

Annual Report 2023



Contents

Annual Report

- 03 Editorial
- 05 Year in review
- 20 Company
- 23 Mission
- 33 2027 Strategy

Financial Report

- 36 Management Report
- 46 Financial statements Swiss GAAP FER
- 46 Income statement
- 48 Balance sheet
- 50 Cash flow statement
- 52 Statement of changes in equity
- 53 Notes
- 78 Independent Auditor's Report
- 83 Statutory financial statements
- 83 Income statement
- 84 Balance sheet
- 86 Cash flow statement
- 88 Notes
- 101 Proposed appropriation of retained earnings
- 102 Statutory Auditor's Report

Corporate Governance

Sustainability Report

- 124 Sustainability at Swissgrid
- 132 Planet
- 155 People
- 185 Partnership
- 211 Notes

Annual Report

Editorial

Transformation, digitalisation, security – the foundations have been laid



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

Dear readers,

In its «Action Plan for Grids», the European Union has given an estimate of EUR 584 billion for the investments needed in the European electricity system as a whole by 2030. At the same time, it wants to more than double power generation from new renewable resources. Europe is forging ahead at high speed to make the energy transition possible and to reach the target of net zero. Switzerland is in the middle of doing the same thing, and is pursuing equivalent goals as part of its Energy Strategy 2050. Due to its close links to the continental European interconnected grid and its energy policy regulations, Switzerland is dependent on cooperation with European partners. If this cooperation is to take place on an equal footing, an electricity agreement is needed between Switzerland and the EU. In the long term, this is the prerequisite for ensuring a high level of security of supply in Switzerland and in Europe.

«Electricity flows through us» is our motto and is what drives us every day. However, the transformation of the energy system increases the complexity of this undertaking. The grid has to overcome additional challenges in the production, feed-in, distribution and storage of electricity. Swissgrid is taking these challenges into account in its «Strategy 2027».

The modernisation and high controllability of the transmission system are key success factors for ensuring grid-related security of supply. More efficient implementation of grid projects and optimal management of the available grid capacity are essential prerequisites. To further these objectives, Swissgrid is pressing ahead with digitalisation in all areas of the company and investing in the further development of its employees and its corporate culture.

In the reporting year, we were able to lay the foundations for achieving important milestones in Strategy 2027. We worked hard towards integrating Switzerland into European processes, we defined the requirements for the future transmission system as part of our grid planning (Strategic Grid 2040) and we made significant investments in security, particularly in grid systems and cybersecurity. Thanks to our projects in the fields of technology and corporate culture, we also created a strong basis for an innovative and digitalised Swissgrid.

To prepare for a potentially uncertain supply situation in the winter, the federal government had already assigned new roles to Swissgrid in 2022. We continued to fulfil these tasks in the reporting year, thereby making an important contribution to ensuring a reliable supply of electricity for Switzerland.

As the national grid operator, we have always focused our business activities on the long term. As part of our sustainability management concept, we prepared a Sustainability Report last year that took into account the standards of the Global Reporting Initiative. Now, for the first time, we are publishing an Annual Report with integrated non-financial reporting.

We welcomed Nell Reimann as a new member of the Executive Board in 2023, as the successor to Maurice Dierick as Head of Business Unit Market. Nell has held various management roles at Swissgrid since 2016, has in-depth knowledge of system operation and is well connected both nationally and internationally.

We would like to say a big thank you to all our employees, who once again achieved extraordinary things in 2023. We look forward to leading Swissgrid into the energy future together.



Adrian Bult
Chairman of the Board of Directors



Yves Zumwald
CEO

Annual Report

Year in review

Swissgrid can look back on a successful reporting year. The commissioning of the line between Bassecourt and Mühleberg was a particular highlight. To ensure that the grid meets future requirements, Swissgrid also worked intensively on planning the Strategic Grid 2040. In order to promote digitalisation and innovation, projects were launched in both the technological and corporate culture areas. Swissgrid consistently upheld its commitment towards achieving greater integration into European processes.



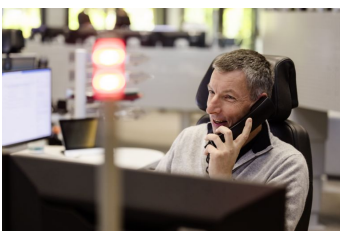
Grid operation

High availability of the Swiss transmission grid

In the past reporting year, Swissgrid guaranteed an availability of the transmission system of well over 99.9%.

At times, 2023 was characterised by tense grid operations, especially in the summer. This was due to grid elements being taken out of operation for construction and maintenance work and to a high level of production. As a result, Swissgrid had to use more redispatching to eliminate grid congestion.

The frequency in the European interconnected grid deviated from the target frequency of 50 hertz much more frequently in 2023 than in previous years. These frequency deviations were triggered in particular by the feed-in of renewable energies at unforecasted levels and by strikes in France. Procedures coordinated between European transmission system operators for dealing with frequency deviations therefore had to be applied several times. Swissgrid coordinated the restoration of the frequency to the normal range in cooperation with Amprion.



Grid operation

Grid operations – rising to meet new challenges

Swissgrid is facing ever greater challenges in system operation. In response, it is implementing its «Vision System Operations». Important milestones were reached in 2023: new personnel was hired to strengthen the division, and the foundations for new career opportunities

were laid.

«Vision Operational Planning» aims to ensure more efficient coordination of the outages required in connection with rising investments in the grid. The first steps were initiated in 2023.

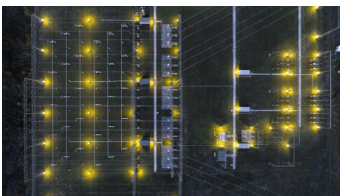


Grid operation

European context

Comprehensive revision of operating agreements and the Swiss Operational Handbook

The signing of the Synchronous Area Framework Agreement (SAFA) in 2019 laid the foundations for further cooperation between Swissgrid and European transmission system operators at a technical and operational level. Swissgrid had to make changes to grid operational planning and real-time operation processes as a result. Swissgrid started revising its operating agreements and the Swiss Operational Handbook in 2022 in association with representatives of 18 power plant and distribution system operators directly connected to the transmission system and with SBB. Good progress was made in the course of the year. The consultation process for the finalised documents is planned for 2024.



Grid infrastructure

Investments in the grid

In order to increase grid security and security of supply in Switzerland in the long term, Swissgrid invests between CHF 200 million to CHF 290 million in the renovation and expansion of the transmission system each year. Swissgrid also ensures ongoing maintenance of the existing infrastructure. In addition to inspection and maintenance work, this also includes the replacement of conductors, the revision of circuit breakers, corrosion protection for supporting structures, deforestation or avalanche protection, as well as the repair of installations after a damaging event. Swissgrid invests a total of around CHF 50 million a year for these purposes.



Grid infrastructure

Commissioning of the Bassecourt – Mühleberg line

The voltage increase on the existing line between Bassecourt and Mühleberg from the previous level of 220 kV to 380 kV is an important milestone in preparing the Strategic Grid 2025. This work is essential for ensuring security of supply in Central Switzerland – especially in the

winter months. The line was successfully put back into operation at the end of November 2023.



Grid infrastructure

Greater security of supply for the left bank of Lake Zurich and the city of Zurich

Swissgrid is expanding the 150 kV line between Samstagern, Thalwil, Waldegg (Zurich) and Obfelden to 220 kV in stages. This will increase the transport capacity as well as the security of supply for the city and the entire Zurich region. Construction work progressed as planned in 2023 on the section between Schweikrüti (Thalwil) and Kilchberg. A section of the line in Gattikon (Thalwil) was successfully put into operation at the end of October 2023, initially still at a voltage of 150 kV. The current line in this section, which partly runs through local recreation and residential areas, will be dismantled by the end of 2024.



Grid infrastructure

Progress on the grid project between Mörel and Ulrichen

Swissgrid is modernising the extra-high-voltage grid in the Valais. A new 380-kV extra-high-voltage line is being built along a distance of around 30 kilometres between Mörel-Filet and Ulrichen. In the year under review, the remaining six of a total of 27 electricity pylons were erected on the section between Mörel-Filet and Ernen and the conductors were installed. The commissioning of the line section between Mörel-Filet and Ernen will be possible in 2025 at the earliest, as soon as Valgrid's new 65 kV substation in Ernen is ready for operation. The 237 pylons on Swissgrid's current 220 kV line and the 65 kV line will then be dismantled, which will provide noticeable relief for the residential area in the Bister, Grenchols and Ernen region.



Grid infrastructure

Dismantling work in the Rhone plain

The dismantling of the old 220 kV line between Chamoson and Chippis began in the fourth quarter of 2023 and will continue until spring 2024. Swissgrid will remove three further lines at lower voltage levels by 2027 as a compensation measure for the new 380 kV line that has already been put into operation. This means that 90 kilometres of overhead lines and 322 pylons will disappear completely from the Rhone plain. The new 380 kV Chamoson – Chippis overhead line will be used to transport energy from large hydropower plants and to connect the Valais to the Swiss and European extra-high-voltage grid.

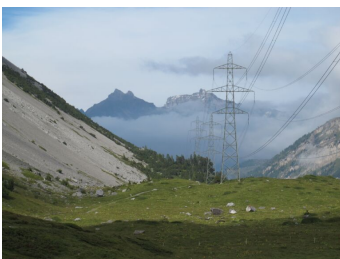


Grid infrastructure

Swiss context

Grid connection for Birr reserve power plant

In 2022, the federal government decided on various measures to counteract an electricity shortage and to ensure security of supply in the winter. These measures included the construction of the Birr reserve power plant with total power of almost 250 MW. Swissgrid created a new grid connection so that the energy from the mobile gas turbines could be fed into the transmission system via the 220 kV substation in Birr. The grid connection has been ready since 24 February 2023 after a record construction time of less than six months. The reserve power plant would therefore have been operational in a potentially sensitive phase at the end of the winter of 2022/2023.



Grid infrastructure

Swiss context

Temporary voltage increases

The Federal Council decided to temporarily increase the voltage of the Bickigen – Chippis (Gemmi line) and Bassecourt – Mühleberg transmission lines in order to strengthen security of supply in extraordinary situations in the short term. Swissgrid had prepared itself technically and operationally to operate both lines at 380 kV on a provisional basis. In January and February 2023, successful test operation at a voltage of 380 kV took place on both lines. This measure would have allowed additional electrical energy to be fed into the transmission system in the event of a critical supply situation.



Grid infrastructure

Grid projects in the approval process

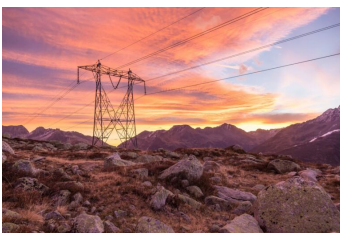
A large number of grid projects are in the approval process: in the spring of 2023, Swissgrid and SBB submitted a planning application for the replacement of the high-voltage submarine cables between Brusino and Morcote. Work is scheduled to begin in 2024. On 25 February 2023, the Federal Council approved extensive underground cabling over a length of around 23 kilometres for the Innertkirchen – Ulrichen line in its sectoral plan for transmission lines (SÜL). The underground cabling will be installed either in existing and newly constructed tunnels (main variant) or in the multifunctional Grimsel railway tunnel. In September 2023, the Swiss Federal Office of Energy and Swissgrid jointly presented the planning corridor for the «All'Acqua – Maggiatal – Magadino» grid project to the public. The approval processes for the Chippis – Mörel line and for the voltage increase on the Bickigen – Chippis line (from 220 to 380 kV) are still pending at federal level.



Grid infrastructure

Groundbreaking ceremony at the Bonaduz substation

The groundbreaking ceremony on 16 June 2023 marked the start of work to modernise the Bonaduz substation and install a new transformer. This new transformer will increase the operational flexibility of the Bonaduz substation and improve security of supply in the canton of the Grisons and the rest of Switzerland. The transformer will connect the 380 kV grid with the 220 kV grid. Work is expected to last until the end of 2025.



Grid infrastructure

Swissgrid of the future

A grid for a secure energy future

The renovation of the energy system is placing new demands on the grid. In the reporting year, Swissgrid pressed ahead with the planning of the Strategic Grid 2040. The aim is to detect and eliminate congestion in the transmission system at an early stage. The necessary regional target values for production and consumption were determined in consultation with electricity producers and grid operators connected to the transmission system. Based on this data, Swissgrid uses market and grid simulations to determine the optimisation and reinforcement requirements for the Swiss transmission grid for the target year of 2040. In April 2024, Swissgrid is expected to submit the results of this periodic multi-year planning to the Federal Electricity Commission, which will review their adequacy and appropriateness. Swissgrid will then publish the Strategic Grid 2040 in 2025.



Security

Creating a good safety culture

A good safety culture requires a willingness to address safety issues in depth. That is why Swissgrid organised another edition of the «Safety & Security Days» in the current reporting year, during which employees received practical training and were given the opportunity to reflect on safety-conscious behaviour.



Security

Emergency communication network for crisis situations

The emergency communication network (NKN) went live on schedule on 1 August 2023. This represents a significant milestone in business continuity management at Swissgrid. The NKN covers the whole of Switzerland and connects important Swissgrid locations. The main role of the NKN is to ensure that affected regions can be reached in the event of regional outages and interruptions to Swissgrid's main communication network so that important processes can be maintained.



Grid operation

Swissgrid of the future

Closer coordination between grid operators

As a result of the energy transition, the number of flexible energy resources in the grid is growing. Swissgrid and ewz carried out a pilot project in collaboration with Equigy to try and make better use of these flexible resources for stable grid operation and to increase coordination efficiency. The pilot project was successfully completed in December 2022. The next phase, which will run until the end of 2024, will involve collaboration with other industry partners.

Further projects are planned or have already been launched: the «OPTESO» project aims to develop a decentralised mechanism to allow grid operators to jointly carry out grid security calculations. In the reporting year, Swissgrid identified potential use cases during the detailed concept phase and developed a prototype to demonstrate the mechanism. In addition, the project team made progress on the prototype as part of the pilot realisation phase and began using real data from the project partners.



Grid infrastructure

Swissgrid of the future

Better monitoring of the condition of pylons

In 2021, Swissgrid launched «Pylonian», the Internet of Things innovation project. This involved placing sensors on pylons to measure parameters such as pylon vibrations and inclination, temperature and solar radiation. At the end of the reporting year, Swissgrid collected real-time data from selected test pylons over a period of one and a half years and linked data anomalies with real events. The introduction of «Pylonian 2.0» increases the piloted number of sensor types to cover additional application scenarios. The integration of new telemetry data makes it possible to monitor the condition of the pylons more effectively and to optimise parameters such as forecasting of the decentralised feed-in. The newly launched «Pylonian 2.0». project increased the piloted number of sensor types to cover additional application scenarios.



Grid operation

Swissgrid of the future

Photovoltaic forecasts to improve system operation

The «Energy Perspectives 2050+» envisage a significant expansion of photovoltaics (PV) in Switzerland. This expected growth will lead to considerable challenges for system operation. Swissgrid launched a project designed to significantly improve the internal data basis for PV feed-in.

The idea is to produce forecasts with a high regional and temporal resolution, based on publicly available data on the PV systems installed in Switzerland. The forecasts will be made available internally via the Swissgrid data platform. This data can be used for various purposes, for example to assess the effects of PV feed-in on load flows and on balancing more effectively. This will create direct added value for system operation. The first prototype was realised in the spring of 2023. The foundations for the productive environment on the Swissgrid data platform were laid in the autumn.



Swissgrid of the future

Sharing data – creating added value

With its Strategy 2027, Swissgrid is driving forward the digitalisation and automation of processes as well as the scalable, cross-domain utilisation of data. It is also laying the groundwork for the use of new technologies, accelerating the implementation times of data-related applications, facilitating collaboration with partners and establishing an efficient operating model for data-related applications.



Swissgrid of the future
Company

Anchoring innovation within the company at every level

The rapidly increasing complexity and volatility of the electricity system is resulting in more and more time-critical system interventions. To successfully overcome these challenges in the future, innovative approaches are needed at a technical and organisational level. In response to this, Swissgrid introduced a focus on «Innovation and Digitalisation» in its Strategy 2027.

Swissgrid drove forward various innovation projects with partners in the reporting year.

The company also introduced measures to strengthen its culture of innovation. Activities such as the «Inspiration Talks» series of events, the «Ideas Forum» and the «Innovation Days» provided new impetus and encouraged interaction. This momentum should allow employees to continue to take the initiative and to develop projects or new solutions from ideas in the future.



Swissgrid of the future
Company

Fit for the future thanks to skills management

According to the World Economic Forum’s «Future of Jobs Report 2023», 44% of employees will need additional or different skills in the next five years, and six out of ten employees will have development and learning needs as a result. Swissgrid is responding to this change with skills management tailored to the specific challenges of Strategy 2027.



Swissgrid of the future
Company

Swissgrid is safeguarding critical knowledge

Swissgrid carries out annual succession planning for management functions and key personnel, and assesses the potential of all employees. As part of this assessment, a systematic survey of all employees with critical and business-relevant knowledge was conducted for the first time in 2023. Among other things, the focus was on critical knowledge for system operation, on technically critical knowledge that is not available or only available to a limited extent to other people, and on knowledge that would take a considerable amount of time to pass on. Swissgrid will agree on individual measures with the holders of this critical knowledge to ensure the transfer of know-how. The aim is to keep this expertise available within the company, even in the absence of the

employees concerned, in order to avoid gaps in knowledge.



