and the Executive Board to ensure that the applicable legal framework is observed and ethical principles are adhered to. Swissgrid's compliance management system is based on ISO 37301:2021-11. It comprises activities and measures in the three main areas of prevention, detection and response. Based on a regular compliance risk assessment, the compliance concept defines the responsibilities and focal points (legal areas). The Compliance function also reports regularly on its activities and measures to the Executive Board and the Board of Directors' Finance and Audit Committee (FPA).



Swissgrid Code of Conduct

The [Code of Conduct](#) approved by the Board of Directors forms the basis for ethical corporate governance with integrity. It describes the key principles and values that guide the actions of Swissgrid and its employees in relation to the law. It also applies to the members of the Board of Directors and the Executive Board, as well

as to external employees of staff leasing companies.

The following principles and values set out in the Code of Conduct (current version dated 1 July 2023) form an integral part of Swissgrid's business culture:

- Ethical principles: protecting personal integrity, non-discrimination, fairness, professionalism and transparency to promote responsible and fair behaviour.
- Compliance with specifications: ensuring compliance with legal and internal regulations.
- Conflicts of interest: avoiding and dealing with conflicts between personal and business interests.
- Confidentiality of company information: protecting confidentiality and ensuring the responsible handling of sensitive and confidential data.
- Internal and external information: ensuring timely, transparent and responsible communication within the company and with external stakeholders.
- Professional and financial integrity: protecting and ensuring appropriate, professional use of company assets by employees.
- Bribery and corruption: adopting a clear position against any form of bribery, corrupt behaviour or incorrect handling of gifts and invitations, and an obligation to report breaches.
- Occupational health and safety: promoting a safe and healthy working environment, in particular by means of prevention, training and information.
- Sustainability and social responsibility: committing to energy efficiency and environmental protection, as well as social responsibility and dialogue with interest groups.
- Reporting and dealing with misconduct: applying processes for recognising, reporting and handling violations and protecting whistleblowers.

The Code of Conduct can be consulted by employees on a comprehensive information page that explains the importance of compliance and how it is organised at Swissgrid. All Swissgrid employees undergo training on the Code of Conduct and must confirm that they have read it. Violations of the principles of the Code of Conduct and the guidelines are not tolerated, are viewed as misconduct and are penalised by Swissgrid.

The Code of Conduct is supplemented by internal directives on specific topics, which are approved by the Swissgrid Executive Board. Directives relevant to integrity in corporate governance include the directive on gifts and invitations (see below), data protection (see below), procurement (see the [«Sustainable supply chain»](#) section), fair behaviour and transparency on the wholesale energy and financial markets (see below), protection of personal integrity in the workplace (see the [«Employer attractiveness»](#) section) and the internal control system for financial accounting (see the [«Corporate Governance Report»](#)).

Anti-corruption

As the owner of the Swiss transmission grid, Swissgrid awards significant contract volumes and attaches great importance to combating corruption. When assessing the risk of corruption, Swissgrid is guided by ISO 37001:2016 and takes into account the risks identified as part of the ERM process and risk-based reviews. The Executive Board has issued directives for all employees on «Gifts and invitations» and «Procurement of supplies, services and construction work» in order to reduce the risk of corruption. Compliance with anti-corruption requirements is verified annually by means of a compliance review. This was also the case in the 2024 financial year.

For the purposes of procurement, the awarding of high-value contracts (CHF 50,000 or more) is reviewed jointly by evaluation teams, and the parties involved must declare their impartiality. The members of the evaluation team must confirm that they are impartial, disclose any conflicts of interest and recuse themselves

if necessary. The awarding of high-value contracts is supervised by specially trained procurement managers, and support is provided by the internal legal service if required. In addition to price criteria, Swissgrid's tenders always include quality criteria. Price negotiations (bidding rounds) are not permitted under public procurement law. The signature regulations provide for the collective signature of the employees and also link the authority to sign to the order value. A dual control principle, at a minimum, applies to the placing of orders and the initiation of payments.

Insider trading and market manipulation

Swissgrid has access to sensitive business and market data from its own operations and from contractual partners. To prevent insider trading and market manipulation in the financial and electricity markets, Swissgrid has taken measures and regulated the handling of information and insider information in its Code of Conduct and in specific directives on the classification of information and on fair behaviour and transparency in the wholesale energy and financial markets. The employees concerned are trained in these requirements, and compliance controls are implemented. There are authorisation concepts, roles and information barriers in place. Swissgrid also reduces the amount of potential insider information by means of rapid publication and transparency.

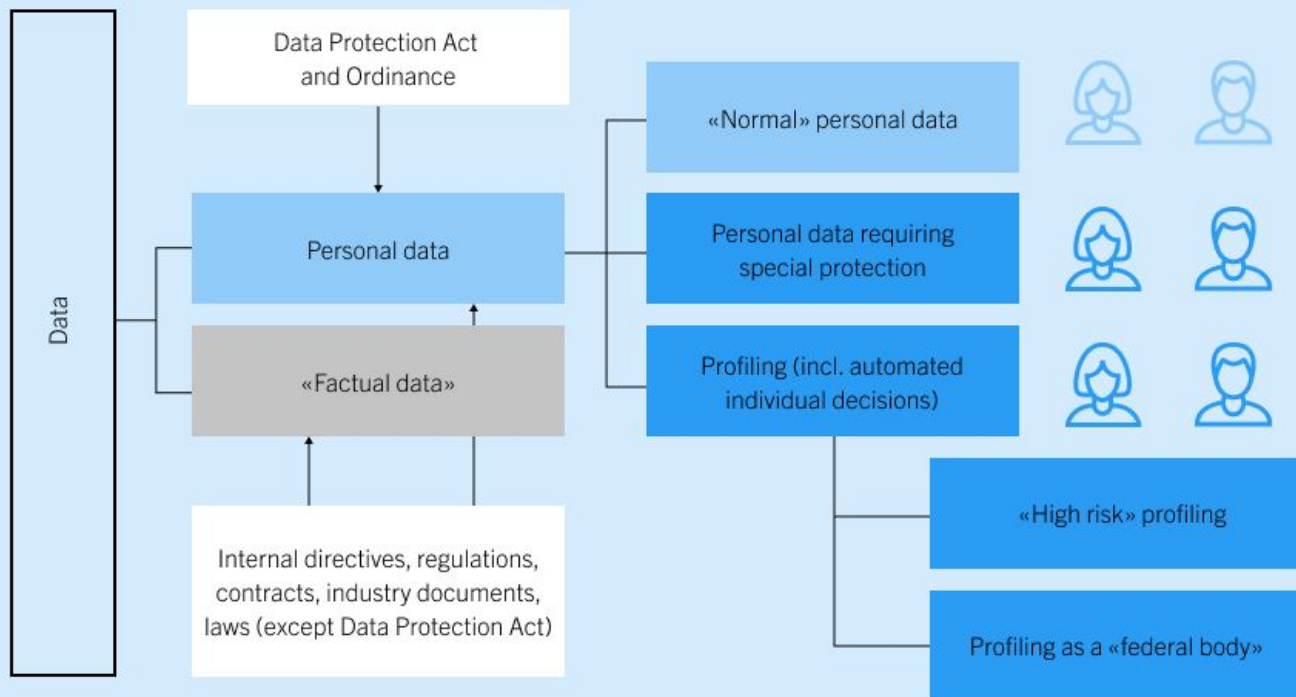
Furthermore, Swissgrid joined the FX Global Code in the 2024 financial year. The FX Global Code is an international code of conduct that sets principles for fairness, transparency and integrity in foreign exchange trading. Thanks to its membership, Swissgrid is undertaking to observe these standards and strengthening confidence in its trading practices. This will allow the company to contribute to a responsible and stable financial market.