Market developments

Expansion of balance group monitoring

In order for Swissgrid to be able to guarantee grid stability at all times, it is dependent on receiving data that is as precise as possible from the balance groups, of which there are over 110, at an early stage. This is because the balance groups have a contractual obligation towards Swissgrid to ensure the best possible balance between the energy supplied and the energy taken from the grid. Swissgrid has therefore expanded its balance group monitoring: since mid-February 2023, balance groups with metering points have been continuously providing production and pumping forecasts in addition to consumption forecasts. This data enables Swissgrid to improve its monitoring of the balance between the energy supplied and the energy consumed. The main aim of extended monitoring is to jointly recognise a massive imbalance at an early stage and to notify the balance groups so that the volume of control energy to be used can be reduced.



Grid operation

Swiss context

A secure supply of electricity for the winter of 2023/2024

The initial conditions for the 2023/2024 winter supply were better than those of the previous winter: reservoir levels were on a par with previous years, gas storage facilities in Europe were almost full, and France had normal nuclear power plant availability. This is expected to remain the case in the future. Swissgrid once again did everything in its power to fulfil the new roles assigned to it by the Federal Council to increase Switzerland's winter supply. The company was responsible for the auction of the hydropower reserve, took structural measures to ensure that the voltage on the line between Bickigen and Chippis could have been temporarily increased if necessary, connected the reserve power plant in Birr (AG) to the transmission system, and took over the operational handling of the potential deployment of emergency power groups as an additional reserve. As in previous years, Swissgrid procured a proportion of the ancillary services required for spring 2024 by organising an early tender in autumn 2023. In addition, a yearly auction for cross-border capacities between France and Switzerland for 2024 was held for the first time in September 2023 to procure control power.



Grid operation

Market developments

Compensation systems for the extra-high-voltage grid

Swissgrid is responsible for voltage maintenance in the extra-high-voltage grid. Reactive power resources are contracted for this purpose, but they are still not made available in sufficient quantities at all times. This is due to Switzerland's own greater requirements for reactive power as a result of grid expansion and the increasing amount of underground cabling. For this reason, the Board of Directors resolved on 24 January 2023 that Swissgrid should build and operate its own reactive power compensation systems. In 2023, Swissgrid launched corresponding preliminary studies for specific locations and began a project to ensure the targeted use of systems. These systems and their use will promote safe, powerful and efficient grid operation.



Grid operation

Swiss context

Hydropower reserve for the winter of 2023/2024

Swissgrid is responsible for the procurement auctions and the operational management of the hydropower reserve for the winter. The hydropower reserve is used to reserve energy in reservoirs that can then be requested in the event of a shortage. In the reporting year, Swissgrid completed the procurement for the 2023/2024 hydropower reserve with auctions in three tranches on behalf of the Federal Electricity Commission. The costs for the total energy volume of 400 GWh amount to EUR 55.5 million (previous year: EUR 296 million).



Swiss context

Consolidation legislation – a legal basis for the power reserve

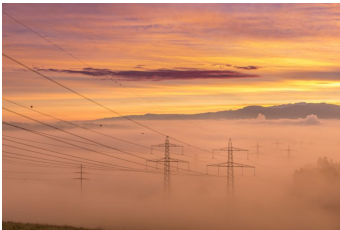
On 29 September 2023, the Federal Assembly adopted the «Federal Act on a Secure Electricity Supply from Renewable Energy Sources» (known as the «consolidation legislation») in the final vote. Swissgrid raised its concerns throughout the process. Among other things, the consolidation legislation establishes the legal basis for the power reserve and for the Winter Reserve Ordinance that has been in place since 1 October 2022. A referendum was called opposing the legislation, and the electorate will vote on the issue on 9 June 2024.



Swiss context

Acceleration of authorisation procedures

The grid plays a decisive role in the success of the energy transition. There is an urgent need for action to speed up grid-related authorisation procedures in order to guarantee security of supply in Switzerland in the long term. The Federal Council wants to simplify the procedures for large installations for the generation of electricity or heat from renewable energies. Among other things, it envisages the designation of suitable areas in the structure plan for wind, water and PV systems, a concentrated planning approval procedure for wind and PV systems, and regulatory deadlines for the competent cantonal authorities and the courts. To speed up grid projects, the sectoral planning procedure for transmission systems is to be shortened. In future, the Federal Council will simply determine the planning corridor, including the technology (overhead line/cablings). This is an important step towards speeding up procedures, but it is not enough on its own. Further measures are urgently needed with regard to the grid.



Grid operation

Swiss context

Simulations for security of supply

The Federal Electricity Commission has updated its analyses on security of supply in the medium and long term. These analyses allow conclusions to be drawn about the reserve capacity required to ensure a secure supply of electricity in 2025. The Commission tasked Swissgrid with conducting a study on short-term electricity adequacy for the year 2025. To this end, Swissgrid carried out a total of 1,575 simulations with various meteorological conditions and unforeseeable power plant outages, and calculated the probability and magnitude of any potential congestion. Based on the results, no supply problems are indicated in any of the simulations in the updated reference scenario for 2025.



Swiss context

European context

Progress towards an electricity agreement

The Federal Council adopted benchmarks for a negotiating mandate with the EU in June 2023, and submitted a draft for consultation in December 2023. Swissgrid welcomes this negotiating mandate, as the conclusion of an electricity agreement with the EU is of central importance for secure grid operation and security of supply in Switzerland.



Market developments

European context

Participation in European control energy platforms at risk

Due to the lack of an electricity agreement with the EU, Swissgrid's access to the European control energy platforms TERRE, MARI and PICASSO, and to International Grid Control Coordination (IGCC), is jeopardised or blocked. Swissgrid is committed to participating in these platforms in order to ensure the secure and efficient operation of the Swiss transmission grid in the long term. To this end, the company ensures technical compatibility with European processes and products, and put the Capacity Management Module into operation in October 2023. This will optimise the allocation of cross-border capacity for the international exchange of control energy via the European platforms.

Swissgrid is also taking legal action against decisions by the European Commission and the Agency for the Cooperation of Energy Regulators (ACER). These pending proceedings will allow Swissgrid to emphasise its legal opinion that it is entitled to participate in the control energy platforms.



Market developments

European context

Interim solutions for cross-border capacities

In order for electricity to be traded internationally, corresponding cross-border capacities must be available. The transmission system operators from the EU member states coordinate their free cross-border capacities within capacity calculation regions. Due to the lack of an electricity agreement with the EU, Switzerland is not part of the neighbouring «CORE» (northern borders) and «Italy North» (southern borders) capacity calculation regions. Thanks to contracts under private law with the transmission system operators, Swissgrid has nevertheless been included in the capacity calculation for the «Italy North» region as a «technical counterparty» since the end of 2021. However, the contract with «Italy North» must be renewed annually and requires the approval of the regulatory authorities in all the countries concerned.

Swissgrid is also endeavouring to conclude a contract with the transmission system operators in the «CORE» region. As flow-based market coupling has already been implemented in the «CORE» region, a new concept had to be developed to take Switzerland into account for capacity calculation in this region. Although this concept does not allow Switzerland to participate in market coupling, the new concept can ensure that the capacities allocated at the country's northern borders are utilised as fully as possible without Swiss grid elements being overloaded by market coupling in «CORE». The integration concept was submitted to the regulatory authorities of the «CORE» region in autumn

2023. The concept will be implemented following successful validation.



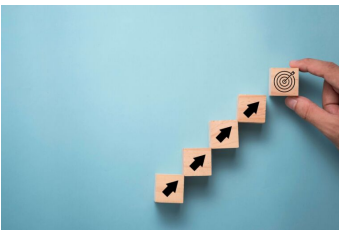
Grid operation

European context

Paradigm shift in grid security processes

Regional Operational Security Coordination (ROSC) is a requirement of the European System Operation Guideline (SO GL). Under the «Synchronous Area Framework Agreement» (SAFA), Swissgrid has contractually agreed to implement this requirement in the same way as the European transmission system operators. After completing the two-year concept phase, Swissgrid began implementing the new processes in September 2023. The introduction of ROSC has resulted in a paradigm shift in grid operations. Whereas in the past, the transmission system operators themselves identified measures to ensure operational security as part of their congestion management, such measures will now be determined centrally. The aim is to prevent contradictory grid relief measures being taken in different countries and to optimise costs.

Due to the lack of an electricity agreement, Switzerland is increasingly excluded from processes on the European internal electricity market. For this reason, Swissgrid's participation in market-relevant processes such as capacity calculation or the European control energy platforms is problematic and disputed in court. Thanks to contracts under private law with neighbouring transmission system operators, Swissgrid is involved in processes to ensure operational security, which mitigates system risks to a certain extent in the short term.



Swissgrid of the future

Company

New enterprise resource planning system for more efficient processes

On 3 January 2023, a new enterprise resource planning system that provides intelligent, integrated end-to-end support for Swissgrid's business processes went live on schedule. This made it possible to fully digitalise various processes, making Swissgrid's business activities more efficient and effective overall. The new solution also offers the potential to integrate additional processes and to achieve optimisations, enabling Swissgrid to reach an important milestone on the path to a digital, intelligent workplace.



Company

Sustainability report creates transparency

In its Strategy 2027, Swissgrid has decided to establish sustainability as a part of its strategy and to strengthen the principle of sustainability throughout the company. As an important part of this, the company published its sustainability commitment for the 2022 financial year in the form of a report for the first time on 8 August 2023. Swissgrid thereby creates comprehensive transparency about its activities and key figures in the area of sustainability, with reference to the standards of the Global Reporting Initiative (GRI). The focus is on the four fields of action Purpose, People, Partnership and Planet. The report is based on the United Nations Sustainable Development Goals (SDGs). Swissgrid is now presenting an integrated Annual and Sustainability Report for the 2023 financial year for the first time. This is also based on the requirements of the Swiss Code of Obligations with regard to non-financial reporting.

Swissgrid organised «The Climate Fresk» workshops to firmly establish sustainability in the minds of employees. The aim of these workshops was to raise awareness of climate change and to provide information on the relevant scientific principles.



Company

Change on the Executive Board

On 1 July 2023, the Board of Directors appointed Nell Reimann (56) as Head of Business Unit Market and a member of the Executive Board. She succeeds Maurice Dierick, who decided to leave Swissgrid with effect from 30 June 2023. Nell Reimann has been working for Swissgrid since September 2016. As Head of System Development, she was initially responsible for the strategic and operational management of the department. In this role, she harmonised and optimised interfaces and processes at the control centres in Aarau and Prilly. Since 2019, Nell Reimann has been Head of System Operations for Aarau and Prilly.



Company

Dialogue with the population, industry stakeholders and politicians

Swissgrid provides transparent and continuous information about its activities and construction plans. In 2023, Swissgrid once again held information events on planned construction projects and strengthened dialogue with the public by attending various trade fairs. In April 2023, the Swiss Museum of Transport in Lucerne opened its new permanent exhibition «Experience Energy!» with the participation of Swissgrid. Swissgrid also continued exchanging information with industry players and politicians. Events included an industry webinar and a grid utilisation

conference. In addition, another session event was organised with partners from the electricity sector in Berne in March 2023.



Company

Swissgrid issued another corporate bond

On 5 June 2023, Swissgrid successfully issued another bond on the capital market with a volume of CHF 200 million, a coupon of 1.90% and a term of three years. The proceeds of this bond will be used to repay current financial liabilities and to finance ongoing investments, procurement costs and the costs of the power reserve for the winter.

Annual Report

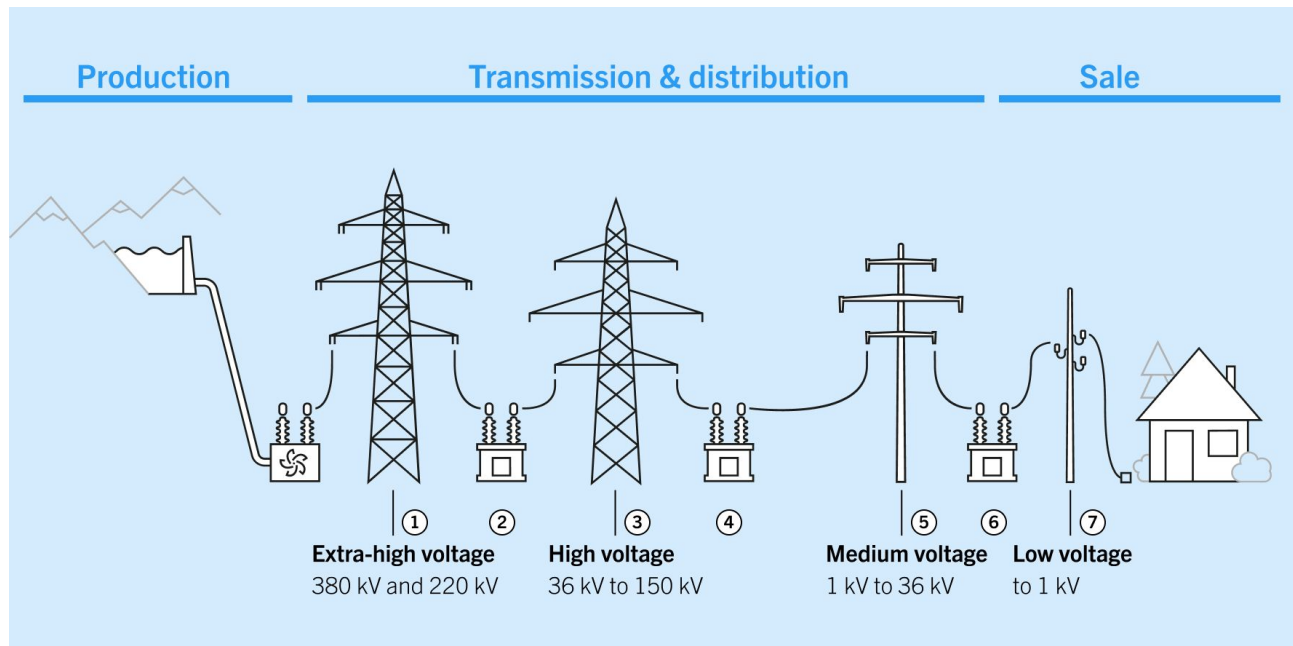
Company

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Swissgrid is the national grid company and owner of the Swiss extra-high-voltage grid. Its mandate is governed by the Electricity Supply Act (StromVG, SR 734.7) and the Electricity Supply Ordinance (StromVV, 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.

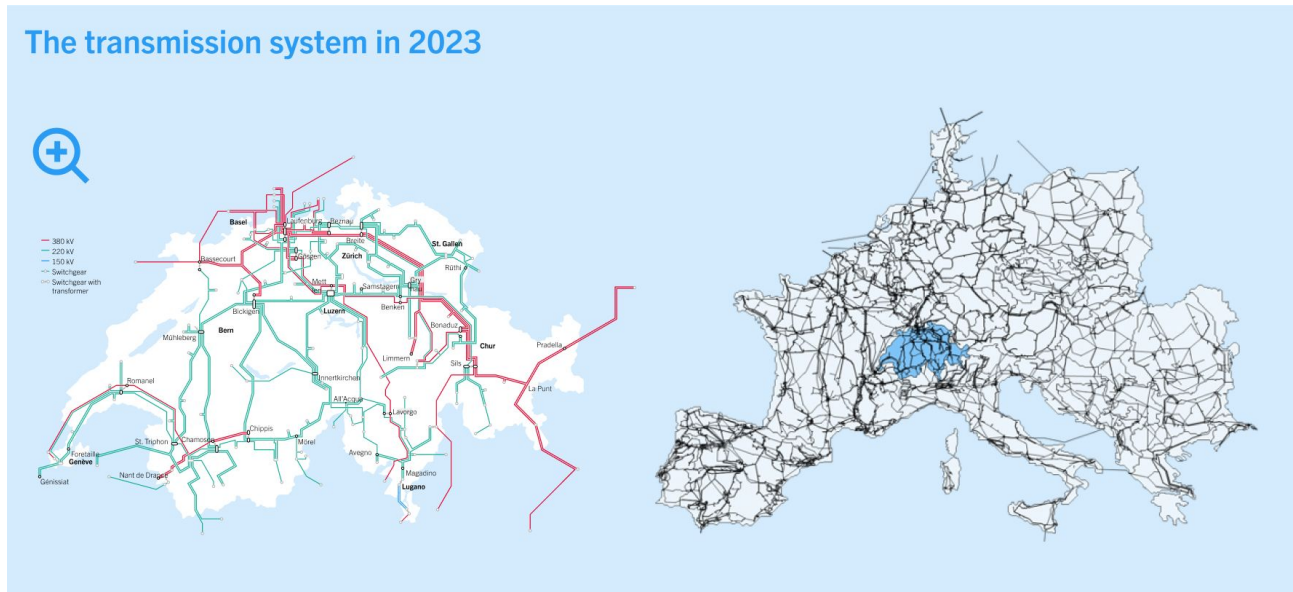
Value chain of the Swiss electricity industry

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.