Data protection

Swissgrid has various internal specifications on how to handle data (material and personal data), particularly the company directives on data governance, information security and cyber security, information classification and data protection. The directive on data protection forms the basis for the implementation of the new Federal Act on Data Protection (nFADP). The purpose of the nFADP is to protect the privacy and fundamental rights of natural persons whose personal data is processed. The following diagram gives an overview of the types of data and the applicable protection rules at Swissgrid.

Since August 2023, Swissgrid has had a dedicated data protection advisor who acts as a contact person for data protection issues and clarifications, and serves as a point of contact for data subjects (e.g. for requests for information, changes and deletion).

Data protection policy



Whistleblowing Policy

The Board of Directors of Swissgrid has issued a Whistleblowing Policy to enable reports of serious violations of external and internal regulations to be submitted. The Whistleblowing Policy is based on DIN ISO 37002:2021 in particular. The Whistleblowing Policy ensures that employees can report any serious offences to a confidential reporting office without fear of any negative consequences. It also stipulates that the investigative body that forms part of the Compliance department will follow up and investigate these leads in a structured and confidential manner. There is an external reporting channel that gives employees the opportunity to report violations anonymously. Since mid-2024, third parties/external persons have also been able to report misconduct via this [channel, which is available to the public](#).

Following up on reports or indications of breaches

The Compliance function is obliged to investigate all reports of serious breaches of internal or external regulations, including whistleblowing reports. It also examines indications of breaches obtained in the course of compliance reviews, which are conducted on an ongoing basis. Together with the Head of Legal, Regulatory & Compliance, it conducts a preliminary investigation to assess whether there is sufficient initial suspicion and whether the mandate for an investigation should be requested from the CEO or the Chairman of the Board of Directors. All information in connection with investigations must be treated confidentially, and the work carried out and the results of the investigation must be documented.

Processing of violations

Violations must be dealt with after an investigation. This encompasses two aspects:

- Violations have consequences that depend in particular on the seriousness of the offences and the degree of fault of the offender or the employee. The extent of the consequences is determined by the HR

department in consultation with the supervisor on a case-by-case basis.

- In order to prevent identical or similar violations, directives must be adapted, additional control measures introduced, processes revised and/or additional training carried out, depending on the case. In this way, compliance management is continuously developed and adapted to the latest needs and risks.

Reporting to the Board of Directors

Each year, the Compliance function prepares a comprehensive report for the CEO on its activities, significant observations and the resulting recommendations. The report also covers potentially critical matters that are brought to the attention of the Board of Directors' FPA in the annual compliance report.

The Head of Compliance is obliged to inform the CEO immediately if facts or circumstances are discovered that significantly jeopardise Swissgrid and/or the achievement of its objectives. The Head of Compliance reports to the CEO and the FPA on material misappropriations or cases of fraud. The Head of Compliance is also obliged to inform the Chairman of the Board of Directors immediately of any whistleblowing reports concerning the behaviour of the CEO and/or members of the Executive Board.

GRI 2-16, 2-27, 3-3, 205-1, 205-1, 205-2, 205-3, 206-1, 406-1, 416-2

Measures and key figures

Compliance review on corruption

A compliance review on corruption was carried out at Swissgrid's operating site (100%) again in the 2024 reporting year. There were no specific findings (i.e. no potential or confirmed incidents of corruption) and no follow-up measures, for example in the form of warnings or dismissals of employees or cancellations of contracts with business partners.

Directive on gifts

The revised directive on gifts and invitations, which has been adapted to current standards, came into force on 1 February 2024. A number of principles such as the value, timing and frequency of gifts must be taken into account. This directive represents a key measure for combating corruption.

Compliance training on corruption

In the 2024 financial year, all employees were given training on corruption prevention and the revised directive on gifts and invitations by means of a comprehensive e-learning programme. In addition, Swissgrid organised personal compliance training sessions for individual teams in which forms of corruption were discussed and the limits for gifts and invitations were explained using examples.

Awareness and training on corruption	2024		2023		2022	
	Number	%	Number	%	Number	%
Members of the Board of Directors and employees who have been informed of anti-corruption policies and procedures ¹	936	100%	862	100%	745	100%
Board of Directors	9	100%	9	100%	9	100%
Executive Board (EB)	5	100%	5	100%	5	100%
Managers excl. EB	114	100%	112	100%	93	100%
Employees without a management function	740	100%	681	100%	597	100%
Employees in training or paid by the hour	68	100%	55	100%	41	100%
Members of the Board of Directors and employees who have received anti-corruption training ²	925	99%	727	84%	119	16%
Board of Directors	9	100%	0	0%	2	22%
Executive Board (EB)	5	100%	0	0%	0	0%
Managers excl. EB	114	100%	97	87%	4	4%
Employees without a management function	740	100%	592	87%	106	18%
Employees in training or paid by the hour	57	84%	38	69%	7	17%

¹ This includes the total number of employees and members of the Board of Directors who were informed up to and including the reporting year. This means that the time of acknowledgement is not limited to the reporting year.

² The date of training relates to the reporting year; this is in contrast to the acknowledgement (see footnote ¹).

No reports or violations of corruption and data protection: in the 2024 financial year, there were no reports or judgements on cases of corruption at Swissgrid. Furthermore, no complaints about breaches of data protection or cases of data theft and loss in connection with customer data were reported to or identified by the data protection advisor.

No significant compliance violations: no significant judgements were brought against Swissgrid in the 2024 financial year for compliance violations. Nor were there any judgements in connection with violations due to negative environmental or social impacts or unfair business activities, including corruption. No significant monetary fines were paid out during this period. An amount of CHF 10,000 was defined as the materiality threshold for reporting. No critical matters due to legal judgements were identified in 2024 and therefore none were brought to the attention of the Board of Directors.

Compliance key figures	2024	2023	2022
Significant ¹ violations of laws and ordinances (including monetary and non-monetary sanctions)	0	0	0
Fines paid or deferred for significant ¹ violations committed in previous years	0	0	0
Whistleblowing reports	1	2	1

Compliance key figures	2024	2023	2022
Reports concerning discrimination	0	0	0
Reports concerning harassment	0	0	0
Reports concerning conflicts of interest	0	1	0
Reports concerning confidentiality of information	0	1	0
Reports concerning financial integrity	1	0	1
Reports concerning corruption	0	0	0
Reports concerning other issues	0	0	0
Number of cases in which an investigation was initiated	0 ²	0	0
Number of cases confirmed	0	0	0
Number of whistleblowing cases in which disciplinary measures were taken	0	0	0

¹ An amount of CHF 10,000 was defined as the materiality threshold for reporting. This includes significant violations in connection with environmental and social issues.

² Investigations were not initiated because it was a minor case without sufficient initial suspicion of a breach of the law by employees.

Sustainable supply chain

In today's globally networked economy, companies are increasingly obliged to ensure responsible treatment of people and the environment not only in their own operations, but along the entire value chain. The inclusion of social and ecological aspects in the procurement of goods and services is an important lever for fulfilling this responsibility. As a major issuer of contracts in Switzerland with a public mandate, Swissgrid is aware of its special economic and social responsibility and attaches great importance to a sustainable supply chain. Swissgrid therefore takes ecological and social criteria into account in its procurement process in addition to price and quality.

GRI 2-23, 2-24, 3-3

Ambition and goals

Establishment of sustainability in procurement

Swissgrid fulfils its environmental, social and economic responsibility along the value chain. To this end, Swissgrid integrates sustainability into its procurement processes and fulfils its duty of care to respect human rights and protect the environment along the supply chain. Swissgrid sets out this ambition in its annual corporate objectives: for the 2024 financial year, Swissgrid set itself the goal of incorporating sustainability into more than 80% of public procurement contracts for goods and services and developing new sourcing strategies that include greenhouse gas GHG reductions.

Respect for human rights at Swissgrid and along the supply chain

Swissgrid is committed to respecting human rights in all its business activities in accordance with Article 35 of the Swiss Federal Constitution and internationally recognised regulations. These include, in particular, the UN Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work and the associated ILO core labour standards, as well as the ten principles of the UN Global Compact.

For Swissgrid, the obligation to respect human rights includes the following fundamental principles:

- Swissgrid rejects all forms of child labour, forced labour, human trafficking and illegal employment.
- Swissgrid recognises the right to freedom of assembly, collective bargaining and freedom of expression.
- Swissgrid is committed to fair and non-discriminatory remuneration. Swissgrid recognises the right to fair, healthy and safe working conditions.
- Swissgrid protects the personal integrity of its employees.
- Swissgrid rejects all forms of discrimination, bullying, sexual and non-sexual harassment.

Swissgrid expects this commitment to respect human rights to be upheld throughout the company and along the upstream value chain. It applies to all Swissgrid employees, members of the Executive Board and Board of Directors, external employees and suppliers. This means that Swissgrid also expects its suppliers to undertake to respect human rights and to fulfil their due diligence obligations along the upstream supply chain (see the [Swissgrid Sustainability Charter](#)).

Management approach

As the national grid company, Swissgrid is subject to the Federal Act and Ordinance on Public Procurement Law (PPA/PPO). The company therefore takes into account the objectives of public procurement in its tenders, and in particular the economically, environmentally and socially sustainable use of public funds. The legal provisions are put into practice in operations by means of internal directives and regulations on the implementation of procurement procedures, including specifications on avoiding conflicts of interest, unauthorised competition agreements and corruption (see the [«Integrity in corporate governance»](#) section).

Swissgrid has set out its sustainability expectations for suppliers and the management principles for the fulfilment of due diligence in the [Sustainability Charter](#), the supply chain policy for exercising due diligence in the area of [human rights](#) and the [guiding principles for sustainability](#).

GRI 2-23, 2-24, 205-2

Code of Conduct for Suppliers

Swissgrid requires providers in the qualification phase (i.e. prior to submitting an offer) to sign and commit to the principles set out in the Swissgrid Sustainability Charter. This is a prerequisite for being allowed to take part in a tender for contracts worth over CHF 150,000. This means that Swissgrid's suppliers undertake to respect human rights, protect health and safety, fairly compensate their employees, combat corruption and protect the environment. Suppliers also agree to reduce their GHG emissions and waste, and to strive to preserve biodiversity and natural resources. In addition, Swissgrid requires its suppliers to oblige their subcontractors to comply with the 13 sustainability principles set out in the charter. In the 2024 financial year, 97% of the 119 suppliers who entered into a contract during the reporting period signed the Sustainability Charter with binding effect. The remaining 3% of suppliers are expected to sign the charter at the beginning of the 2025 financial year.

The Sustainability Charter also stipulates that suppliers must report any incidents, behaviour or other circumstances that constitute, could be regarded as or could lead to a breach of the sustainability principles. Accidents, near-accidents and environmental incidents in connection with service fulfilment etc. must be reported to Swissgrid. Compliance with the Sustainability Charter can be verified by Swissgrid or by third parties commissioned by Swissgrid by various means, including on-site inspections. In the event of a breach of the principles of the Sustainability Charter, Swissgrid may also take steps as outlined in the contractual provisions.

GRI 2-23, 2-24, 406-1, 407-1, 408-1, 409-1

Due diligence in the area of human rights

To supplement the Sustainability Charter, the Board of Directors approved the supply chain policy for exercising due diligence in the area of human rights at the beginning of the 2025 financial year. The aim of the supply chain policy is to identify, assess, avoid and minimise potential and actual risks in relation to human rights along the value chain. The supply chain policy applies to Swissgrid and its main suppliers and will be introduced and made binding during the 2025 financial year.

The supply chain policy meets the requirements of the Swiss «Ordinance on Due Diligence and Transparency in relation to Minerals and Metals from Conflict-Affected Areas and Child Labour (DDTrO)». In accordance with Art. 11 para. 3 DDTrO, the supply chain policy is based on ILO Conventions 138 and 182, the ILO-IOE Child Labour Guidance Tool for Business of 15 December 2015, the OECD Due Diligence Guidance for Responsible Business Conduct of 30 May 2018 and the UN Guiding Principles on Business and Human Rights.

Swissgrid exercises due diligence in the area of human rights by following a risk-based management system with the following core elements:

Risk analysis

In accordance with the supply chain policy, Swissgrid conducts regular and ad hoc risk analyses to identify, assess, prioritise and review potential and actual human rights risks along its supply chain. Swissgrid assesses potential risks based on the severity of the potential extent of damage and the probability of occurrence. Risks are analysed and monitored taking into account several sources of information, including databases with relevant indicators, such as the UNICEF Children's Right in the Workplace Index, information from suppliers, independent assessments of commitment to sustainable supply chains by experts, internal or external indications or reports as part of the reporting process, specialist literature and information from the authorities, international organisations and civil society.

Risk-based measures for prevention and mitigation

Swissgrid implements risk-based measures to prevent, avoid or minimise negative impacts on human rights along its supply chain. These measures are designed based on the risk analysis, taking into account the effectiveness, efficiency, potential influence and level of involvement. Swissgrid focuses on both preventive and remedial measures. The tools that Swissgrid can use for eliminating or minimising potential risks include certifications, training, active supplier management, collaboration with suppliers, and partnerships with relevant stakeholders and technical experts. If human rights violations are identified along the supply chain, the business relationship in question may be suspended or terminated prematurely.

Reporting procedure

Suppliers, business partners, employees and other external persons have the opportunity to report concerns or suspicions relating to human rights, including child labour, within the supply chain via the publicly accessible «Swissgrid whistleblower system». Further information on the reporting procedure can be found in the [«Integrity in corporate governance»](#) section.

Regular review

The effectiveness of the management system will be regularly reviewed in the future and adapted if necessary. This includes documenting and checking the effectiveness of the measures implemented and incorporating empirical values into the regular risk analyses.

GRI 3-3, 308-2, 407-1, 408-1, 409-1

Potential impacts and risks identified along the supply chain

In the 2024 financial year, Swissgrid reviewed and updated the analysis of the potential direct and indirect impacts on people and the environment along its supply chain and the resulting risks for Swissgrid in its dual materiality analysis, the ERM process, and an analysis focussing on compliance with human rights. Although Swissgrid has identified various social and environmental risk areas along its supply chain, based on the due diligence checks carried out and the evaluation of the reports received by Swissgrid's whistleblower system, there is no reasonable suspicion of a violation of human rights (including child labour) in connection with

products or services procured by Swissgrid.