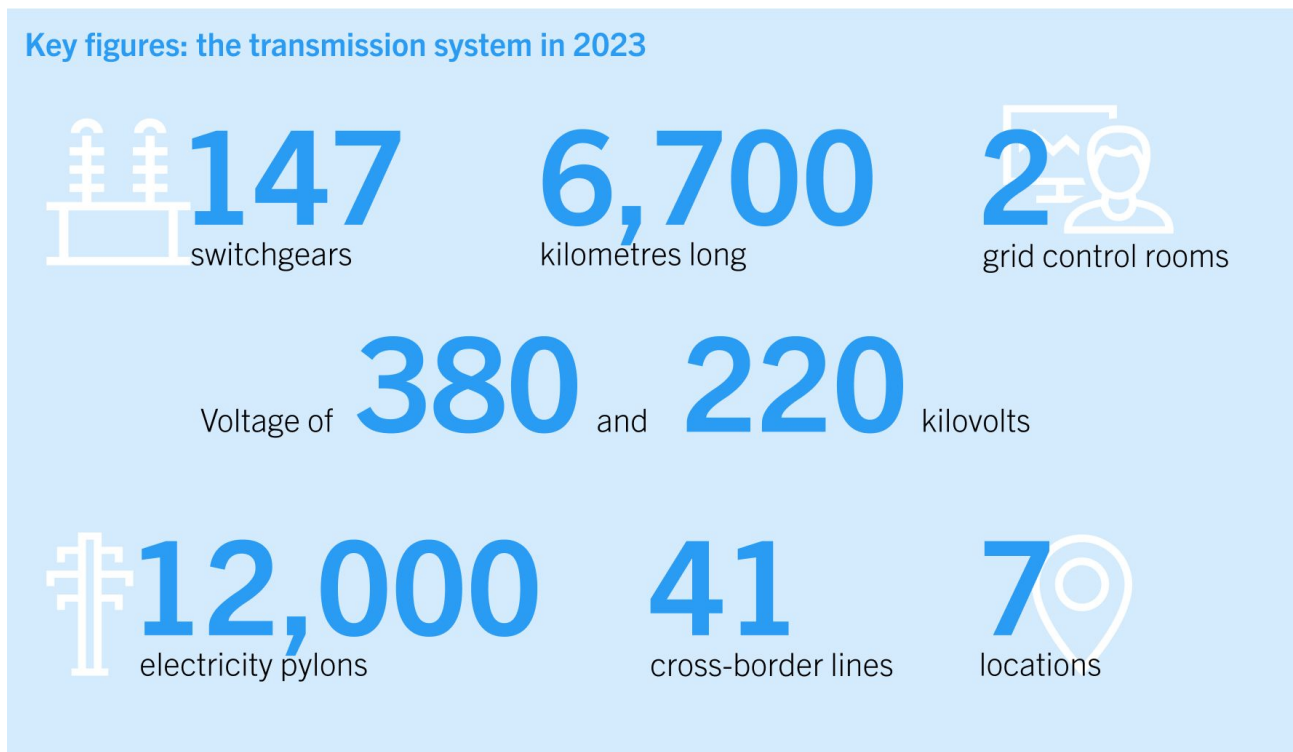


Swissgrid is responsible for grid level 1 and therefore for the secure transmission of large volumes of electrical energy over long distances. The Swiss transmission grid consists of 380 and 220 kilovolt lines extending over a length of 6,700 kilometres and supported by more than 12,000 electricity pylons. 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.



In addition to the domestic transmission of electricity, the Swiss transmission grid also enables the import, export and transit of energy. With 41 cross-border lines, it is closely integrated into the European interconnected grid. The Swiss transmission grid therefore 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.



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, minimises congestion and prevents overloads in the grid.

In addition, 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 system security, 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.

GRI 2-1

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 (StromVG) 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. Today, Swissgrid employs over 800 people at its headquarters in Aarau, at its site in Prilly, and at its bases in Castione, Landquart, Laufenburg, Ostermundigen and Uznach.

Business activities in a strictly regulated environment

Swissgrid operates in a strictly regulated environment (see chapter «Regulatory business model»). 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 StromVG and StromVV. 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 Federal Electricity Commission (EiCom).

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 chapter «Corporate structure and shareholders»).

Annual Report

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.

GRI 203-1, 203-2

Relevant contribution to the transformation of the energy system

The energy industry is facing major changes: decisions at the global, European and Swiss levels are making provision for a change in energy production, away from CO₂-intensive towards CO₂-neutral energy sources. With its long-term climate strategy, Switzerland has set itself the goal of achieving net-zero greenhouse gas emissions by 2050. At the same time, following the adoption of the Energy Strategy 2050 by the Swiss electorate, the decision has been made to gradually phase out nuclear energy and promote renewable energies. The power plant park in Switzerland will therefore undergo significant changes. In order to achieve the climate targets, electrification of mobility, heating and industry is also necessary, leading to an increase in the consumption of electrical energy.

This comprehensive transformation of the energy system is already a mammoth task in itself. In addition, Switzerland's security of supply – particularly in the winter months – must be guaranteed in the long term. This challenge, which has long been discussed in the industry, has moved to the top of the political agenda in recent years, resulting in changes to the legal framework.

A challenge and an opportunity

Transmission system operators, as the link between production and consumption, are significantly affected by these changes. The rise in decentralised and renewable electricity generation, such as wind and photovoltaics, and the elimination of power plants with guaranteed power, are increasing the volatility and complexity of the energy system, and hence the demands placed on grid operators. However, these changes are both a challenge and an opportunity, giving transmission system operators the chance to make an important contribution to the transformation of the energy system.

It is crucial for the grid infrastructure to keep pace with the ambitions of the energy transition. Swissgrid aims to use, manage, modernise and expand its transmission system more efficiently so that the secure transport of electrical energy can continue to be guaranteed in the future. Digitalisation is one of the aspects the company is relying on in order to increase the efficiency of grid operations and of the planning, expansion and maintenance of the grid infrastructure. Swissgrid is tackling the higher volatility of renewable electricity generation by improving its

forecasting capabilities, for example. On the market side, new market platforms and products are being developed so that the growing potential of decentralised flexibility, such as batteries and heat pumping technology, can be used in a way that benefits the system.

Swissgrid is committed to a climate-neutral society by 2050, a successful energy transition and the continuous development of the grid – as the backbone of a more sustainable energy system. Swissgrid has reaffirmed its commitment with its Strategy 2027 (see chapter «2027 Strategy») and the decision to anchor sustainability even more firmly within the company. The company is also part of the initiative to support the energy system to reach carbon neutrality.

Swissgrid sets various priorities in order to fulfil its legal mandate and to assume its important contribution to ensuring a secure supply of electricity. These priorities are also part of the Strategy 2027 and correspond to sustainability topics that have been integrated into Swissgrid's materiality matrix.

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. In Switzerland, other sectors such as transport, finance, health and IT also count as critical infrastructures. However, they are all dependent on the energy sector, and therefore rely on a secure supply of electricity, which the transmission system plays an important role in providing. The Federal Office for Civil Protection 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 their grids, the transmission system operators follow 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 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 cross-border 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 European transmission system operators cooperate closely in areas such as grid operations, control power markets and congestion management. To ensure that all grid operators adhere to the same rules in the interconnected grid, the EU regulatory requirements for system operation are implemented. 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 chapter «Stakeholder engagement»).

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 those 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 StromVG and Art. 5 StromVV, ENTSO-E requirements in accordance with the Synchronous Area Framework Agreement, Transmission Code and 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 the 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. 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.

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 chapter «2027 Strategy»). The «Security of supply» priority focuses on 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 federal government's «Energy Strategy 2050». To increase the controllability of the grid, Swissgrid is taking structural measures, changing operational processes and using digital solutions in system operation. These approaches are also key to promoting the integration of renewable energy sources into the energy system.

	2023	2022
Number of supply failures in the meshed grid	1	0
Average duration of interruption	40 minutes	0
Energy not supplied in the meshed grid	113 MWh	0

in GWh	2023	2022
Transported energy	74,134	74,414
Imported energy	27,017	32,695
Exported energy	32,888	28,762
Transit energy	21,591	23,134
Active power losses absolute	919	987
Positive control energy	1,033	1,118
Negative control energy	694	754

Active power losses of transported energy	1.24%	1.33%
Ratio of «energy not supplied» to transported energy	0.0015	0

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. To support the

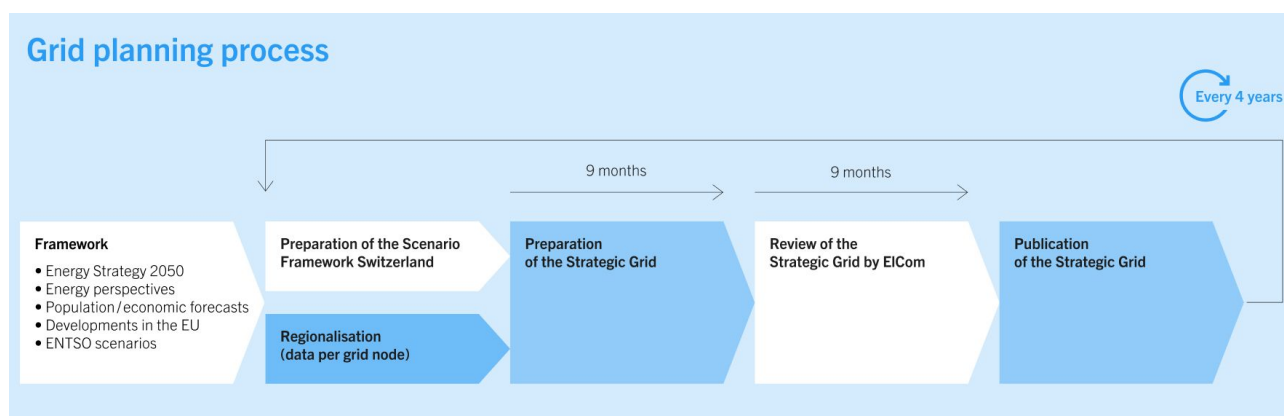
transformation of the energy system, Swissgrid invests over CHF 200 million every year.

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 (EiCom) for review. Swissgrid will then publish the new strategic grid. 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 renewable energy installations. 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 (see chapter «2027 Strategy»), 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.

GRI 203-1, 203-2

Innovation and digitalisation

Swissgrid is driving forward digitalisation within the company in order to tackle the challenges associated with the transformation of the energy system. Digitalisation can also be seen as a catalyst for the energy transition because it leads to increased efficiency in all areas of responsibility and opens up new opportunities.

More efficiency in grid planning

Use of 3D visualisations

Swissgrid has developed a 3D Decision Support System in collaboration with ETH Zurich. This system analyses and maps all the factors that are relevant to the line route, such as environmental protection, regional planning, economic efficiency and technology. The resulting 3D models assist decision-makers, lead to greater transparency, and simplify communication with residents and stakeholders.

Greater efficiency in grid management and expansion

A digital twin of the grid

A completely digitalised grid image – a digital twin of the physical grid – provides the basis for establishing data-driven plant management. This allows the status of plants to be monitored more precisely over the entire life cycle and enables the grid to be operated in a more efficient manner.

Use of drones and artificial intelligence

In 2022, Swissgrid carried out a pilot project to test the use of drones. They flew over around 1,000 pylons to assess their condition and identify any damage. These drones can deliver high-resolution images thanks to modern sensors and cameras. Using artificial intelligence algorithms, the images were then evaluated according to the damage catalogue defined by Swissgrid. Following the successful completion of the pilot project, Swissgrid commissioned service providers to fly over all 12,000 pylons in the transmission system by 2025. Swissgrid is also considering the use of drones for other scopes of application.

Building Information Modelling

In order to expand the transmission system more efficiently, Swissgrid uses digital working methods such as Building Information Modelling (BIM). This allows interdisciplinary collaboration over the life cycle phase of systems, including model-based planning and the realisation of grid infrastructure. The first pilot projects are currently underway, such as the replacement construction at the Botterens substation.

Internet-of-Things sensors on pylons

In 2021, Swissgrid launched the «Pylonian» innovation project, which involved placing Internet-of-Things sensors on pylons to measure variables such as pylon vibrations, pylon inclination, temperature and solar radiation. Swissgrid's aim is to monitor the condition of the pylons over their entire life cycle in order to carry out maintenance work in a more targeted manner.

More efficiency in grid operations

Forecast of production from photovoltaics

Swissgrid's «PV Forecasts» project aims to significantly improve Swissgrid's internal data basis for feeding photovoltaic energy into the grid. This should make forecasts with a high regional and temporal resolution possible in the future. This aids system operation with regard to grid monitoring and is intended to assist the industry with the secure integration of large volumes of photovoltaic energy.

Outage planning

The aim of Swissgrid's «Compose» research and development project is to automate and optimise the outage planning of grid elements with the help of mathematical optimisation and algorithms. This facilitates the highly complex planning of grid operations.

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 ewz carried out a pilot project to distribute the use of decentralised energy resources in a coordinated manner in order to provide ancillary services. Phase B, which was launched in 2023, aims to win over additional industry partners for the project.

Swissgrid is also seeking closer cooperation with distribution system operators in the future with the «OPTESO» project, which aims to develop a decentralised mechanism for carrying out joint grid security calculations.

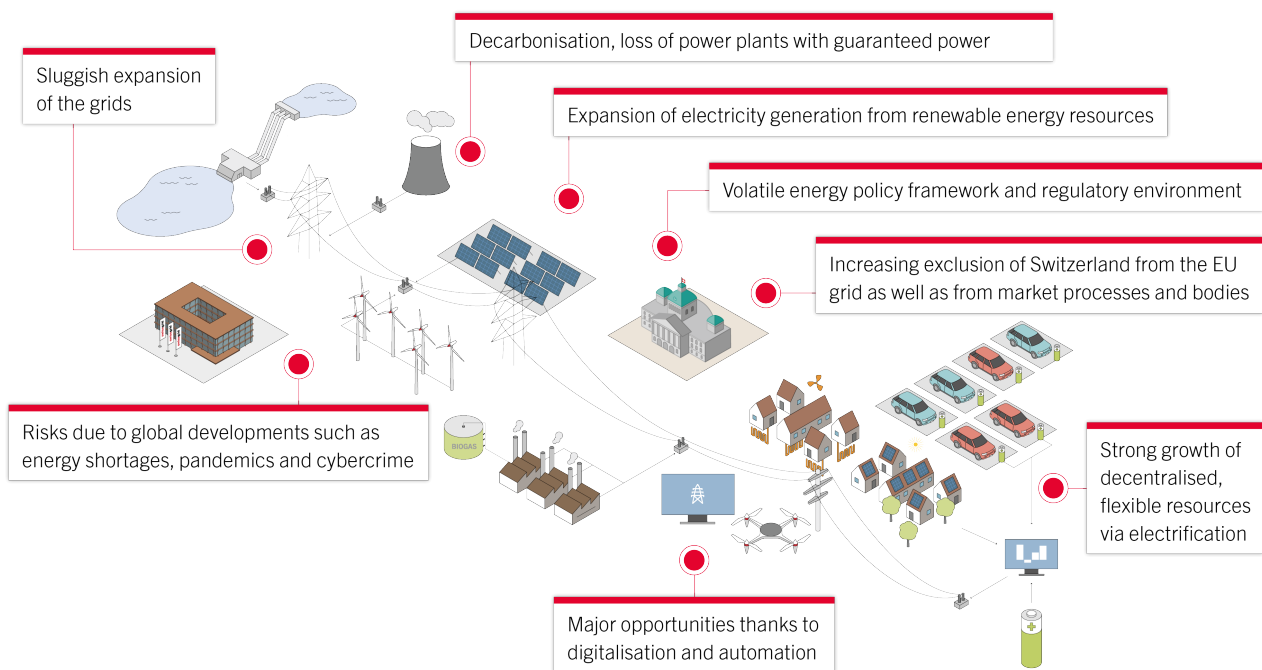
Innovation and digitalisation as a new priority in Strategy 2027

The new «Innovation and Digitalisation» priority was included in Strategy 2027 (see chapter «2027 Strategy») in order to develop Swissgrid into an innovative, highly digitalised company. 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 events such as Innovation Days, during which employees were able to explore exciting topics for the future and receive incentives, and where ideas and interaction were promoted (see chapter «Attracting, retaining and developing skilled workers»).

Annual Report

2027 Strategy

In the past reporting year, 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»

The new strategy 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 already 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 as well as 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 (StromVG) and the Electricity Supply Ordinance (StromVV). To strengthen the supply of electricity in Switzerland, the Winter Reserve Ordinance (WResV) was also enacted in February 2023. The Federal Electricity Commission ElCom oversees compliance with StromVG, StromVV and WResV.

It 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 the 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 also 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. ECom 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 StromVG and StromVV 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 WResV.

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 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.

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.

Volume- and tariff-related timing differences according to StromVG and StromVV are also subject to interest at the WACC rate and have an impact on capital costs. In contrast to IOA, volume- and tariff-related timing differences are subject to interest at $WACC_{t+2}$. Deficits increase capital costs, while surpluses reduce them. Volume- and tariff-related timing differences resulting from the implementation of the specified measures from WResV are not subject to interest.

Profit regulation

The legal framework in place for Swissgrid means that the EBI (earnings before interest) of the regulated business area is essentially a multiplication of the invested operating assets with the capital cost rate ($WACC_{t+0}$) and the interest applied to the volume- and tariff-related timing differences

($WACC_{t+2}$). 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 cost-plus regulation therefore leads to a return in the amount of the capital cost rates to be applied.