Potential negative impacts on the environment: as part of the dual materiality analysis (see the section on «Sustainability at Swissgrid»), the material flow analysis (see the section on the «Circular economy») and the survey of Scope 3 GHG emissions, Swissgrid has identified the most important product groups with regard to their environmental footprint along the entire life cycle. They include transformers, conductors, cables, switchgears, concrete and steel. In addition, Swissgrid has identified and evaluated potential negative externalities in relation to the upstream production process of the purchased products and services. The risk of inadequate environmental management systems of direct and indirect suppliers, which can lead to negative environmental externalities, was identified as material. Examples include the release of environmentally hazardous substances into the air, water or soil, high GHG emissions or energy consumption from non-renewable sources, the improper disposal of waste and the extraction of abiotic and biotic raw materials.

Potential negative impacts on people and society: as part of the ERM process, Swissgrid has classed the risk of personal accidents on installations as a very high business risk. This applies to employees of Swissgrid and of external service providers (see the «Occupational health and safety» section).

In the 2024 financial year, Swissgrid also updated its risk analysis with regard to compliance with human rights along its supply chain. This was based on the country risks of the production sites for Swissgrid's most important grid components and the major export countries for critical raw materials used in these components, including copper, aluminium, steel, zinc, nickel and cobalt. The risk analysis focused on child labour, forced labour, freedom of association, occupational health and safety, discrimination, remuneration and working hours, and was carried out using qualitative expert assessment and quantitative data.

The result shows that the potential risks in relation to Swissgrid's direct suppliers are low for the majority of grid components, with the exception of one production site in Latin America for one of the subcomponents. As part of the country risk analysis, potential risks in relation to working conditions (remuneration and working hours) were rated highest. Other sector-agnostic country risks were found relating to child labour, forced labour, freedom of association and occupational safety. The UNICEF Children's Rights Index recommends increased due diligence for the country concerned in order to analyse and mitigate the risks in greater depth. The potential risks are at least partially mitigated by the fact that the results of an external assessment showed that the supplier in question has advanced sustainability systems in place in various areas, including labour and human rights. Swissgrid is also planning to conduct a detailed risk analysis of its supply chain for the 2025 financial year in order to define further risk-based measures.

Overall, the environmental and social risks in relation to Swissgrid's direct suppliers were deemed to be lower than the potential risks from upstream, indirect suppliers. This is primarily due to the prevalence of suppliers from Switzerland and neighbouring EU countries with a high level of protection, strict regulatory framework and correspondingly lower country risks.

Measures and key figures

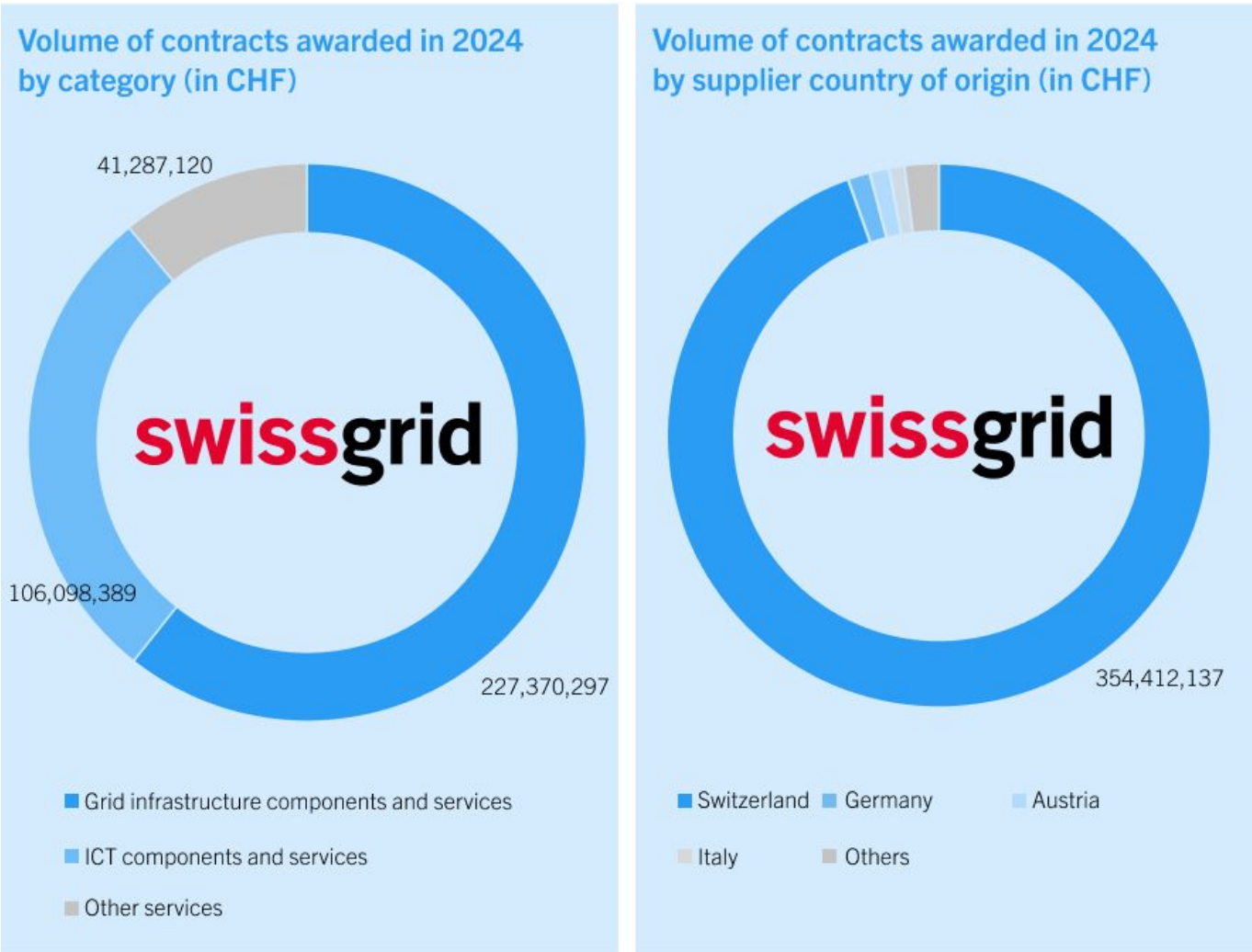
Swissgrid implements risk-based measures to prevent, avoid or minimise negative social and environmental impacts along its supply chain, with a focus on suppliers with a contract value of CHF 150,000 or more. These measures are designed based on the results of the risk analyses, taking into account the effectiveness, efficiency, potential influence and level of involvement of Swissgrid. Swissgrid implements risk-based preventive and remedial measures as well as measures to reduce the environmental footprint of the products purchased.

GRI 2-6, 203-1, 204-1, 308-1, 414-1

Swissgrid’s supplier portfolio

To fulfil its statutory mandate, Swissgrid procured goods and services representing a contract volume of CHF 375 million in the 2024 financial year. New contracts were awarded to 119 suppliers, 22 of whom are working with Swissgrid for the first time. Services and components for the grid infrastructure accounted for around 61% of the volume of contracts awarded in 2024. Innovations in connection with the digitalisation and automation of processes and data are essential in order to meet the growing demands in relation to secure grid operation in an increasingly complex and volatile environment,. Consequently, contracts for services and components in the ICT sector accounted for around 28% of the procurement volume awarded in 2024. The remaining contracts concerned the various services necessary for the performance of Swissgrid’s legal mandate.

Around 95% of the volume of contracts awarded, i.e. CHF 354 million, was accounted for by 105 local suppliers based in Switzerland, followed by suppliers from Germany, Austria and Italy (3% of the volume of contracts awarded).