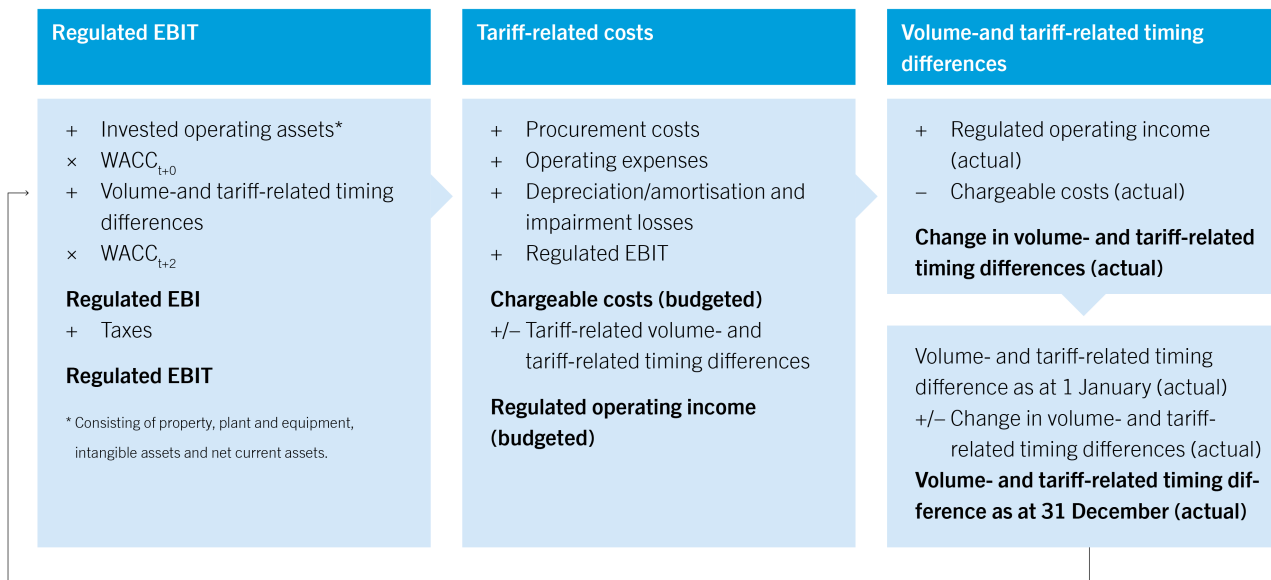
Imputed capital cost rate (WACC)

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 899.9 million, procurement costs are CHF 33.7 million higher than the previous year's value of CHF 866.2 million. This increase is primarily due to higher costs for reactive energy (CHF 6.6 million) and active power loss (CHF 9.9 million). The rise in the reactive energy segment is due to the higher pro rata voltage maintenance costs payable by this segment. The rise in the active power loss segment is due to higher prices for the procurement of the energy required to compensate for active power losses. In contrast, costs in the grid usage and general ancillary services segments remained at the previous year's level.

Operating expenses and depreciation/amortisation

Operating expenses rose by CHF 43.2 million year on year, from CHF 250.6 million to CHF 293.8 million. The increase is mainly due to the launch of several measures associated with the initial implementation of Strategy 2027, which resulted in higher costs in materials and third-party supplies and in personnel expenses year on year. The average number of full-time equivalents in 2023 amounts to 704.3 FTE (previous year: 630.9 FTE).

The scheduled depreciation/amortisation on property, plant and equipment and intangible assets amounted to CHF 146.1 million in the reporting year, down CHF 9.6 million on the previous year. The decrease is attributable to assets that had already been fully depreciated in the previous year and to auction income received for the maintenance and expansion of the transmission grid in 2022 and 2023.

Revenue and volume- and tariff-related timing differences

For the 2023 financial year, net turnover across all segments amounts to CHF 1,219.2 million. This represents an increase of CHF 232.1 million in relation to the previous year's figure of CHF 987.1 million. The rise is mainly attributable to the general ancillary services (CHF 191.2 million) and active power loss (CHF 71.7 million) segments. The increase in the general ancillary services segment is the result of higher tariff revenues, higher income from balance group/balancing energy and the higher auction income to cover the chargeable costs of the transmission system allocated to this segment. Net turnover in the active power loss segment increased due to higher tariff revenues and higher pro rata income from the compensation for international transit flows (ITC) and auctions. By contrast, income in the grid usage segment fell by CHF 46.1 million in relation to the previous year due to the lower income from ITC and auctions allocated to this segment. Revenue in the reactive energy segment remained at the previous year's level.

In the 2023 financial year, the operating business activities reported net deficits (cumulative deficits less cumulative surpluses) of CHF 216.4 million (previous year: CHF 370.7 million). In particular, the general ancillary services and active power loss segments posted deficits of CHF 170.9 million and CHF 77.2 million respectively due to the higher procurement costs. In addition, the costs resulting from intermediary transactions in the power reserve segment increased by CHF 403.2 million compared to the previous year, which explains the net deficit of CHF 1,367.3 million as at 31 December 2023 (previous year: CHF 747.7 million).

EBIT, financial income and net income

Earnings before interest and taxes (EBIT) from activities relating to the Federal Electricity Supply Act (StromVG) are equivalent to the interest applied to the assets required for grid operations using the

weighted average cost of capital rate for the current year under review (= $WACC_{t+0}$) and the interest applied to the volume- and tariff-related timing differences with $WACC_{t+2}$ plus income taxes. The weighted average cost of capital rates defined by the Federal Department of the Environment, Transport, Energy and Communications (DETEC) for the 2023 financial year are 3.83% for 2023 ($WACC_{t+0}$) and 3.98% for 2025 ($WACC_{t+2}$). In 2023, EBIT increased by CHF 13.0 million from the previous year's value of CHF 125.2 million to CHF 138.2 million. The increase in EBIT is due to the higher net deficits and the resulting higher interest expense. The portfolio of loans and bonds was expanded in the 2023 financial year to finance ongoing investments and procurement costs, leading to a rise in financial expenses of CHF 6.1 million to CHF 20.8 million (previous year: CHF 14.7 million). Net income in 2023 amounts to CHF 100.0 million, up from the previous year's figure of CHF 96.4 million.

Balance sheet and cash flow statement

Total assets (excluding fiduciary positions) increased by CHF 383.1 million compared to the previous year to CHF 4,219.6 million. 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 2023 amounts to 32.1%, as compared to 33.9% on 31 December 2022. The decrease in the equity ratio is due to the higher total assets resulting from the rise in volume- and tariff-related timing differences and the increase in financial liabilities to cover liquidity requirements.

In 2023, cash flow from operating activities amounts to CHF –505.4 million, an increase of CHF 356.1 million compared to the previous year's value (CHF –149,3 million). The cash outflow is due to the high procurement costs from operating activities and the costs for the power reserve.

With a gross investment volume of CHF 279.5 million, Swissgrid again realised more investments than in the previous year (CHF 257.4 million). In addition, the auction income received for the maintenance and expansion of the transmission grid decreased. Higher cash flow from investing activities of CHF –40.5 million was therefore generated year on year (previous year: CHF –3.9 million).

To cover liquidity requirements, in particular for financing the costs of the power reserve, financial liabilities rose by CHF 548.9 million compared to the previous year. After deduction of the dividend and interest paid, cash flow from financing activities stood at CHF 484.2 million in the reporting year (previous year: CHF 53.4 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 shareholdings. It is based on the established ISO 31000 and COSO ERM standards and 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 head of Enterprise Risk Management 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 in the form of a standardised report.

Risk situation

The risk of a power shortage in the winter of 2022/2023 rose due to the conflict in Ukraine and the associated loss of Russian gas imports to Europe, as well as the low availability of French nuclear power stations. The resulting massive distortions on the European energy markets increased the likelihood that the volume of energy on offer could be insufficient. In order to keep the grid stable and to supply it with the necessary volume of electrical energy at all times, Swissgrid implemented the following measures to strengthen security of supply, partly also on behalf of the federal government:

- Early procurement of sufficient control energy to keep the generation and consumption of energy in the grid constantly balanced in the short term.
- Temporary increases in the operating voltage on selected lines in the transmission system to increase transfer capacity in emergency situations.
- Creation of energy reserves outside the market (strategic hydropower reserve in the event of extraordinary shortage situations and an additional energy reserve using reserve power plants).
- Preparations to operate a national virtual reserve power plant from emergency power units.

These and other measures, and the calming of the European energy markets, defused the situation ahead of the winter of 2023/2024.

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 accentuate the risk again. This is especially true in the winter months, when Switzerland is dependent on electricity imports.

In addition to the risks associated with security of supply, the existing risks remain relevant for Swissgrid. The drivers for these risks are natural influences, the national and international political and regulatory environment as well as personnel and technical factors. 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. After breaking off negotiations on a framework agreement in 2021, the Federal Council is endeavouring to resume talks in 2024. At the time of reporting, the date of the conclusion of an electricity agreement and its content are not known. The Swiss electricity system therefore remains excluded from important processes affecting grid security in Europe. This leads to higher unscheduled flows of electricity through the Swiss grid and jeopardises both system stability and import capacity in the medium term. Swissgrid is developing technical solutions and negotiating private-law agreements with other transmission system operators to ensure the stability of the grid, but is reliant on political support in this respect. 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 not an adequate substitute for an electricity agreement in the long term.

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 therefore works continuously to optimise the Swiss market for ancillary services, and cooperates with 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.

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 permanently or the grid can no longer be controlled. Exercises with authorities and industry partners also took place again in 2023, such as practising OSTRAL procedures and carrying out regular grid restoration exercises with distribution system operators and foreign

transmission system operators.

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 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.

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 financial implementation of the measures envisaged by the federal government to ensure security of supply (power reserve) may mean that Swissgrid has to provide interim financing for these resources, which are to be funded via downstream tariff revenues. Swissgrid therefore took 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 are constantly reviewed, assigned individual limits and monitored. Counterparty risks are monitored on a regular basis.

Future prospects

Strategic outlook

The electricity industry is undergoing a process of radical change which is significantly modifying the

framework conditions for transmission system operators. The transformation of the energy system is leading to a loss of reliably predictable electricity generation in favour of an increase in decentralised and renewable electricity generation, which is resulting in new requirements for grid operations. Changes must also be made to the grid infrastructure on account of these changes in electricity generation so that the transmission system operators can continue to guarantee grid-related security of supply. At the same time, the EU and Switzerland are modifying the political and regulatory requirements for the electricity industry. The situation is made even more difficult for Swissgrid by the lack of an electricity agreement with the EU: Switzerland is increasingly excluded from European processes, committees and cooperation.

Swissgrid is addressing these and other challenges in its Strategy 2027, which was launched in the past reporting year. This marked the start of a new five-year strategy period for the company. Information on the strategic areas of action and the priorities of the new strategy can be found under Strategy 2027.

Outlook for 2024

Strategy 2027 lays the foundations for the 2024 corporate objectives. The plans for the Strategic Grid 2040 are to be finalised and submitted to the Federal Electricity Commission ElCom for review. Swissgrid prepares its grid planning on the basis of the Swiss Federal Office of Energy's scenario framework and the ENTSO scenarios set out in it. The Strategic Grid supports the implementation of the Energy Strategy 2050 and increases the controllability of the grid in the long term.

The degree of digitalisation is being increased with specific projects such as the introduction of business information modelling. The first corresponding pilot projects for substations and lines will be launched in 2024. Swissgrid is also taking practical measures to automate internal company processes, including the establishment of a centre of excellence for automation. Swissgrid's efficiency can be significantly increased by the use of consistent digitalisation and automation.

In 2024, the focus will also be on further investments in safety, training and employee development. Swissgrid intends to introduce a skills management system to define the future requirements for employees and to develop them where necessary. The aim of this programme is also to attract new employees to Swissgrid.

The further development of the sustainability strategy is another priority. Swissgrid will clarify its short, medium and long-term objectives for selected topics that the company has defined as material. The new measures and their effectiveness will be presented once again in the 2024 Annual Report and Sustainability Report.

Research and development

Swissgrid collaborates with national and international research institutions to ensure that it can continue performing its duties 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 200 million and CHF 290 million a year over the medium term.

Operating costs

In the past reporting year, Swissgrid launched its Strategy 2027 and entered a new five-year strategy period. Strategy 2027 will enable Swissgrid to address the challenges posed by the fundamental transformation of the energy system. Implementing these measures will lead to a rise in operating costs.

EBIT and net income

EBIT is directly dependent on the invested operating assets (IOA) and the weighted average capital cost rate (WACC) in line with the regulatory business model. The WACC communicated by the Federal Department of the Environment, Transport, Energy and Communications (DETEC) for 2024 is 4.13%. Consequently, an EBIT or net income in line with 2023 is expected for 2024.

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	2023	2022
Net turnover	4, 5	1,219.2	987.1
Other operating income	4, 6	19.9	19.7
Change in volume- and tariff-related timing differences	4, 15	216.4	370.7
Capitalised self-constructed assets		22.5	20.2
Total operating income		1,478.0	1,397.7
Procurement costs	4, 5	899.9	866.2
Gross profit		578.1	531.5
Cost of materials and third-party supplies	7	123.8	104.3
Personnel expenses	8	131.1	117.0
Other operating expenses	9	38.9	29.3
Earnings before interest, income taxes, depreciation and amortisation		284.3	280.9
Depreciation on property, plant and equipment	13	126.5	130.8
Amortisation on intangible assets	13	19.6	24.9
Earnings before interest and income taxes (EBIT) ¹	4	138.2	125.2
Financial income	10	2.0	1.7
Financial expenses	11	20.8	14.7
Earnings before income taxes		119.4	112.2
Income taxes	12	19.4	15.8
Net income		100.0	96.4

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

Earnings per share

CHF	2023	2022
Net income	100,021,265	96,410,768
Weighted average number of shares outstanding	334,495,151	334,495,151
Non-diluted earnings per share	0.30	0.29

CHF	2023	2022
Dilution from the conversion of the convertible loans	-0.01	-0.01
Diluted earnings per share	0.29	0.28

The dilution arises from the potential conversion of the convertible loans to equity. Assuming that conversion had taken place on 1 January of the reporting year, the interest expense would have been reduced by CHF 1.4 million (previous year: CHF 2.5 million). Given that taxes are chargeable in Swissgrid's regulated business model, the conversion would have increased net income by CHF 1.4 million (previous year: CHF 2.5 million). At the same time, the average number of shares outstanding would also have increased by 10,538,739 units (previous year: 19,181,327 units). This leads to a potential dilution of CHF -0.01 per share (previous year: CHF -0.01 per share).

Financial statements Swiss GAAP FER

Balance sheet

Assets

In millions of CHF	Notes	31.12.2023	31.12.2022
Property, plant and equipment	13	2,274.4	2,363.2
Intangible assets	13	106.6	122.8
Financial assets	14	6.1	6.5
Long-term deficits arising from volume- and tariff-related timing differences	15	643.6	688.5
Non-current assets		3,030.7	3,181.0
Assets held on a fiduciary basis	16	33.9	54.2
Short-term deficits arising from volume- and tariff-related timing differences	15	723.7	59.2
Inventory		0.9	1.1
Trade accounts receivable	17	222.3	234.6
Other receivables	18	19.0	59.2
Prepaid expenses and accrued income	19	111.9	128.6
Cash and cash equivalents		111.1	172.8
Current assets		1,222.8	709.7
Assets		4,253.5	3,890.7

Equity and liabilities

In millions of CHF	Notes	31.12.2023	31.12.2022
Share capital		334.5	334.5
Capital reserves		431.2	431.2
Retained earnings		587.1	535.3
Total equity		1,352.8	1,301.0
Non-current financial liabilities	20	2,026.1	1,756.1
Non-current provisions	21	33.5	35.7
Non-current liabilities		2,059.6	1,791.8
Liabilities held on a fiduciary basis	16	33.9	54.2
Current financial liabilities	20	510.0	231.1

In millions of CHF	Notes	31.12.2023	31.12.2022
Trade accounts payable		172.8	393.4
Other liabilities	22	13.5	0.7
Accrued expenses and deferred income	23	110.8	118.4
Current provisions	21	0.1	0.1
Current liabilities		841.1	797.9
Total liabilities		2,900.7	2,589.7
Equity and liabilities		4,253.5	3,890.7

Financial statements Swiss GAAP FER

Cash flow statement

In millions of CHF, excluding balance sheet items held on fiduciary basis	Notes	2023	2022
Net income		100.0	96.4
Financial expenses	11	20.8	14.7
Financial income	10	-2.0	-1.7
Current income taxes	12	21.6	20.2
Depreciation and amortisation	13	146.1	154.4
Profit/loss from disposal of fixed assets		-	1.3
Change in inventories		0.2	0.1
Change in provisions	21	-2.2	-9.1
Change in trade accounts receivable		12.3	-53.8
Change in other receivables		40.2	-39.5
Change in prepaid expenses and accrued income		16.7	-47.5
Change in volume- and tariff-related timing differences	15	-619.6	-425.1
Change in trade accounts payable		-220.6	187.0
Change in other current liabilities		12.8	-1.7
Change in accrued expenses and deferred income		-11.7	-22.0
Interest received		0.6	0.2
Income taxes paid		-20.6	-23.2
Cash flow from operating activities		-505.4	-149.3
Gross investments in property, plant and equipment		-254.1	-232.6
Congestion proceeds received for grid investments		216.6	226.6
Net investments in property, plant and equipment	13	-37.5	-6.0
Gross investments in intangible assets		-25.4	-24.8
Congestion proceeds received for grid investments		21.9	24.1
Net investments in intangible assets	13	-3.5	-0.7
Investments in financial assets		-	-0.5
Divestments of financial assets		-	2.7
Dividends received		0.5	0.6
Cash flow from investing activities		-40.5	-3.9

In millions of CHF, excluding balance sheet items held on fiduciary basis	Notes	2023	2022
Change in current financial liabilities		248.9	-54.6
Change in non-current financial liabilities		100.0	-
Issuing of bonds		200.0	175.0
Interest paid		-16.5	-13.9
Dividends paid		-48.2	-53.1
Cash flow from financing activities		484.2	53.4
Change in cash and cash equivalents		-61.7	-99.8
Composition			
Cash and cash equivalents at beginning of period		172.8	272.6
Cash and cash equivalents at end of period		111.1	172.8
Change in cash and cash equivalents		-61.7	-99.8

Financial statements Swiss GAAP FER

Statement of changes in equity

In millions of CHF	Share capital	Capital reserves	Retained earnings	Total equity
Balance at 31.12.2021	334.5	431.2	492.0	1,257.7
Allocation	–	–	–	–
Dividends paid	–	–	–53.1	–53.1
Capital increases (minus transaction costs)	–	–	–	–
Net income 2022	–	–	96.4	96.4
Balance at 31.12.2022	334.5	431.2	535.3	1,301.0
Allocation	–	–	–	–
Dividends paid	–	–	–48.2	–48.2
Capital increases (minus transaction costs)	–	–	–	–
Net income 2023	–	–	100.0	100.0
Balance at 31.12.2023	334.5	431.2	587.1	1,352.8

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. As at 31 December 2023, Swissgrid has 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 amounts to CHF 167.25 million (previous year: CHF 167.25 million).