Swissgrid has a qualification process in place to carry out an initial assessment of new suppliers. Swissgrid also carries out risk-based checks to ensure the availability of relevant certifications in the areas of quality management, environmental management, occupational health and safety and/or energy management (ISO 9001, ISO 14001, ISO 45001, ISO 50001, Safety Culture Ladder). The necessary certification depends on the

product group and may be a prerequisite for participation in Swissgrid's open tenders.

Audits of new suppliers according to environmental and/or social criteria in the 2024 financial year	Number	Proportion
Total new suppliers*	119	100%
of which were audited according to environmental criteria	65	55%
of which were audited according to social criteria	46	39%

* New suppliers are suppliers who concluded a contract with Swissgrid during the 2024 financial year.

GRI 308-2, 414-2

Screening of suppliers for potential negative environmental and social impacts

As part of its risk analysis, Swissgrid has tasked an independent, specialised agency with assessing the sustainability performance of its suppliers and providers since the beginning of 2023. Four areas are evaluated: the environment, labour and human rights, ethics, and sustainable procurement. Participation in this assessment process is voluntary, but is partly taken into account in the open selection procedure for suppliers. As of December 2024, a total of 127 suppliers have been subjected to a current sustainability assessment by Swissgrid. In the 2024 financial year, orders totalling CHF 153 million were placed with 98 of the 127 suppliers with a sustainability rating. This corresponds to around a third of the total order value from the 2024 financial year.

Of the 98 evaluated suppliers with whom orders were placed in the 2024 financial year, 56% have a good, advanced or above-average sustainability rating, while 35% have a partially satisfactory and 9% an unsatisfactory rating. The number and proportion of suppliers with an unsatisfactory environmental rating is higher than in relation to labour and human rights. An unsatisfactory rating does not mean that significant negative effects materialise. However, the risk of potential negative effects is significantly higher for these companies.

Examples of the identified environmental aspects that need to be addressed include the implementation of measures to reduce energy consumption and GHG emissions, reporting and/or documentation with regard to the management system for waste, materials and/or chemicals, or the preparation of environmental guidelines. Aspects that need to be improved on in labour and human rights include the publication of documented guidelines, measures and/or key figures on working conditions, human rights and/or diversity, equality and inclusion.

Key figures on environmental assessments carried out in the 2024 financial year:

Assessment of potential environmental impacts	Number of suppliers*	Proportion of suppliers evaluated
Suppliers assessed for environmental impacts	98	100%
of whom obtained a good, progressive or above-average environmental rating	76	78%
of whom obtained a partially satisfactory environmental rating	10	10%
of whom obtained an unsatisfactory environmental rating	12	12%
Suppliers identified as having significant actual negative environmental impacts	0	0%
Suppliers identified as having significant potential negative environmental impacts	12	12%
Suppliers asked to make improvements as a result of the evaluations	0	0%
Suppliers whose business relationship was terminated due to negative evaluations	0	0%

* Suppliers who received an order from Swissgrid in the 2024 financial year and have a current sustainability assessment.

Key figures on assessments carried out in the area of labour and human rights in the 2024 financial year

Assessment of potential social impacts	Number of suppliers*	Proportion of suppliers evaluated
Suppliers assessed for impacts with regard to labour and human rights	98	100%
of whom obtained a good, progressive or above-average labour and human rights rating	84	86%
of whom obtained a partially satisfactory assessment labour and human rights rating	11	11%
of whom obtained an unsatisfactory labour and human rights rating	3	3%
Suppliers identified as having significant actual negative impacts with regard to labour and human rights	0	0%
Suppliers identified as having significant potential negative impacts with regard to labour and human rights	3	3%
Suppliers asked to make improvements as a result of the evaluations	0	0%
Suppliers whose business relationship was terminated due to negative evaluations	0	0%

*Suppliers who received an order from Swissgrid in the 2024 financial year and have a current sustainability assessment.

GRI 308-2, 414-2

Risk-based inspections of supplier activities in the area of occupational safety and environmental protection

For contract management purposes, Swissgrid also carries out risk-based inspections of service providers who carry out work on Swissgrid systems. These inspections focus on compliance with occupational safety and environmental protection requirements in order to identify and eliminate the relevant risks. In addition, Swissgrid organises annual training courses on occupational safety for its external grid system operators.

HSE inspections and training of service providers on Swissgrid systems in the 2024 financial year	Number
HSE inspections of work carried out by suppliers/service providers	370
Service providers whose work was audited	103
Service providers with identified HSE violations	32
Service providers with whom corrective measures were agreed upon	32
Service providers whose contracts were cancelled due to violations	0

Dedicated training courses on occupational safety
carried out with external grid system operators
(service providers) of Swissgrid

3

Inclusion of sustainability criteria to improve the environmental and social footprint

In line with its ambition and goals, Swissgrid integrates environmental and social aspects as suitability and/or award criteria into tenders for the procurement of products and services. The specific criteria and their weighting are defined depending on the product group and taking into account the market situation, volume and potential risks. Examples of the criteria applied include:

Energy efficiency criteria

Swissgrid applies energy efficiency criteria in the procurement of selected components and operating equipment. These criteria include the capitalisation of active power losses in the selection of transformers, including the application of a bonus/malus incentive system, the assessment of losses in the procurement of overhead lines, the establishment of maximum loss rates for equipment with SF6 and of maximum permissible energy consumption values for SAS devices, as well as the availability of energy efficiency certificates when procuring IT products (e.g. Energy Star or Blue Angel). Wherever possible, compliance with the calculated energy efficiency specifications for grid components is checked on site by Swissgrid as part of factory acceptance tests.

Criteria with reference to GHG emissions

When assessing selected grid components, Swissgrid takes into account the availability of life cycle assessment calculations in accordance with recognised international standards. The aim is to systematically request the CO₂ footprint of the products offered by suppliers for key products in the future and to take this into account using a comparable assessment methodology. Other award criteria used by Swissgrid that are relevant to the GHG emissions along the supply chain include the proportion of renewable energy used in the manufacture of the product to be procured (conductors, underground cables or high-voltage cables); the existence of measures to reduce emissions; and the existence of calculations of GHG emissions and/or reduction targets.

Social criteria

Swissgrid took the following social criteria into account in procurements concluded in the 2024 financial year: number and severity of occupational accidents with lost working days, existence of guiding principles and risk assessments on occupational safety, and the implementation of measures to fulfil social responsibility and support employees. Copper Mark certification is also required as an additional criterion for the procurement of selected conductors. The aim of the certification is to ensure that suppliers of end products containing copper encourage and demand responsible social and environmental operating practices along their value chain.

Swissgrid has exceeded its corporate goal with regard to sustainable procurement: in the 2024 financial year,

Swissgrid took at least one sustainability criterion into account in more than 98% of open and invitation tender procedures in accordance with public procurement law. In 150 tenders, providers were evaluated according to environmental sustainability criteria, while social sustainability criteria were applied in 144 tenders. In several tenders, both environmental and social requirements were demanded as suitability and/or award criteria.

Use of sustainability criteria in tenders	Number
Total tenders carried out (contract value > CHF 150,000)	153
of which tenders* with environmental sustainability criteria	150
of which tenders* with social sustainability criteria	144

* Invitations to tender in open and invitation procedures.