Financial statements Swiss GAAP FER

Notes

1. Accounting principles

General

The 2023 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.

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

Revenue is recognised in the income statement upon performance of Swissgrid's obligations. For activities regulated under the Electricity Supply Act (StromVG), the measurement of performance is based mainly on energy volumes directly metered on the transmission grid or reported from 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 (WResV) 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 StromVG/WResV

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

According to Art. 14 of the Electricity Supply Act and WResV, 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 StromVG

Earnings before interest and taxes (EBIT) from activities related to the Electricity Supply Act (StromVG) are defined in Article 13 of the Electricity Supply Ordinance (StromVV) and are equivalent to the interest applied to the invested operating assets with the weighted average cost of capital rate for the current year under review (= $WACC_{t+0}$) and the interest applied to the volume and tariff-related timing differences with the weighted average cost of capital rate of $WACC_{t+2}$ plus income taxes.

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 official weighted average cost of capital rates based on this method of calculation are 3.83% for 2023 ($WACC_{t+0}$) and 3.98% for 2025 ($WACC_{t+2}$).

EBIT according to WResV

In the power reserve segment, the legally prescribed cost recovery principle results in neutral earnings before interest and taxes (EBIT). Borrowing costs are recorded under operating expenses in accordance with Art. 22 of the WResV.

Chargeability of operating and capital costs

EICom 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 the 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 determined as follows:

- 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 determined as follows:

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

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 an 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 as well as 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 (StromVG), the power reserve segment (WResV) 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.

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.

For more information on this, the reader is referred to the comments in the sections on «Revenue recognition» and «Activities according to StromVG/WResV» in Note 1, as well as the comments 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 ECom deems the costs to be chargeable. ECom has the right to verify ex post the chargeability of Swissgrid's costs for tariff-setting purposes.

At present, ECom 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 2023

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 StromVG	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	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.

¹ Total operating income is lower in the segment reporting than in the income statement as it does not include the costs of capitalised self-constructed assets (CHF 22.5 million).

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 StromVG	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	-	-0.2
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.

Segment report 2022

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 StromVG	Power reserve	Further activities
Net turnover	987.1	571.8	321.7	95.6	15.7	-17.7	987.1	-	-
Other operating income	19.7	1.8	0.2	-	-	-	2.0	-	17.7
Change in volume- and tariff-related timing differences	370.7	-107.1	346.9	134.3	-4.0	-	370.1	0.6	-
Total operating income ¹	1,377.5	466.5	668.8	229.9	11.7	-17.7	1,359.2	0.6	17.7
Procurement costs	-866.2	-11.4	-642.9	-219.3	-10.3	17.7	-866.2	-	-
Gross profit	511.3	455.1	25.9	10.6	1.4	-	493.0	0.6	17.7
Operating expenses	-230.4	-192.2	-20.2	-2.6	-0.4	-	-215.4	-0.6	-14.4
Depreciation/amortisation and impairment losses	-155.7	-148.9	-3.3	-0.4	-0.1	-	-152.7	-	-3.0
Earnings before interest and income tax (EBIT)	125.2	114.0	2.4	7.6	0.9	-	124.9	-	0.3

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

deficits.

¹ Total operating income is lower in the segment reporting than in the income statement as it does not include the costs of capitalised self-constructed assets (CHF 20.2 million).

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 StromVG	Power reserve	Further activities
Net turnover	987.1	571.8	321.7	95.6	15.7	-17.7	987.1	-	-
Other operating income	19.7	1.8	0.2	-	-	-	2.0	-	17.7
Procurement costs	-866.2	-11.4	-642.9	-219.3	-10.3	17.7	-866.2	-	-
Operating expenses	-229.8	-192.2	-20.2	-2.6	-0.4	-	-215.4	-0.6	-14.4
Depreciation/amortisation and impairment losses	-155.7	-148.9	-3.3	-0.4	-0.1	-	-152.7	-	-3.0
Imputed interest and income taxes (EBIT)	-125.2	-114.0	-2.4	-7.6	-0.9	-	-124.9	-	-0.3
Change in volume- and tariff-related timing differences	-370.1	107.1	-346.9	-134.3	4.0	-	-370.1	-0.6	-

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

Earnings before interest and taxes (EBIT) per segment within the StromVG-regulated activities correspond to the capital costs on the invested operating assets plus taxes (see Note 1). The individual expense and income positions assigned to the four segments within the StromVG-regulated activities are listed in Note 5.

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 EICOM. 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 amounts to CHF 525.7 million in the 2023 financial year, CHF 46.1 million below the previous year. The decrease is attributable to the reduction of CHF 54.3 million in auction income to cover the chargeable costs of the transmission system allocated to this segment and the reduction of CHF 6.6 million in income from ITC. In contrast, tariff revenues for grid usage rose by CHF 14.8 million. Procurement costs in the 2023 financial year amount to CHF 14.9 million, CHF 3.5 million above the previous year's value of CHF 11.4 million due to higher costs for national redispatch.

Net turnover exceeds costs in the 2023 financial year, resulting in a surplus of CHF 37.2 million.

General ancillary services/balancing energy

Net turnover in this segment rose by CHF 191.2 million compared to the previous year. This was due to the higher tariff revenues, which stood at CHF 149.8 million, higher revenue from balance group balancing energy, which amounted to CHF 33.9 million, and the increase of CHF 7.5 million 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 energy and the proportional voltage maintenance costs payable by this segment. Procurement costs in this segment totalled CHF 646.6 million, on a par with the previous year's level (CHF 642.9 million).

In 2023, costs exceeded net turnover, resulting in a deficit of CHF 170.9 million.

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 167.3 million, net turnover in this segment is CHF 71.7 million above the previous year's figure (CHF 95.6 million). The increase is due to the higher tariff revenues of CHF 43.9 million, the higher income from ITC of CHF 23.4 million and the higher auction income to cover the chargeable costs of the transmission system allocated to this segment of CHF 4.4 million. Procurement costs in this segment totalled CHF 229.2 million in the reporting year (previous year: CHF 219.3 million).

In 2023, costs exceeded revenue, resulting in a deficit of CHF 77.2 million.

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 increased by CHF 5.3 million year on year to CHF 21.0 million due to the increase in tariff revenues. By contrast, procurement costs amounted to CHF 16.9 million, CHF 6.6 million up on the previous year's figure of CHF 10.3 million. This increase is due to the higher pro rata voltage maintenance costs payable by this segment.

The greater increase in income compared to costs resulted in a surplus of CHF 2.7 million in the 2023 financial year.

Power reserve

This segment handles the orders regulated by the WResV for the use of the hydropower reserve and reserve power plants, pooled emergency power groups and combined heat and power plants (CHP plants). It will be financed via tariff revenues from 2024. 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 is reported in the power reserve segment.

The expenses resulting from the intermediary business amounted to CHF 403.2 million in the reporting year (previous year: CHF 54.4 million). The services provided by the company itself represent CHF 8.2 million (previous year: CHF 0.6 million) and are included in operating costs. No income was generated in the reporting year, resulting in a deficit of CHF 411.4 million.

5. Net turnover and procurement costs according to StromVG

In millions of CHF	Segment	2023	2022
Tariff income for grid utilisation	A	506.6	491.8
Net income from ITC	A/C	41.8	25.0
Income from auctions for the reduction of chargeable grid costs	A/B/C	133.0	175.4
Tariff income for general ancillary services (AS) and income from unintentional deviation	B	256.9	107.1
Income from balance group/balance energy	B	172.9	139.0
Tariff income for active power losses	C	94.7	50.8
Tariff income for reactive energy	D	21.0	15.7
Eliminations		-7.7	-17.7
Net turnover		1,219.2	987.1
Expenses for national redispatch	A	14.9	11.4
Expenses for AS control power provision and unintentional deviation	B	494.4	489.9
Expenses for automatic start-up/island operation capability	B	1.4	1.4
Expenses for grid enhancement	B	8.1	5.4
Expenses for AS energy	B	84.6	92.7
Expenses for compensation of active power losses	C	229.2	219.3
Expenses for reactive energy/voltage maintenance	B/D	75.0	63.8
Eliminations		-7.7	-17.7
Procurement costs		899.9	866.2

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)

Segment reporting is provided in Note 4.

Income from ITC consists of the following:

– Compensation for grid usage (A): CHF 4.7 million (previous year: CHF 11.3 million)

– Compensation for active power losses (C): CHF 37.1 million (previous year: CHF 13.7 million)

The ITC compensation for grid usage and active power losses corresponds to net income. Supervision charges paid to ECom and to the Swiss Federal Office of Energy (SFOE) amounting to CHF 4.9 million (previous year: CHF 4.6 million) are deducted from the gross income of CHF 5.3 million for grid usage (previous year: CHF 13.4 million) and CHF 41.4 million for active power losses (previous year: CHF 16.3 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 14.4 million (previous year: CHF 68.7 million)
- General AS (B): CHF 83.1 million (previous year: CHF 75.6 million)
- Active power losses (C): CHF 35.5 million (previous year: CHF 31.1 million)

Expenses for reactive energy/voltage maintenance are comprised as follows:

- General AS (B): CHF 58.1 million (previous year: CHF 53.5 million)
- Reactive energy (D): CHF 16.9 million (previous year: CHF 10.3 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	2023	2022
Congestion management clearing	16.3	17.5
Other	3.6	2.2
	19.9	19.7

7. Materials and third-party supplies

In millions of CHF	2023	2022
Grid maintenance	25.1	18.3
Grid system control	0.4	0.4
Other services in the grid area	23.5	25.8
Expenses for projects, advisory and non-cash benefits	56.9	49.5
Removal of grid elements	–	–4.6
Hardware/software maintenance	17.9	14.9
	123.8	104.3

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

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

Several measures associated with the initial implementation of Strategy 2027 were launched in the reporting year, which is why higher expenses were incurred for projects, advisory and non-cash benefits and for hardware/software maintenance.

8. Personnel expenses

Personnel expenses

In millions of CHF	2023	2022
Salaries, bonuses, allowances	105.5	93.7
Employee insurance	20.8	18.6
Other personnel expenses	4.8	4.7
	131.1	117.0
Headcount at 31.12.		
Permanent employment:		
Number of employees	774.0	685.0
expressed as full-time equivalents:	734.8	644.3
Fixed-term employment:		
Number of employees	19.0	18.0
expressed as full-time equivalents:	13.5	14.8

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	2023	2022
Fixed remuneration (incl. lump-sum expenses)	1.83	1.80
Variable remuneration	0.81	0.73
Pension benefits ¹	0.50	0.49
Total remuneration to the Executive Board	3.14	3.04
Of which to the highest-earning member of the Executive Board		
Fixed remuneration (incl. lump-sum expenses)	0.52	0.51
Variable remuneration	0.25	0.24

In millions of CHF	2023	2022
Pension benefits ¹	0.15	0.15
Total remuneration to the highest-earning member of the Executive Board	0.92	0.90

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	2023	2022
Rental and occupancy costs	10.1	9.2
Ground rents	4.2	4.8
Rental costs for communication equipment/telecommunication expense	3.4	2.9
Board of Directors' fees and expenses incl. social costs	0.8	0.9
Actual expenses for travel and subsistence for employees and third parties	2.4	1.7
Fees, dues and licences	4.8	3.7
Insurance	2.4	2.3
Other administrative costs	10.8	3.8
	38.9	29.3

For the first time, other administrative costs include borrowing costs of 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 of the WResV.

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 72,700).

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	2023	2022
Interest income on time deposits	0.6	0.2
Other financial income	1.4	1.5
	2.0	1.7

Other financial income includes a dividend of CHF 0.5 million (previous year: CHF 0.6 million) received from Holding des Gestionnaires de Réseau de Transport d'Électricité SAS (HGRT).

11. Financial expenses

In millions of CHF	2023	2022
Bond interest	14.0	11.1
Loans and convertible loans interest	5.5	2.7
Commitment fees	0.6	0.2
Other financial expenses	0.7	0.7
	20.8	14.7

Financial liabilities increased in the reporting year to finance ongoing investments and procurement costs. This increase resulted in higher financial expenses compared to the previous year.

12. Income taxes

In millions of CHF	2023	2022
Current income taxes	21.6	20.2
Change in deferred taxes	-2.2	-4.4
	19.4	15.8

An average rate of 16.3% (previous year: 16.8%) was used to calculate the current income taxes and, in 2023, deferred taxes were calculated based on an expected rate of 15.6% (previous year: 15.7%).

The effective average tax rate based on earnings before tax amounts to 16.3% (previous year: 14.1%).

13. Non-current assets

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
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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	–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

Summary of property, plant and equipment – 2022

In millions of CHF	Advances and construction in progress	Substations	Lines	Properties and buildings	Other property plant and equipment	Total
Acquisition cost at 1.1.2022	462.2	2,242	2,790.6	252.3	62.9	5,810.0
Additions	3.9	0.3	1.8	–	0.1	6.0
Disposals	–	–11.2	–9.9	–1.4	–12.3	–34.8
Reclassification	–219.2	52.8	161.1	4.1	5.0	3.8
Acquisition cost at 31.12.2022	246.9	2,283.9	2,943.6	255.0	55.7	5,785.0
Accumulated depreciation and amortisation at 1.1.2022	5.2	1,458.9	1,728.2	79.2	54.3	3,325.8
Depreciation and amortisation	–	69.7	45.6	6.9	7.3	129.5
Impairment losses	–	–	–	–	–	–
Disposals	–	–10.4	–9.5	–1.3	–12.3	–33.5
Reclassification	–	0.1	–	–	–0.1	–
Accumulated depreciation and amortisation at 31.12.2022	5.2	1,518.3	1,764.3	84.8	49.2	3,421.8
Net book value at 1.1.2022	457.0	783.1	1,062.4	173.1	8.6	2,484.2
Net book value at 31.12.2022	241.7	765.6	1,179.3	170.2	6.5	2,363.2

Gross investments in property, plant and equipment amounted to CHF 254.1 million (previous year:

CHF 232.6 million). Thereof, CHF 216.6 million (previous year: CHF 226.6 million) were financed by proceeds from the auctioning of bottleneck capacities for cross-border supplies. Project costs of CHF 0.1 million were reclassified from «intangible assets under development» to «construction in progress» in the year under review (previous year: CHF 0.1 million from «construction in progress» to «intangible assets under development»). In addition, borrowing reclassified from «construction in progress» to «lines» exceeded the gross investments of CHF 10.0 million in the reporting year.

Property, plant and equipment of CHF 21.2 million (previous year: CHF 20.1 million) were purchased from related parties in 2023.

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

Summary of intangible assets – 2022

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 1.1.2022	11.0	4.0	15.0	191.4	–	191.4	148.7	62.8	211.5	351.1	66.8	417.9
Additions	0.3	0.1	0.4	–	–	–	0.3	–	0.3	0.6	0.1	0.7
Disposals	–	–	–	–	–	–	–20.1	–3.0	–23.1	–20.1	–3.0	–23.1
Reclassification	–5.1	–1.2	–6.3	–	–	–	5.3	1.1	6.4	0.2	–0.1	0.1
Acquisition cost at 31.12.2022	6.2	2.9	9.1	191.4	–	191.4	134.2	60.9	195.1	331.8	63.8	395.6
Accumulated depreciation and amortisation at 1.1.2022	–	–	–	89.4	–	89.4	128.8	52.8	181.6	218.2	52.8	271.0
Depreciation and amortisation	–	–	–	6.0	–	6.0	13.1	5.8	18.9	19.1	5.8	24.9
Impairment losses	–	–	–	–	–	–	–	–	–	–	–	–
Disposals	–	–	–	–	–	–	–20.1	–3.0	–23.1	–20.1	–3.0	–23.1
Reclassification	–	–	–	–	–	–	–	–	–	–	–	–
Accumulated depreciation and amortisation at 31.12.2022	–	–	–	95.4	–	95.4	121.8	55.6	177.4	217.2	55.6	272.8
Net book value at 1.1.2022	11.0	4.0	15.0	102.0	–	102.0	19.9	10.0	29.9	132.9	14.0	146.9
Net book value at 31.12.2022	6.2	2.9	9.1	96.0	–	96.0	12.4	5.3	17.7	114.6	8.2	122.8

Gross investments in intangible assets amounted to CHF 25.4 million (previous year: CHF 24.8 million). Thereof, CHF 21.9 million (previous year: CHF 24.1 million) were financed by proceeds from the auctioning of bottleneck capacities for cross-border supplies. In addition, intangible assets amounting to CHF 0.3 million (previous year: CHF 0.2 million) were purchased from related parties in 2023.

14. Financial assets

In millions of CHF	31.12.2023	31.12.2022
Shareholdings	5.2	5.6
Other financial assets	0.9	0.9
	6.1	6.5

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 = Embrach (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 (EnG).

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 31.12.2021	258.2	29.8	15.8	22.5	–	326.3	–	326.3
Change in 2022	–107.1	346.9	134.3	–4.0	0.6	370.7	–	–
Final compensation grid takeover	4.9	–8.6	–	–	–	–3.7	–	–
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
Current portion	17.3	224.9	85.0	4.4	392.1	723.7	–	723.7

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	31.12.2023	31.12.2022
Trade accounts receivable	15.3	28.6
Other receivables	1.5	3.1
Prepaid expenses and accrued income	5.3	8.6
Cash and cash equivalents	11.8	13.9
	33.9	54.2

Liabilities held on a fiduciary basis

In millions of CHF	31.12.2023	31.12.2022
Trade accounts payable	27.7	32.9
Accrued expenses and deferred income	6.2	21.3
	33.9	54.2

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

Auctions

In millions of CHF	2023	2022
Share of revenue Switzerland	368.9	425.4
Congestion management clearing	-17.2	-20.2
Net proceeds	351.7	405.2
Used for reduction of the chargeable grid costs	-123.1	-135.0
Used for grid investments	-228.6	-250.7
Undistributed income from auctions	-	19.5

Pursuant to the ECom ruling issued on 22 February 2022 and the supplement dated 7 February 2023, income from auctions in 2023 amounting to CHF 351.7 million (previous year: CHF 385.7 million) was paid to Swissgrid.

17. Trade receivables

In millions of CHF	31.12.2023	31.12.2022
Trade receivables	222.3	234.6
Specific valuation allowances	–	–
	222.3	234.6

18. Other receivables

In millions of CHF	31.12.2023	31.12.2022
Value-added tax	–	39.3
Security deposits on blocked bank accounts	1.2	1.2
Other	17.8	18.7
	19.0	59.2

Other receivables include the receivable for the 2023 enforcement costs for handling congestion management amounting to CHF 16.3 million (previous year: CHF 17.5 million).

19. Prepaid expenses and accrued income

In millions of CHF	31.12.2023	31.12.2022
Accrued revenue for supplies made	93.4	108.3
Other	18.5	20.3
	111.9	128.6

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	31.12.2023	31.12.2022
Bonds	1,915.0	1,715.0
Convertible loans	41.0	72.1

In millions of CHF	31.12.2023	31.12.2022
Loans	580.1	200.1
Total financial liabilities	2,536.1	1,987.2
Current portion	510.0	231.1

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

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:

Position	Interest rate (bandwidth)	Year 1	Year 2–5	more than 5 years	Total
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
Balance at 31 December 2022					
Convertible loans	3,36 – 3,93%	31.1	39.2	1.8	72.1
Loans	0.00%	200.0	–	0.1	200.1

Convertible loans and loans are assessed at their nominal value.

Lines of credit

The committed lines of credit total CHF 950 million, of which CHF 145 million was claimed as at 31 December 2023.

21. Provisions

In millions of CHF	Dismantling	Procedural costs	Deferred taxes	Total provisions
Balance at 31 December 2021	6.1	0.5	38.3	44.9
Provisions raised	–	0.1	–	0.1
Provisions used	–	–	–	–
Reversals	4.6	0.2	4.4	9.2
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
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	31.12.2023	31.12.2022
Value-added tax	10.8	–
Security deposits on blocked bank accounts	0.7	0.7
Other	2.0	–
	13.5	0.7

In particular, the «Other» item contains outstanding obligations towards PKE Vorsorgestiftung Energie of CHF 1.7 million (no outstanding obligations as at the balance sheet date in the previous year).

23. Accrued expenses and deferred income

In millions of CHF	31.12.2023	31.12.2022
Accrued expenses for supplies made	61.2	79.7
Personnel expenses and employee insurance scheme	15.4	12.7
Accrued interest and premium from issued bonds	19.0	12.6
Taxes	15.2	13.4
	110.8	118.4

24. Contingent receivables

Billing method for the ancillary services (AS) surcharge

EICom defined the billing method for the AS surcharge in its 4/2018 directive. Under this method, Swissgrid and the distribution system operators wait until the subsequent year to finally settle payments of AS tariffs for the previous financial year.

The settlement will result in receivables owed to Swissgrid by the distribution system operators. However, since the amount of these receivables could not be reliably determined when the financial statements were prepared, they were recognised as contingent receivables.

25. Other off-balance sheet commitments

Joint Allocation Office (JAO)

As a shareholder of the Joint Allocation Office (JAO), Swissgrid is contractually obliged to assume its share of the annual costs.

TSCNET Services GmbH

As a shareholder of TSCNET Services GmbH, Swissgrid is contractually obliged to assume its share of the annual costs.

Equigy B.V.

As a shareholder of Equigy B.V., Swissgrid is contractually obliged to assume its share of the annual costs.

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
31.12.2023	6.3	40.8	59.4	106.5
31.12.2022	5.7	35.9	60.4	102.0

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
31.12.2023	1.2	0.9	2.1
31.12.2022	1.1	1.6	2.7

26. 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 is EUR 208.5 million (previous year: EUR 121.3 million), with negative replacement values of EUR 96.9 million as at 31 December 2023 (previous year: EUR 5.4 million).

27. 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	
		31.12.2023	31.12.2023			31.12.2022	2023
Pension plans without overfunding / underfunding	–	–	–	–	12.2	12.2	11.0
Total	–	–	–	–	12.2	12.2	11.0

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 is 113.9% as at 31 December 2023 (previous year 107.7%).

28. Transactions with related parties

Transactions with related parties in millions of CHF	2023	2022
Total operating activities		
Net turnover	495.8	421.3
thereof grid utilisation	326.1	330.9
thereof general ancillary services /balance energy	87.0	42.4
thereof active power losses	63.2	34.0

Transactions with related parties in millions of CHF	2023	2022
thereof reactive energy	19.5	14.0
Other operating income	0.1	0.1
Procurement costs and operating expenses		
Procurement costs	460.7	557.5
thereof grid utilisation	14.8	3.0
thereof general ancillary services /balance energy	405.6	506.3
thereof active power losses	31.4	43.3
thereof reactive energy	8.9	4.9
Cost of materials and third-party supplies	13.2	14.4
Other operating expenses	4.4	2.4
Financial result		
Financial expenses	0.7	1.5

In the power reserve segment, costs to related parties totalled CHF 94.5 million (previous year: CHF 20.9 million).

Unsettled balances at balance sheet date with related parties in millions of CHF	31.12.2023	31.12.2022
Assets		
Trade receivables	95.4	94.4
Prepaid expenses and accrued income	15.9	17.8
Liabilities		
Convertible loans and loans	21.6	42.6
Trade accounts payable	60.4	181.9
Accrued expenses and deferred income	6.3	12.1

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.

29. Events after the balance sheet date

There are no events after the balance sheet date that would require disclosure or recognition in the 2023 financial statements.

On 15 April 2024, the Board of Directors of Swissgrid Ltd approved the 2023 financial statements for submission to the General Assembly and for publication.

Financial statements Swiss GAAP FER

Independent Auditor's Report



Independent Auditor's Report

To the General Meeting of Swissgrid Ltd, Aarau

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Swissgrid Ltd (the Company), which comprise the balance sheet as at 31 December 2023 and the statement of income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the financial statements give a true and fair view of the financial position of the Company as at 31 December 2023, and its results of operations 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 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, together with 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.

Key Audit Matters



Accuracy of the calculation of the regulated EBIT and volume- and tariff-related timing differences



Completeness and accuracy of the net turnover and procurement costs

Key audit matters are those matters that, in our professional judgment, 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.



Accuracy of the calculation of the regulated EBIT and volume- and tariff-related timing differences

Key Audit Matter

For the 2023 financial year Swissgrid reports an EBIT (earnings before interest and taxes) of 138.2 Mio. CHF (PY: 125.2 Mio. CHF). The change in volume- and tariff-related timing differences amounts to CHF +216.4 Mio. CHF (PY: +370.7 Mio. CHF).

The EBIT presented in Swissgrid's financial statements is legally defined as the multiplication of the invested operating assets (regulatory asset base, "RAB") and volume- and tariff-related timing differences by the applicable regulatory interest rates plus taxes. The RAB consists of the transmission grid assets (incl. construction in progress), the intangible assets and the net current assets determined on a monthly basis.

Cost and volume variances between the actual costs and income for a year and the costs and income pre-determined in advance at tariff level for the same year lead to so-called volume- and tariff-related timing differences. These are deferred separately as surpluses or deficits in the balance sheet and must be amortized over the coming years. The yearly change is recorded separately in the income statement under "Change in volume- and tariff-related timing differences".

There is a risk that the EBIT and the volume- and tariff-related timing differences are not calculated according to the applicable legal and regulatory provisions and that, consequently, the EBIT and the volume- and tariff-related timing differences are not presented correctly in the financial statements.

For further information on the calculation of the regulated EBIT and volume- and tariff-related timing differences refer to the notes of the financial statements Swiss GAAP FER under note "1. Accounting principles" (paragraph Activities according to StromVG/WResV), under note "3. Legal proceedings" and under note "4. Segment reporting" (paragraph Change in volume- and tariff-related timing differences per segment) as well as under note "15. Volume- and tariff-related timing differences".

Our response

We have performed mainly the following audit procedures:

- Identification of the key controls and verification of their effectiveness using sampling;
- Reconciliation of the method used for calculating the regulated EBIT and volume- and tariff-related timing differences with the legal, administrative and regulatory requirements;
- Recalculation of the interest on the various components of the RAB and volume- and tariff-related timing differences using the interest rates according to the legal base (StromVG/StromVV) as well as to the decisions and directives of the Swiss Federal Electricity Commission (EiCom) and comparison with the recorded values;
- Evaluation of the completeness and transparency of the disclosures
- Discussion and assessment of significant changes in regulatory cost accounting, in particular the allocation keys used and allocations.



Completeness and accuracy of the net turnover and procurement costs

Key Audit Matter

For the 2023 financial year Swissgrid reports a net turnover of 1'219.2 Mio. CHF (PY: 987.1 Mio. CHF) and the procurement costs amount to 899.9 Mio. CHF (PY: 866.2 Mio CHF).

The calculation of the net turnover (performance) and procurement costs is based mainly on the energy data directly metered on the transmission system or reported from downstream grid levels. For the measurement of performance, regulated tariffs must mainly be taken into account; for the procurement costs the applicable market prices.

Swissgrid's regulated activities are characterized by a high volume of IT-based transactions.

For certain turnover and procurement costs positions, no volume base exists at the closing date yet, which requires to make estimates and assumptions.

Due to the transaction volume, the various IT interfaces and the estimates / assumptions, there is a risk that the performance and costs are not calculated completely and correctly.

Our response

We have analyzed the process relative to the calculation of the net turnover and procurement costs and we have determined whether the energy data have been recorded completely and correctly. In this respect, we have among others identified the key controls and we have then verified their effectiveness using sampling. We have considered the high degree of integration of the provision and recording of services by the various IT systems by testing the effectiveness of the general IT controls and application controls of the relevant IT systems for accounting purposes with the assistance of our IT specialists.

In order to assess the completeness and accuracy, we have also critically examined the main assumptions and evaluated the accuracy of the forecasts regarding the presented accruals, in particular by comparing retrospectively the accrued amounts and the actual amounts.

Furthermore, we have assessed the appropriateness of the disclosures in the financial statements concerning the corresponding positions of the balance sheet and income statement.

For further information on the net turnover and the procurement costs refer to the notes of the financial statements Swiss GAAP FER under note "2. Estimation uncertainty" and under note "4. Segment reporting" (paragraph Segment report 2023) as well as under note "5. Net turnover and procurement costs according to the electricity supply act (StromVG)".

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 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 the financial statements that give a true and fair view in accordance with Swiss GAAP FER, 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 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 SA-CH, we exercise professional judgment and maintain professional skepticism 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 Group'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 Group 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.

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 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.

KPMG AG

Silvan Jurt
Licensed Audit Expert
Auditor in Charge

Beatriz Vazquez
Licensed Audit Expert

Basel, 15 April 2024

KPMG AG, Grosspeteranlage 5, CH-4002 Basel

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Statutory financial statements

Income statement

In millions of CHF	Notes	2023	2022
Net turnover	3	1,219.2	987.1
Other operating income	4	19.9	19.7
Change in volume- and tariff-related timing differences		218.6	365.7
Capitalised self-constructed assets		22.5	20.2
Total operating income		1,480.2	1,392.7
Procurement costs	3	899.9	866.2
Gross profit		580.3	526.5
Cost of materials and third-party supplies	5	123.8	104.3
Personnel expenses	6	131.1	117.0
Other operating expenses	7	38.9	29.3
Earnings before interest, income taxes, depreciation and amortisation		286.5	275.9
Depreciation on property, plant and equipment		115.8	120.1
Amortisation on intangible assets		36.3	41.5
Earnings before interest and income taxes (EBIT)		134.4	114.3
Financial income		2.0	1.7
Financial expenses		20.8	14.7
Profit for the year before taxes		115.6	101.3
Income taxes		21.6	20.2
Profit for the year		94.0	81.1

Statutory financial statements

Balance sheet

Assets

In millions of CHF	Notes	31.12.2023	31.12.2022
Cash and cash equivalents		111.1	172.8
Trade accounts receivable	8	222.3	234.6
Other receivables	9	19.0	59.2
Inventory		0.9	1.1
Prepaid expenses and accrued income	10	111.9	128.6
Short-term deficits arising from volume-and tariff-related timing differences		723.7	59.2
Assets held on a fiduciary basis	11	33.9	54.2
Current assets		1,222.8	709.7
Financial assets	12	0.9	0.9
Shareholdings	13	5.2	5.6
Property, plant and equipment	14	2,131.9	2,209.9
Intangible assets		240.0	272.9
Long-term deficits arising from volume-and tariff-related timing differences		611.9	654.8
Non-current assets		2,989.9	3,144.1
Assets		4,212.7	3,853.8

Equity and liabilities

In millions of CHF	Notes	31.12.2023	31.12.2022
Trade accounts payable	15	172.8	393.4
Current financial liabilities	18	510.0	231.1
Other liabilities	16	13.5	0.7
Accrued expenses and deferred income	17	110.8	118.4
Current provisions	19	0.1	0.1
Liabilities held on a fiduciary basis	11	33.9	54.2
Current liabilities		841.1	797.9
Non-current financial liabilities	18	2,026.1	1,756.1
Non-current provisions	19	1.8	1.8

In millions of CHF	Notes	31.12.2023	31.12.2022
Non-current liabilities		2,027.9	1,757.9
Liabilities		2,869.0	2,555.8
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
Voluntary retained earnings		577.5	531.8
Available earnings		577.5	531.8
Results carried forward		483.5	450.7
Profit for the year		94.0	81.1
Equity		1,343.7	1,298.0
Equity and liabilities		4,212.7	3,853.8

Statutory financial statements

Cash flow statement

In millions of CHF excluding balance sheet items held on fiduciary basis	Notes	2023	2022
Profit for the year		94.0	81.1
Financial expenses		20.8	14.7
Financial income		-2.0	-1.7
Current income taxes		21.6	20.2
Depreciation and amortisation		152.1	159.8
Gains/losses on disposal of non-current assets		-	1.8
Change in inventory		0.2	0.1
Change in provisions		-	-4.7
Change in trade accounts receivable		12.3	-53.8
Change in other receivables		40.2	-39.5
Change in prepaid expenses and accrued income		16.7	-47.5
Change in volume- and tariff-related timing differences		-621.8	-420.1
Change in trade accounts payable		-220.6	187.0
Change in other current liabilities		12.8	-1.7
Change in accrued expenses and deferred income		-11.7	-22.0
Interest received		0.6	0.2
Income taxes paid		-20.6	-23.2
Cash flow from operating activities		-505.4	-149.3
Gross investments in property, plant and equipment		-254.1	-232.6
Congestion proceeds received for grid investments		216.6	226.6
Net investments in property, plant and equipment		-37.5	-6.0
Gross investments in intangible assets		-25.4	-24.8
Congestion proceeds received for grid investments		21.9	24.1
Net investments in intangible assets		-3.5	-0.7
Investments in shareholdings		-	-0.5
Divestments of financial assets		-	2.7
Dividends received		0.5	0.6
Cash flow from investing activities		-40.5	-3.9
Change in current financial liabilities		248.9	-54.6
Change in non-current financial liabilities		100.0	-

In millions of CHF excluding balance sheet items held on fiduciary basis	Notes	2023	2022
Issuing of bonds		200.0	175.0
Interest paid		-16.5	-13.9
Dividends paid		-48.2	-53.1
Cash flow from financing activities		484.2	53.4
Change in cash and cash equivalents		-61.7	-99.8
Composition			
Cash and cash equivalents at beginning of period		172.8	272.6
Cash and cash equivalents at end of period		111.1	172.8
Change in cash and cash equivalents		-61.7	-99.8

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

Revenue is recognised in the income statement upon performance of Swissgrid's obligations. For activities regulated under the Electricity Supply Act (StromVG), the measurement of performance is based mainly on energy volumes directly metered on the transmission grid or reported from 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 (WResV) 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 StromVG/WResV

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

According to Art. 14 of the Electricity Supply Act (StromVG), 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 StromVG

Earnings before interest and taxes (EBIT) from activities related to the Electricity Supply Act (StromVG) are defined in Article 13 of the Electricity Supply Ordinance (StromVV) and are equivalent to the interest applied to the invested operating assets with the weighted average cost of capital rate for the current year under review (= $WACC_{t+0}$) and the interest applied to the volume and tariff-related timing differences with the weighted average cost of capital rate of $WACC_{t+2}$ plus income taxes. 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 official weighted average cost of capital rates based on this method of calculation are 3.83% for 2023 ($WACC_{t+0}$) and 3.98% for 2025 ($WACC_{t+2}$).

EBIT according to WResV

In the power reserve segment, the legally prescribed cost recovery principle results in neutral earnings before interest and taxes (EBIT). Borrowing costs are recorded under operating expenses in accordance with Art. 22 WResV.

Chargeability of operating and capital costs

EICom 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 the 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 determined as follows:

- 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 determined as follows:

- 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.

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 an 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.

For more information on this, the reader is referred to the comments in the sections on «Revenue recognition» and «Activities according to StromVG» in Note 1, as well as the comments in Note 25.

3. Net turnover and procurement costs

Net turnover

For the 2023 financial year, net turnover across all segments amounts to CHF 1,219.2 million. This represents an increase of CHF 232.1 million in relation to the previous year's figure of CHF 987.1 million. The rise is mainly attributable to the general ancillary services (CHF 191.2 million) and active

power loss (CHF 71.7 million) segments. The increase in the general ancillary services segment is the result of higher tariff revenues, higher income from balance group/balancing energy and the higher auction income to cover the chargeable costs of the transmission system allocated to this segment. Net turnover in the active power loss segment increased due to higher tariff revenues and higher pro rata income from ITC and auctions. By contrast, income in the grid usage segment fell by CHF 46.1 million in relation to the previous year due to the lower income from ITC and auctions allocated to this segment. Revenue in the reactive energy segment remained at the previous year's level.