Partnership with other transmission system operators

Along with nine European transmission system operators, Swissgrid is a member of an initiative to support the industrial strategy for a green and digital Europe. One of the strategic objectives of this partnership is to strengthen sustainable procurement practices and methods by adopting a harmonised approach. In this context, Swissgrid worked with the members of the initiative in the 2024 financial year to develop possible approaches for promoting the circular economy in procurements for critical grid components. To improve the effectiveness of sustainability criteria, several workshops were organised to share lessons learned, experience and recommendations.

Stakeholder engagement

Swissgrid endeavours to obtain broad acceptance of its construction projects for the Swiss transmission grid. To do so, Swissgrid engages in close dialogue not only with the authorities at federal, cantonal and municipal level, but also with the affected population, interest groups, associations and the media.

Swissgrid’s stakeholder engagement includes the management of industry stakeholders (see Swissgrid website: Stakeholder Management) and its stakeholder engagement as described above. The related ambitions, objectives and measures are explained in this section.

GRI 2-29

Ambition and goals

Swissgrid adopts an approach to the planning and implementation of grid expansion that involves comprehensive dialogue and participation. The involvement of the relevant stakeholder groups plays an important role in sustainable grid expansion, as construction projects can have an impact on the population, municipalities and cantons, as well as on the landscape, nature and biodiversity. Thanks to proactive grid project communication, Swissgrid ensures that the concerns of these stakeholders are incorporated into its planning processes. In this way, it can develop grid projects that minimise the impact on the environment and the population.

Swissgrid has set itself the following goals:

- Transparent communication of all relevant factors that influence the progress and dimension of the grid project, such as:
 - Technical limits and principles
 - Federal, cantonal and municipal requirements
 - Necessity of the project from the perspective of grid operations
- Active involvement of the population in order to recognise their needs and concerns, include them in communication measures and, as far as possible, consider them in the planning process.

GRI 2-12, 2-25, 2-29, 413-1

Management approach

Operational responsibility for the implementation of stakeholder management and stakeholder engagement lies with the Executive Board. The relevant framework is provided by Swissgrid's Strategy 2027, which was approved by the Board of Directors.

Public involvement: political participation

Swissgrid's business model is politically regulated. Swissgrid is therefore sometimes directly affected by political proposals. One example of this is the Federal Council's «Grid express» bill. Its aim is to shorten the planning procedures for grid projects. Another example is the electricity agreement with the EU, which is due to enter the parliamentary process in mid-2025. This approach ensures that the Swiss public is involved in the legislative process via parliament and the instruments of direct democracy.

Public involvement: Swissgrid's stakeholder engagement

Swissgrid has defined specific guidelines for stakeholder engagement, i.e. the involvement of the public in grid projects and grid project communication to ensure the systematic implementation of measures. Swissgrid places credible and active relationship management at the heart of its stakeholder engagement. This requires continuous communication to inform the public and other relevant stakeholders about upcoming grid projects as early as possible. In the vast majority of cases, this happens long before there is a real need for the technical project management to communicate any information.

Grid expansion follows a strict statutory procedure that consists of several phases (link to [Approval processes](#)). The requirements of grid projects are determined upstream in a separate process. Grid project communication is essential whenever an extra-high-voltage line is built or replaced. The authorities and the public are informed and involved in the process at every stage.

The decisive factor for stakeholder engagement activities is not the technical milestones of a project, but regular communication measures. This is primarily because the planning procedures (especially the transmission lines sectoral plan) often take several years. Swissgrid considers regular dialogue with the affected stakeholders to be crucial, particularly in planning phases in which only a few decisions are made with a mandatory need for communication. Generally Swissgrid implements a stakeholder engagement measure at least once a year.

The details of stakeholder involvement in all the different planning phases are summarised [here](#).

Swissgrid carries out a range of construction projects with different degrees of strategic importance, resource requirements, costs and complexity. From a technical point of view, a distinction is made between line and substation projects, as well as between new construction, enhancement and renovation projects. To ensure

that Swissgrid can reach the relevant stakeholders as effectively as possible with the available resources, it divides projects into the following categories: high, medium, low.

Measures and key figures

Swissgrid's measures for involving the public are based on the project classification described above. Possible measures are divided between the various project phases as follows:

«High» project category

The most important measures in the various project phases include:

- Preliminary project: prior notification of affected municipalities, stakeholder discussions, media releases, information brochures and information events.
- Construction project and approval process: project website, Infopoint, social media activities, media releases, project advisory council and trade fairs.
- Implementation: ground-breaking ceremony, inaugurations, pictures/videos, information boards and information events. Throughout all the phases: stakeholder meetings and media work to ensure transparent communication.

Low-category projects are not systematically integrated into the stakeholder engagement process. The necessary measures, such as construction site information or discussions with the authorities and landowners, are carried out independently by the project managers. However, situations or developments can also occur in low-category projects that increase the need for communication and make temporary involvement in the process necessary.

«Medium» project category

Measures include discussions with stakeholders in all project phases, as well as regular media releases/web news and information brochures. The affected municipalities are informed at an early stage of the preliminary project. During implementation, the focus is on information meetings, events and visual content such as images/videos and social media activities in order to ensure comprehensive and transparent communication.

Communication measure: project flyers

Project information brochures are used to provide all households and companies in the area close to a grid project with information. In the 2024 financial year, the public was informed about grid projects such as Niederwil – Obfelden, Marmorera – Tinizong, Nant de Drance, Oberwallis, Obfelden – Samstageren and Mörel – Ernen thanks to specific project flyers.

Communication measure: media information

As well as providing the population with direct information (e.g. via project flyers), communication with the national and local media is crucial for successful stakeholder engagement and continuous project communication. Swissgrid maintains active media relations. This means that direct contact with journalists (referred to here as media information) is used to supplement traditional media releases.

In the reporting year, Swissgrid sent out the following media releases on grid projects for stakeholder engagement purposes: Chamoson – Chippis grid project, Mörel – Ernen grid project, Thalwil – Sihlhalden grid project (line dismantling) and Morcote – Brusino grid project (Lago di Lugano underwater cable).

Project advisory council: direct involvement of the population in grid projects

The project advisory council is a voluntary body that Swissgrid appoints for certain projects during the construction project phase. The aim is to promote dialogue between the public, the authorities and Swissgrid. Swissgrid may invite representatives of municipalities, environmental organisations and interest groups to participate in project advisory councils, for example. Three meetings of the Niederwil – Obfelden project advisory council were held in the reporting year (more information can be found [here](#)). As no other grid project was in the construction phase in 2024, all meetings focussed on this grid project.



Notes

GRI Index

Application note: Swissgrid has reported the information specified in this GRI Index for the period from 1 January to 31 December 2024 with reference to the GRI standards.

GRI standards	Disclosure	Reference	Explanations
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GRI 2: General disclosures 2021	2-1 Organizational details	Annual Report (Company), Corporate Governance Report (Corporate structure and shareholders)	
	2-2 Entities included in the organization's sustainability reporting	Sustainability at Swissgrid (Context of non-financial reporting)	
	2-3 Reporting period, frequency and contact point	Sustainability at Swissgrid (Context of non-financial reporting)	
	2-4 Restatements of information	Sustainability at Swissgrid (Context of non-financial reporting)	
	2-5 External assurance	Notes (Independent Auditor's Report)	
	2-6 Activities, value chain and other business relationships	Annual Report (Company), Sustainable supply chain (Measures and key figures)	The description of the company in the Annual Report also fulfils the requirements of Art. 964b para. 2 (1) of the Swiss Code of Obligations (description of the business model).
	2-7 Employees	Employer attractiveness (Swissgrid employees)	As the national grid company, Swissgrid only employs staff in Switzerland. This eliminates the need for a regional breakdown.
	2-8 Workers who are not employees	Employer attractiveness (Swissgrid employees)	
	2-9 Governance structure and composition	Corporate Governance Report (Board of Directors), Sustainability at Swissgrid (The role of the Board of Directors), Employer attractiveness (Overview of employee diversity)	
	2-10 Nomination and selection of the highest governance body	Corporate Governance Report (Election and term of office)	
	2-11 Chair of the highest governance body	Corporate Governance Report (Board of Directors)	
	2-12 Role of the highest governance body in overseeing the management of impacts	Sustainability at Swissgrid (The role of the Board of Directors) Stakeholder engagement (Management approach)	
	2-13 Delegation of responsibility for managing impacts	Sustainability at Swissgrid (The role of the Board of Directors + The role of the Executive Board)	
	2-14 Role of the highest governance body in sustainability reporting	Sustainability at Swissgrid (The role of the Board of Directors + The role of the Executive Board)	
	2-15 Conflicts of interest	Corporate Governance Report (Board of Directors + Conflicts of interest)	
	2-16 Communication of critical concerns	Integrity in corporate governance (Measures and key figures)	
	2-17 Collective knowledge of the highest governance body	Sustainability at Swissgrid (The role of the Board of Directors)	
	2-18 Evaluation of the performance of the highest governance body	Corporate Governance Report (Internal organisation)	
	2-19 Remuneration policies	Corporate Governance Report (Remuneration), Financial Report (8. Personnel expenses + 9. Other operating expenses), Sustainability at Swissgrid (Sustainability targets for variable remuneration)	
	2-20 Process to determine remuneration	Corporate Governance Report (Board of Directors + Remuneration), Employer attractiveness (Measures and key figures on attracting and retaining employees and diversity)	Swissgrid does not consult any remuneration consultants.
	2-21 Annual total compensation ratio	Employer attractiveness (Measures and key figures on attracting and retaining employees and diversity)	
	2-22 Statement on sustainable development strategy	Annual Report (Editorial)	
	2-23 Policy commitments	Sustainability at Swissgrid (Sustainability targets + The role of the Executive Board), Sustainable supply chain (Ambition and goals + Management approach)	
	2-24 Embedding policy commitments	Sustainability at Swissgrid (Sustainability targets), Sustainable supply chain (Ambition and goals), Integrity in corporate governance (Management approach)	
	2-25 Processes to remediate negative impacts	Integrity in corporate governance (Management approach), Climate change (Measures and key figures), Occupational safety, Environmental protection and biodiversity (Management approach), Stakeholder engagement and Employer attractiveness (Management approach)	
	2-26 Mechanisms for seeking advice and raising concerns	Integrity in corporate governance (Management approach), Occupational health and safety (Measures and key figures), Environmental protection (Management approach)	
	2-27 Compliance with laws and regulations	Integrity in corporate governance (Measures and key figures + Management approach)	
	2-28 Membership associations	Stakeholder engagement (Introduction)	Website: Stakeholder management
	2-29 Approach to stakeholder engagement	Stakeholder engagement (Management approach)	
	2-30 Collective bargaining agreements	Employer attractiveness (Measures and key figures in other areas)	
Material topics			
GRI 3: Material topics 2021	3-1 Process to determine material topics	Sustainability at Swissgrid (Dual materiality analysis)	
	3-2 List of material topics	Sustainability at Swissgrid (Dual materiality analysis)	
Sustainability in general	3-3 Management of material topics	Sustainability Report	The aspects in accordance with GRI 3-3 are addressed in the sections on each key topic.
Economy			
GRI 201: Economic performance 2016	201-1 Direct economic value generated and distributed	Financial Report	
	201-2 Financial implications and other risks and opportunities due to climate change	Climate change (Procedure for identifying the impacts, risks and opportunities of climate change)	
	201-3 Defined benefit plan obligations and other retirement plans	Financial Report, Employer attractiveness (Measures and key figures in other areas)	The defined benefit plan obligations and other retirement plans are not covered by Swissgrid's general funds.
	201-4 Financial assistance received from government	Annual Report (Business activities in a strictly regulated environment)	
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	Not material	Swissgrid operates exclusively in Switzerland.
	202-2 Proportion of senior management hired from the local community	Not material	Swissgrid operates exclusively in Switzerland.
GRI 203: Indirect economic impacts 2016	203-1 Infrastructure investments and services supported	Annual Report (Mission)	
	203-2 Significant indirect economic impacts	Energy transition (Measures and key figures), Annual Report (Mission)	
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Sustainable supply chain (Measures and key figures)	
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Integrity in corporate governance (Management approach + Measures and key figures)	100% as part of the compliance review on corruption. The Swissgrid headquarters are located at an operating site in Aarau.
	205-2 Communication and training about anti-corruption policies and procedures	Integrity in corporate governance (Measures and key figures), Sustainable supply chain (Code of Conduct for suppliers)	
	205-3 Confirmed incidents of corruption and actions taken	Integrity in corporate governance (Measures and key figures)	
GRI 206: Anti-competitive Behaviour 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Integrity in corporate governance (Measures and key figures)	
GRI 207: Tax 2019	207-1 Approach to tax	Not material	Swissgrid operates exclusively in Switzerland. Due to its regulated business model, a tax strategy is not material.
	207-2 Tax governance, control, and risk management	Not material	Due to Swissgrid's regulated business model and localised, long-term investments, its tax expenses can be calculated accurately and at an early stage. The tax risks are therefore minimal and Swissgrid does not carry out a detailed risk assessment.
	207-3 Stakeholder engagement and management of concerns related to tax	Not material	Swissgrid remains constantly in contact with national, cantonal and municipal tax authorities. Swissgrid is currently liable for tax in 22 cantons and around 850 municipalities.
	207-4 Country-by-country reporting	Not material	Swissgrid Ltd is only liable for tax in Switzerland. Please refer to the Financial Report for the detailed tax figures.
Ecology			
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Circular economy (Measures and key figures)	
	301-2 Recycled input materials used	Circular economy (Measures and key figures)	
	301-3 Reclaimed products and their packaging materials	Circular economy (Measures and key figures)	Data on the proportion of recycled products is not available. Swissgrid is working on requesting essential information from suppliers in the future.