Procurement costs

At CHF 899.9 million, procurement costs are CHF 33.7 million higher than the previous year's value of CHF 866.2 million. This increase is primarily due to higher costs for reactive energy (CHF 6.6 million) and active power loss (CHF 9.9 million). The rise in the reactive energy segment is due to the higher pro rata voltage maintenance costs payable by this segment. The rise in the active power loss segment is due to higher prices for the procurement of the energy required to compensate for active power losses. In contrast, costs in the grid usage and general ancillary services segments 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	2023	2022
Congestion management clearing	16.3	17.5
Other	3.6	2.2
	19.9	19.7

5. Materials and third-party supplies

In millions of CHF	2023	2022
Grid maintenance	25.1	18.3
Grid system control	0.4	0.4
Other services in the grid area	23.5	25.8
Expenses for projects, advisory and non-cash benefits	56.9	49.5
Dismantling of grid elements	–	–4.6
Hardware/software maintenance	17.9	14.9
	123.8	104.3

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

Several measures associated with the initial implementation of Strategy 2027 were launched in the reporting year, which is why higher expenses were incurred for projects, advisory and non-cash benefits and for hardware/software maintenance.

6. Personnel expenses

In millions of CHF	2023	2022
Salaries, bonuses, allowances	105.5	93.7
Employee insurance	20.8	18.6
Other personnel expenses	4.8	4.7
	131.1	117.0

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	2023	2022
Rental and occupancy costs	10.1	9.2
Ground rents	4.2	4.8
Rental costs for communication equipment/telecommunication expense	3.4	2.9
Board of Directors' fees and expenses incl. social costs	0.8	0.9
Actual expenses for travel and subsistence for employees and third parties	2.4	1.7
Fees, dues and licences	4.8	3.7
Insurance	2.4	2.3
Other administrative costs	10.8	3.8
	38.9	29.3

For the first time, other administrative costs include borrowing costs of 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 WResV.

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 72,700).

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 2023, trade receivables include CHF 57.2 million (previous year: CHF 63.6 million) in relation to companies with a direct or indirect shareholding in Swissgrid.

9. Other receivables

Other receivables include the receivable for the 2023 enforcement costs for handling congestion management amounting to CHF 16.3 million (previous year: CHF 17.5 million).

10. Prepaid expenses and accrued income

In millions of CHF	31.12.2023	31.12.2022
Accrued revenue for supplies made	93.4	108.3
Other	18.5	20.3
	111.9	128.6

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 the EICom ruling issued on 22 February 2022 and the supplement dated 7 February 2023, income from auctions in 2023 amounting to CHF 351.7 million (previous year: CHF 385.7 million) was paid to Swissgrid. At CHF 33.9 million, the balance sheet item is CHF 20.3 million below the previous year's value of CHF 54.2 million. The decrease is due to the lower level of outstanding trade accounts receivable and trade accounts payable as at 31 December 2023.

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 = Embrach (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 (EnG).

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	31.12.2023	31.12.2022
Construction in progress	276.3	241.7
Substations	647.0	702.1
Lines	1,048.8	1,098.4
Properties and buildings	155.5	161.2
Other property, plant and equipment	4.3	6.5
	2,131.9	2,209.9

14. Intangible assets

The book values of the individual categories are as follows:

In millions of CHF	31.12.2023	31.12.2022
Intangible assets under development	3.7	9.1
Usage rights	62.5	67.1
Software	12.7	17.7
Merger losses (goodwill)	161.1	179.0

In millions of CHF	31.12.2023	31.12.2022
	240.0	272.9

15. Trade accounts payable

As at 31 December 2023, trade accounts payable include CHF 65.6 million (previous year: CHF 216.8 million) in relation to companies with a direct or indirect shareholding in Swissgrid. Liabilities of CHF 0.1 million exist in relation to the external auditor as at 31 December 2023 (previous year: no outstanding liabilities).

16. Other liabilities

In millions of CHF	31.12.2023	31.12.2022
Value-added tax	10.8	–
Security deposits on blocked bank accounts	0.7	0.7
Other	2.0	–
	13.5	0.7

In particular, the «Other» item contains outstanding obligations towards PKE Vorsorgestiftung Energie of CHF 1.7 million (no outstanding obligations as at the balance sheet date in the previous year).

17. Accrued expenses and deferred income

In millions of CHF	31.12.2023	31.12.2022
Accrued expenses for supplies made	61.2	79.7
Personnel expenses and employee insurance scheme	15.4	12.7
Accrued interest and premium from issued bonds	19.0	12.6
Taxes	15.2	13.4
	110.8	118.4

18. Financial liabilities

In millions of CHF	31.12.2023	31.12.2022
Bonds	1,915.0	1,715.0
Convertible loans	41.0	72.1
Loans	580.1	200.1
Total financial liabilities	2,536.1	1,987.2
Current portion	510.0	231.1

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

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:

Loans and convertible loans

Position	Interest rate (bandwidth)	Year 1	Year 2–5	more than 5 years	Total
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
Balance at 31 December 2022					
Convertible loans	3,36 – 3,93%	31.1	39.2	1.8	72.1
Loans	0.00%	200.0	–	0.1	200.1

Convertible loans and loans are assessed at their nominal value.

As at 31 December 2023, convertible loans of CHF 40.1 million (previous year: CHF 70.4 million) exist

towards companies with a direct or indirect shareholding in Swissgrid.

19. Provisions

In millions of CHF	31.12.2023	31.12.2022
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

The power reserve segment handles the orders regulated by the WResV for the use of the hydropower reserve and reserve power plants, pooled emergency power groups and combined heat and power plants (CHP plants). It will be financed via tariff revenues from 2024. 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 is reported in the power reserve segment.

The expenses resulting from the intermediary business amounted to CHF 403.2 million in the reporting year (previous year: CHF 54.4 million).

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 is EUR 208.5 million (previous year: EUR 121.3 million), with negative replacement values of EUR 96.9 million as at 31 December 2023 (previous year: EUR 5.4 million).

23. Contingent receivables

Billing method for ancillary services (AS)

EICom defined the billing method for the AS surcharge in its 4/2018 directive. Under this method, Swissgrid and the distribution system operators wait until the subsequent year to finally settle payments

of AS tariffs for the previous financial year.

The settlement will result in receivables owed to Swissgrid by the distribution system operators. However, since the amount of these receivables could not be reliably determined when the financial statements were prepared, they were recognised as contingent receivables.

24. Other off-balance sheet commitments

Joint Allocation Office (JAO)

As a shareholder of the Joint Allocation Office (JAO), Swissgrid is contractually obliged to assume its share of the annual costs.

TSCNET Services GmbH

As a shareholder of TSCNET Services GmbH, Swissgrid is contractually obliged to assume its share of the annual costs.

Equigy B.V.

As a shareholder of Equigy B.V., Swissgrid is contractually obliged to assume its share of the annual costs.

Off-balance-sheet lease commitments

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

Lease commitments

In millions of CHF	Year 1	Year 2–5	Total
31.12.2023	1.2	0.9	2.1
31.12.2022	1.1	1.6	2.7

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
31.12.2023	6.3	40.8	59.4	106.5
31.12.2022	5.7	35.9	60.4	102.0

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

25. 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 ECom deems the costs to be chargeable. ECom has the right to verify ex post the chargeability of Swissgrid's costs for tariff-setting purposes.

At present, ECom 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.

26. Audit fees

In 2023, the fees for audit services amount to CHF 214,000 (previous year: CHF 165,000) and CHF 146,200 (previous year: CHF 0) for other services.

27. Events after the balance sheet date

There are no events after the balance sheet date that would require disclosure or recognition in the 2023 financial statements.

On 15 April 2024, the Board of Directors of Swissgrid Ltd approved the 2023 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	2023	2022
Balance carried forward from the previous year	483,537,900.53	450,691,734.63
Profit for the year	93,993,597.53	81,051,549.66
Retained earnings	577,531,498.06	531,743,284.29
Appropriation to the general legal reserves	–	–
Dividend payment	30,006,379.45	48,205,383.76
Balance to be carried forward	547,525,118.61	483,537,900.53
Total appropriation	577,531,498.06	531,743,284.29

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, 15 April 2024

On behalf of the Board of Directors:

Adrian Bult, Chairman

Statutory financial statements

Statutory Auditor's Report



Statutory Auditor's Report

To the General Meeting of Swissgrid Ltd, Aarau

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Swissgrid Ltd (the Company), which comprise the balance sheet as at 31 December 2023, and the income statement and 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 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, together with 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.

Key Audit Matters



Accuracy of the calculation of the regulated EBIT and volume- and tariff-related timing differences



Completeness and accuracy of the net turnover and procurement costs

Key audit matters are those matters that, in our professional judgment, 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.



Accuracy of the calculation of the regulated EBIT and volume- and tariff-related timing differences

Key Audit Matter

For the 2023 financial year Swissgrid reports an EBIT (earnings before interest and taxes) of 134.4 Mio CHF (PY: 114.3 Mio CHF). The change in volume- and tariff-related timing differences amounts to 218.6 Mio. (PY: +365.7 Mio CHF).

The EBIT presented in Swissgrid's financial statements is legally defined as the multiplication of the invested operating assets (regulatory asset base, "RAB") and volume- and tariff-related timing differences by the applicable regulatory interest rates plus taxes. The RAB consists of the transmission grid assets (incl. construction in progress), the intangible assets and the net current assets determined on a monthly basis.

Cost and volume variances between the actual costs and income for a year and the costs and income pre-determined in advance at tariff level for the same year lead to so-called volume- and tariff-related timing differences. These are deferred separately as surpluses or deficits in the balance sheet and must be amortized over the coming years. The yearly change is recorded separately in the income statement under "Change in volume- and tariff-related timing differences".

There is a risk that the EBIT and the volume- and tariff-related timing differences are not calculated according to the applicable legal and regulatory provisions and that, consequently, the EBIT and the volume- and tariff-related timing differences are not presented correctly in the financial statements.

For further information on the calculation of the regulated EBIT and volume- and tariff-related timing differences refer to the notes "1. Accounting principles" (paragraph Activities according to StromVG/WResV), under note "25. Legal proceedings".

Our response

We have performed mainly the following audit procedures:

- Identification of the key controls and verification of their effectiveness using sampling;
- Reconciliation of the method used for calculating the regulated EBIT and volume- and tariff-related timing differences with the legal, administrative and regulatory requirements;
- Recalculation of the interest on the various components of the RAB and volume- and tariff-related timing differences using the interest rates according to the legal base (StromVG/StromVV) as well as to the decisions and directives of the Swiss Federal Electricity Commission (ElCom) and comparison with the recorded values;
- Evaluation of the completeness and transparency of the disclosures presented in the financial statements.
- Discussion and assessment of significant changes in regulatory cost accounting, in particular the allocation keys used and allocations.



Completeness and accuracy of the net turnover and procurement costs

Key Audit Matter

For the 2023 financial year Swissgrid reports a net turnover of 1'219.2 Mio CHF (PY: 987.1 Mio CHF) and the procurement costs amount to 899.9 Mio. CHF (PY: 866.2 Mio CHF).

The calculation of the net turnover (performance) and procurement costs is based mainly on the energy data directly metered on the transmission system or reported from downstream grid levels. For the measurement of performance, regulated tariffs must mainly be taken into account; for the procurement costs the applicable market prices.

Swissgrid's regulated activities are characterized by a high volume of IT-based transactions.

For certain turnover and procurement costs positions, no volume base exists at the closing date yet, which requires to make estimates and assumptions.

Due to the transaction volume, the various IT interfaces and the estimates / assumptions, there is a risk that the performance and costs are not calculated completely and correctly.

Our response

We have analyzed the process relative to the calculation of the net turnover and procurement costs and we have determined whether the energy data have been recorded completely and correctly. In this respect, we have among others identified the key controls and we have then verified their effectiveness using sampling. We have considered the high degree of integration of the provision and recording of services by the various IT systems by testing the effectiveness of the general IT controls and application controls of the relevant IT systems for accounting purposes with the assistance of our IT specialists.

In order to assess the completeness and accuracy, we have also critically examined the main assumptions and evaluated the accuracy of the forecasts regarding the presented accruals, in particular by comparing retrospectively the accrued amounts and the actual amounts.

Furthermore, we have assessed the appropriateness of the disclosures in the financial statements concerning the corresponding positions of the balance sheet and income statement.

Further information on net sales and procurement costs can be found in Note 2 "Estimation uncertainties" and Note 3 "Net sales and procurement costs" in the notes to the financial statements.

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 consolidated financial statements, the stand-alone financial statements of the Company, the compensation report 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 the 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 judgment and maintain professional skepticism 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 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 that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the Company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

KPMG AG

Silvan Jurt
Licensed Audit Expert
Auditor in Charge

Beatriz Vazquez
Licensed Audit Expert

Basel, 15 April 2024

Corporate Governance

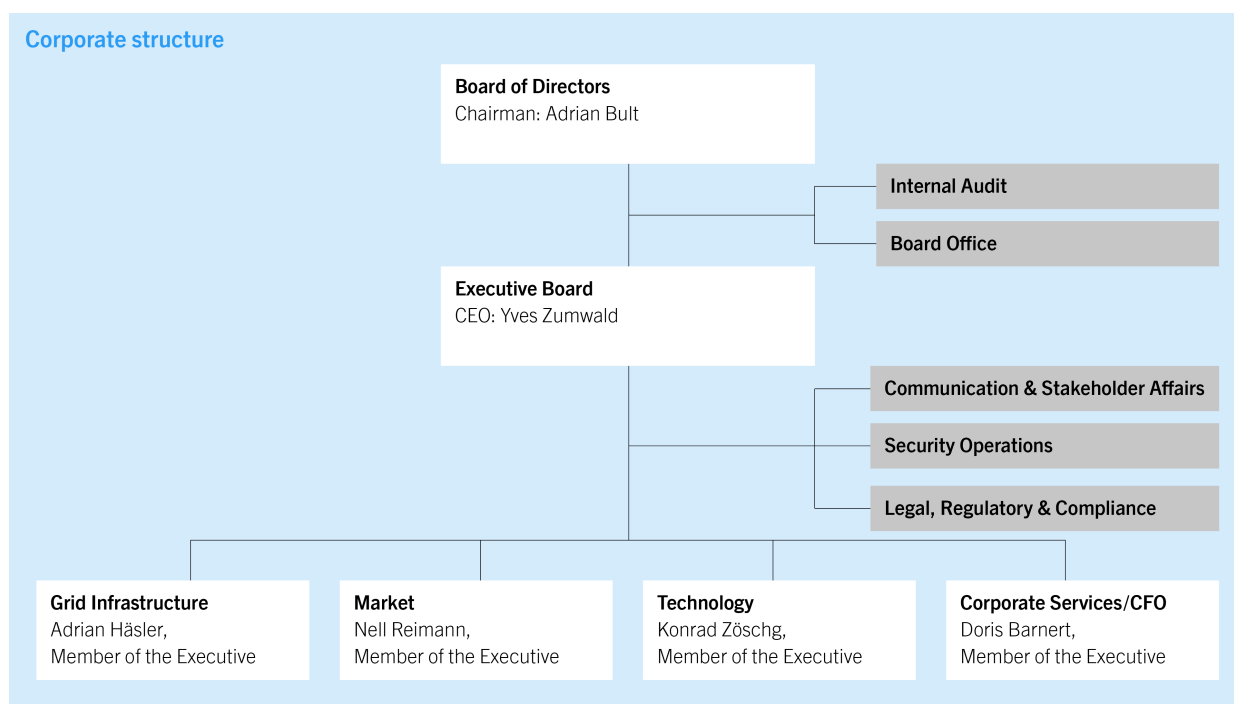
The Board of Directors and the Executive Board of Swissgrid Ltd (hereinafter Swissgrid) place great importance on good corporate governance. The following lists are based on the Swiss Code of Best Practice for Corporate Governance. All information relates to the reporting date of 31 December 2023, unless specified otherwise.