GRI 302: Energy 2016	302-1 Energy consumption within the organization	Climate change (Key figures on energy and electricity consumption)	
	302-2 Energy consumption outside of the organization	Climate change (Key figures on energy and electricity consumption)	
	302-3 Energy intensity	Climate change (Key figures on energy and electricity consumption)	
	302-4 Reduction of energy consumption	Climate change (Emission reduction measures and key figures – Reduction in electricity and energy consumption)	As a result of the LED initiative, Swissgrid's energy consumption was reduced by 19.9 MWh in the 2024 financial year in relation to the previous year.
	302-5 Reductions in energy requirements of products and services	Not material	Swissgrid does not produce or market any products or services directly to end consumers.
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Not material	According to the Swissgrid materiality analysis, water consumption is assessed as not material. Swissgrid is responsible for transporting electricity in the extra-high-voltage grid and not for electricity generation. Water is mainly used at Swissgrid locations, bases and substations for cleaning, or in the company restaurants. It comes from the normal drinking water supply.
	303-2 Management of water discharge-related impacts		
	303-3 Water withdrawal		
	303-4 Water discharge		
	303-5 Water consumption		
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Biodiversity (Management approach)	
	304-2 Significant impacts of activities, products and services on biodiversity	Biodiversity (Management approach)	
	304-3 Habitats protected or restored	Biodiversity (Management approach)	Swissgrid does not restore and regenerate habitats. The company is guided by the net-zero principle and pursues the following mitigation hierarchy for its measures: avoidance, restoration or replacement. An effectiveness analysis with regard to biodiversity or other related aspects has not yet been carried out.
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	Information not available/incomplete	Due to a lack of data on the overlap between species on the IUCN Red List and in national protected areas, it is currently not possible to make a statement on this GRI.
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Climate change (Measures and key figures)	Gases taken into account in the calculations: CO ₂ , CH ₄ , N ₂ O, SF ₆ , NF ₃ . Swissgrid does not cause any biogenic emissions from the incineration or biodegradation of biomass.
	305-2 Energy indirect (Scope 2) GHG emissions	Climate change (Measures and key figures)	Gases taken into account in the calculations: CO ₂ , CH ₄ , N ₂ O, FKW, PFKW, SF ₆ , NF ₃ .
	305-3 Other indirect (Scope 3) GHG emissions	Climate change (Measures and key figures)	Gases taken into account in the calculations: CO ₂ , CH ₄ , N ₂ O, FKW, PFKW, SF ₆ , NF ₃ .
	305-4 GHG emissions intensity	Climate change (Measures and key figures)	Gases taken into account in the calculations: CO ₂ , CH ₄ , N ₂ O, FKW, PFKW, SF ₆ , NF ₃ .
	305-5 Reduction of GHG emissions	Climate change (Measures and key figures)	Swissgrid's GHG emissions increased in the 2024 financial year.
	305-6 Emissions of ozone-depleting substances (ODS)	Not material	
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Not material	Swissgrid does not produce electricity.
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Circular economy (Measures and key figures)	Data on waste includes the material flows generated by Swissgrid itself. Waste generated upstream or downstream is not included.
	306-2 Management of significant waste-related impacts	Circular economy (Management approach)	Environmental construction supervision helps Swissgrid to ensure that waste is handled in accordance with the legal obligations.
	306-3 Waste generated	Circular economy (Measures and key figures)	Data on waste includes the material flows generated by Swissgrid itself based on a three-year average. Waste generated upstream or downstream is not included.
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Sustainable supply chain (Measures and key figures)	
	308-2 Negative environmental impacts in the supply chain and actions taken	Sustainable supply chain (Measures and key figures)	
Social issues			
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Employer attractiveness (Swissgrid employees)	
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employer attractiveness (Measures and key figures)	Swissgrid's basic benefits are generally available to all employees, regardless of their level of employment (e.g. full-time and part-time). Life insurance is not part of these basic benefits. Shareholdings for private individuals are prohibited by law.
	401-3 Parental leave	Employer attractiveness (Measures and key figures)	
GRI 402: Labour/Management Relations	402-1 Minimum notice periods regarding operational changes	Employer attractiveness (Measures and key figures in other areas)	
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Occupational health and safety (HSE management system)	
	403-2 Hazard identification, risk assessment, and incident investigation	Occupational health and safety (Management approach)	
	403-3 Occupational health services	Occupational health and safety (Measures for health protection)	Personal health data is classified as confidential at Swissgrid in accordance with internal directives and the Code of Conduct. The confidentiality of personal data is guaranteed by a restrictive data management system, provisions in internal directives and appropriate employee training, among other things.
	403-4 Worker participation, consultation, and communication on occupational health and safety	Occupational health and safety (Management approach + Measures for health protection)	The right of employees to have a say is effected through staff representation.
	403-5 Worker training on occupational health and safety	Occupational health and safety (Measures to strengthen the safety culture)	
	403-6 Promotion of worker health	Occupational health and safety (Measures for health protection)	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational health and safety (Measures to strengthen the safety culture), Sustainable supply chain (Management approach + Measures and key figures)	
	403-8 Workers covered by an occupational health and safety management system	Occupational health and safety (Management approach)	
	403-9 Work-related injuries	Occupational health and safety (Measures and key figures)	
	403-10 Work-related ill health	Occupational health and safety (Measures and key figures)	
GRI 404: Training and Education	404-1 Average hours of training per year per employee	Employer attractiveness (Measures and key figures on employee development)	
	404-2 Programs for upgrading employee skills and transition assistance programs	Employer attractiveness (Measures and key figures on employee development)	
	404-3 Percentage of employees receiving regular performance and career development reviews	Employer attractiveness (Measures and key figures on employee development)	
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Employer attractiveness (Overview of employee diversity + Measures and key figures on the protection of personal integrity)	
	405-2 Ratio of basic salary and remuneration of women to men	Employer attractiveness (Measures and key figures on attracting and retaining employees and diversity)	Swissgrid operates exclusively in Switzerland. Data showing the breakdown per employee category is not available.
GRI 406: Non-discrimination 2015	406-1 Incidents of discrimination and corrective actions taken	Employer attractiveness (Measures and key figures on the protection of personal integrity)	
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Sustainable supply chain (Potential impacts and risks identified along the supply chain)	The risk analysis in relation to suppliers has shown that the right to freedom of association and collective bargaining is restricted, particularly at production sites outside Europe. Measures include the sustainability assessment of suppliers and inclusion of social criteria when selecting suppliers.
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Sustainable supply chain (Potential impacts and risks identified along the supply chain)	
GRI 409: Forced or Compulsory Labor	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Sustainable supply chain (Potential impacts and risks identified along the supply chain)	
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	See comment	100% of the security personnel employed by Swissgrid are trained in ethical principles and human rights. The training of additional security personnel deployed for selected events and provided by a third-party company on demand is the responsibility of the service provider and is not carried out by Swissgrid.
GRI 411: Rights of Indigenous peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	Not material	Swissgrid does not pursue any activities in areas with recognised indigenous populations whose rights may be violated.
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Environmental protection (Management approach), Stakeholder engagement (Management approach)	Impacts on the population are analysed as part of the preparatory phases of grid projects (100%), but with no distinctions by gender, as this is not considered material for grid projects in Switzerland. Swissgrid does not implement any programmes to promote the community.
	413-2 Operations with significant actual and potential negative impacts on local communities	Environmental protection (Management approach)	

GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Sustainable supply chain (Measures and key figures)	
	414-2 Negative social impacts in the supply chain and actions taken	Sustainable supply chain (Measures and key figures)	
GRI 415: Public Policy 2016	415-1 Political contributions	See comment	Swissgrid does not make party donations.
GRI 416: Customer Health and Safety	416-1 Assessment of the health and safety impacts of product and service categories	Environmental protection (Measures and key figures), Occupational safety (Risks and hazards)	Not material on the basis of Swissgrid's business model and activities
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Integrity in corporate governance (Measures and key figures)	
GRI 417: Marketing and Labelling 2016	417-1 Requirements for product and service information and labeling	Not material	
	417-2 Incidents of non-compliance concerning product and service information and labeling	Not material	
	417-3 Incidents of non-compliance concerning marketing communications	Not material	
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Integrity in corporate governance (Measures and key figures)	

Independent Auditor's Report

Swissgrid AG

Aarau

Bericht des unabhängigen Wirtschaftsprüfers
mit begrenzter Sicherheit über ausgewählte
Aspekte im Nachhaltigkeitsbericht 2024
(einschliesslich der Aussagen zu den
Treibhausgasen)

an den Verwaltungsrat