GRI 2-1

Corporate structure and shareholders

Corporate structure

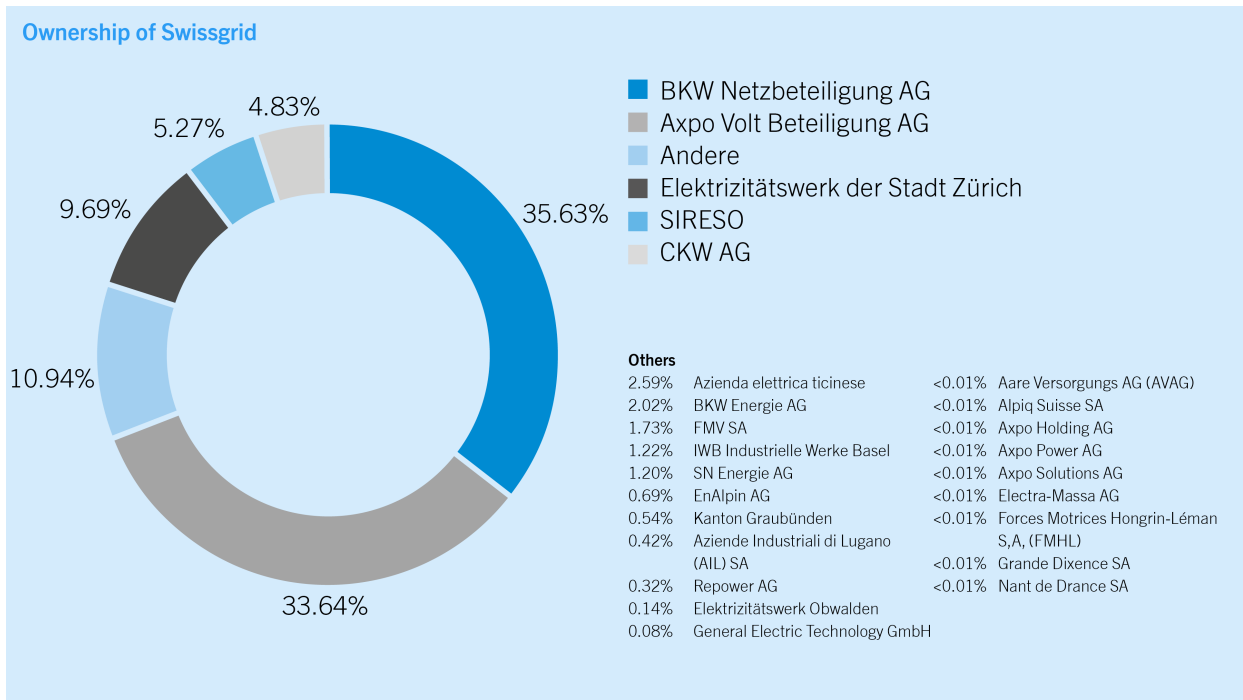
Swissgrid's corporate structure is shown below:



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 and additional cost financing. 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 2023 (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 2023 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 2023 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, Felix Graf, Markus Kägi, 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, GARAI0 REM AG, LUKOWA Group 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 Lebensversicherungsgesellschaft AG, Helvetia Schweizerische Versicherungsgesellschaft AG and Radar Topco S.à.r.l., Luxembourg (including the Swissport Group); member of the Executive Committee of the Institute for Accounting, Controlling and Auditing ACA-HSG at the University of St. Gallen.



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

Affiliations Chairman of the Board of Directors of DAAily platforms AG; Vice-Chairman of the Board of Directors of 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.



Markus Kägi

Board of Directors, cantonal representative, born in 1954, Swiss

Markus Kägi, owner of Zürcher Notarpatent, has been a member of the Swissgrid Board of Directors since 2019. Between 2007 and 2019, he was a Councillor of the Canton of Zurich and Head of the Building Department. In 2012/2013 and 2017/2018, he also served as President of the Government of the Canton of Zurich. Prior to this, from 1996 to 2007, he was the ombudsman for the Canton of Zurich and, from 2005 to 2007, Chairman of the European Ombudsman Institute. From 1991 to 1996, he was a member of the Cantonal Council of Zurich, taking over as Chairman in 1995/1996.

Affiliations None.



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 Expert Fellow at Swiss Economics, 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; Board member at Caritas, Fondation «Aide aux Enfants», Fondation PlanetSolar and the Ordre des Avocats Neuchâtelois; 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); member of the Board of Directors at Ritom SA and 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 of NIS AG and CC Energie SA; Vice-Chairman of the

Board of Directors of BKW Netzbeteiligung AG; member of the Board of Trustees of the BKW pension fund.

Resignations in the reporting period: none

New elections in the reporting period: none

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.

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.

GRI 2-11, 2-12, 2-13, 2-15, 2-18

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 ten 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. Following the self-evaluation performed in the previous year, changes were made in the reporting year to the processes for holding Board meetings and for preparing risk reports.

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 and the adoption of resolutions by means of a double resolution as laid down in 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 (incl. 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 advises on 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)
- Claude Nicati (since 2014)
- Roberto Pronini (since 2021)
- Martin Koller (since 2021)

Changes in the reporting period: none

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 six times in the last financial year.

Mitglieder:

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

Changes in the reporting period: none

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.

Mitglieder:

- Markus Kägi (Chairman since 2022, member since 2019)
- Felix Graf (since 2022)
- Benedikt Loepfe (since 2021)
- Regula Wallimann (since 2022)

Changes in the reporting period: none

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 main 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 and responsibilities of the Internal Audit division are regulated in separate regulations.

The Board of Directors approves the Internal Audit division's audit planning annually upon request by the Finance and Audit Committee. Internal Audit 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 Häslar, Nell Reimann, Konrad Zöschg, Doris Barnert



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 Häslar

Head of Grid Infrastructure, born in 1966, Swiss

Adrian Häslar, dipl. Elektroingenieur (graduate electrical engineer) HTL, Executive MBA HSG, has been a member of the Executive Board since April 2019. Previously, 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.



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.



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.

Changes in the reporting period: Maurice Dierick, Head of Market, as at 30 June 2023

Appointments in the reporting period: Nell Reimann, Head of Market, as at 1 July 2023

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

KPMG AG, Basel, acted as the statutory auditor for the financial report issued by Swissgrid Ltd until the end of 2023. The audit mandate was first awarded to KPMG for the 2005/2006 financial year (long year). The auditor in charge, Silvan Jurt, had performed the role since the 2022 financial year. The auditor is appointed at the General Assembly for a one-year term. For its function as auditor, KPMG received remuneration of CHF 214,000 for the last financial year. Total remuneration of CHF 146,200 was paid for other services. PricewaterhouseCoopers AG, Zurich (PwC) will be proposed to the General Assembly as the new auditor for the 2024 financial year.

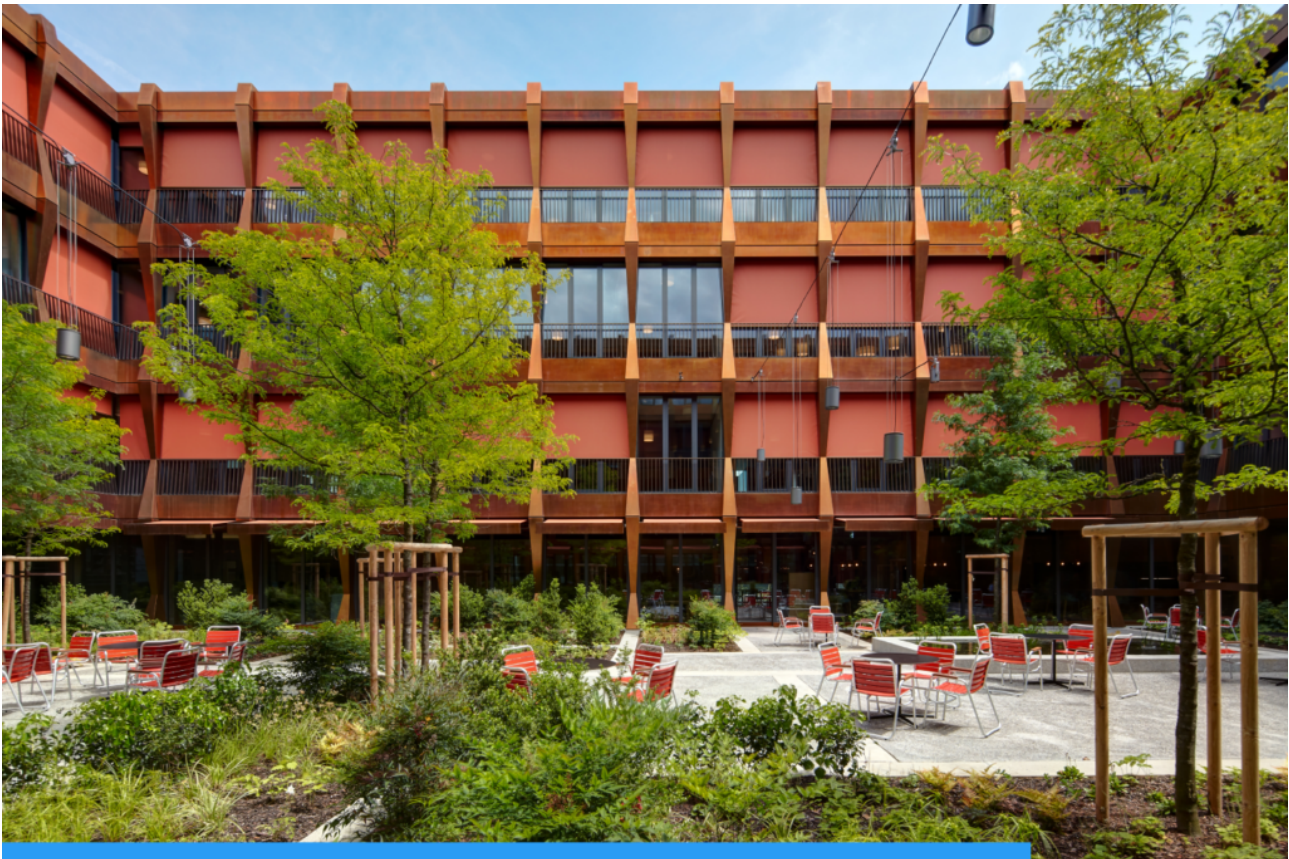
The non-financial reporting for the 2023 financial year was audited by PwC (limited assurance audit). Stefan Räbsamen took over as lead auditor. PwC performed a business audit on selected environmental and social aspects of the Sustainability Report. The detailed description of the subject matter and scope of the audit performed, including the audit specifications, can be found in the notes on «Limited Assurance». PwC received remuneration of CHF 30,000 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 2023



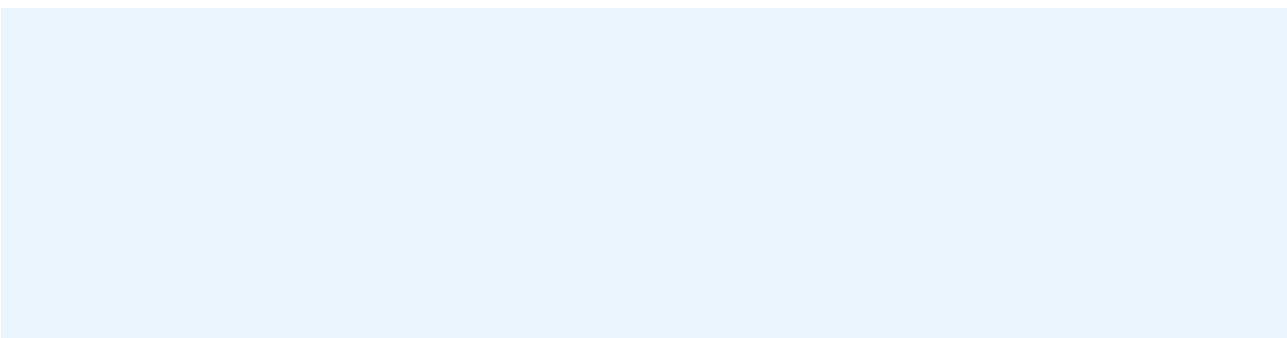


Sustainability at Swissgrid

GRI 2-22

Swissgrid ensures the secure, effective and efficient transmission of electrical energy on behalf of the Swiss public and the electricity industry. The company's legal mandate is geared towards the short and long term in order to ensure grid-related security of supply both now and in the future. Swissgrid plays a key role in implementing Switzerland's Energy Strategy 2050 by ensuring the efficient networking of increasingly decentralised and renewable energy resources. For Swissgrid, sustainability is a crucial consideration when planning the transmission system of the future and is therefore part of its responsibility towards society and the environment.

Consequently, sustainability is one of the main priorities of Strategy 2027, which was approved by the Board of Directors at the end of 2022. As part of its strategy development, Swissgrid has decided to systematise and consolidate the social, ecological and economic measures already in place in its various business areas, and to anchor sustainability even more firmly throughout the company.



Yves Zumwald, CEO



«A reliable, efficient and ecologically sustainable supply of electricity is the basis for economic prosperity and social coexistence in Switzerland and Europe. A smoothly functioning transmission system plays a vital role in ensuring a secure supply of electricity. To ensure that this remains the case in the future, we must act responsibly and in a goal-orientated manner. This applies not only to the safe operation, expansion and renovation of the grid, but also to our commitment to people, the environment and society.

By establishing sustainability in our Strategy 2027, we reaffirmed our intention to integrate sustainable, responsible actions even more strongly within the company and to systematise and take a more holistic view of the associated activities. Swissgrid is guided by the UN Sustainable Development Goals 2030.»

Basis of the sustainability commitment: materiality analysis

Swissgrid's sustainability commitment is summarised under «Corporate Social & Environmental Responsibility» (CSER). Swissgrid laid the foundations for this commitment by conducting a materiality analysis with reference to the standards of the Global Reporting Initiative (GRI). The analysis shows the relevance of social, ecological and economic issues from the perspective of Swissgrid and its stakeholders, categorised into the four fields of action Purpose, Planet, People and Partnership. The results of this analysis, including the most important sustainability topics identified, are presented as a materiality matrix.

GRI 3-1

Procedure for determining material topics

In 2022, Swissgrid carried out a materiality analysis approved by the Executive Board. From now on, the definition of material topics will be reviewed and updated every two years and approved by the Board of Directors. This will ensure that Swissgrid's assessment of the actual and potential impact of its business activities on society, the environment and the economy remains up to date. The process for determining and reviewing the material sustainability topics comprises four steps:

Process step	Description
Analysis of the company context – basis for determining potential impacts and topics	<ul style="list-style-type: none">• Review of Swissgrid's corporate activities, business relationships and stakeholders with a view to sustainability• Analysis of trends, challenges and regulatory developments in the electricity and sustainability sectors from a corporate, national and international perspective

Identification of actual and potential impacts on society, the environment and the economy

- Identification of sustainability risks based on technical expertise and factoring in existing risk analyses
- Analysis of the sustainability performance indicators recorded (e.g. occupational health and safety, environmental protection, HR policy, complaints procedure and supplier portfolio)
- Inclusion of external expert opinions and benchmark comparisons regarding the actual and potential impact of grid operators on society, the environment and the economy

Evaluation of the significance of impacts; prioritisation of topics for reporting

- Evaluation of the significance of the actual and potential impact on the company («outside-in» perspective) and on society, the environment and the economy («inside-out» perspective), taking into account the extent and probability of occurrence of risks
- Strategic evaluation of actual and potential challenges, opportunities and impacts under Strategy 2027 and its operational development
- Grouping of the topics in the materiality analysis on a scale from very low to very high, based on the significance of the impact for and by Swissgrid and from a stakeholder perspective
- Prioritisation and consolidation of reporting topics, focusing on topics classed as at least «high» in terms of materiality, either from the perspective of Swissgrid and/or of stakeholders

Internal and external validation of results

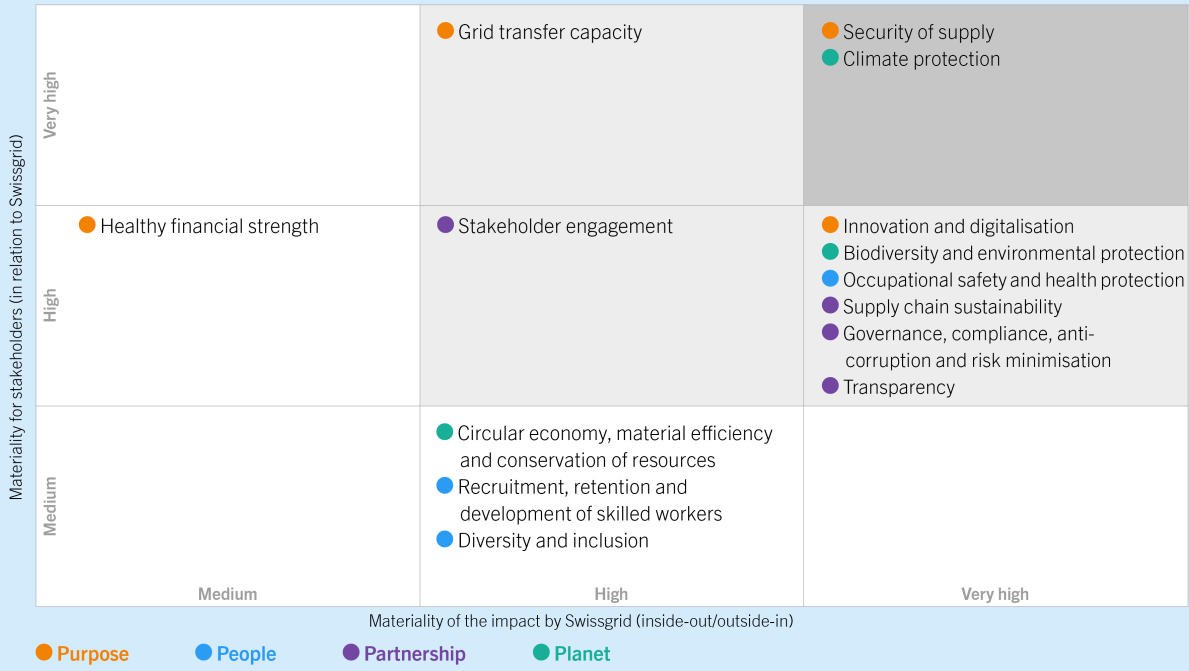
- Internal validation process as part of multi-stage workshops with participants from all business areas
- Comparison with materiality matrices of other European transmission system operators and Swiss electricity supply companies
- Direct involvement of external stakeholders (planned for 2024/2025) to validate the relevant topics, impacts and prioritisation; the 2022 materiality analysis was prepared with the help of external consultants, without direct consultation with other external stakeholders

GRI 3-2, 3-3

Swissgrid materiality matrix

Swissgrid's comprehensive analysis revealed 14 topics that are of particular relevance to the company. These are shown in the form of a materiality matrix – with topics allocated to the four fields of action Purpose, Planet, People and Partnership. Topics classified as immaterial are not listed.

Swissgrid materiality matrix



In the matrix, the vertical axis represents the topics that are important for the company in the opinion of Swissgrid’s stakeholders. The horizontal axis illustrates on the one hand how the company is affected by certain issues (outside-in) and, on the other hand, the potential impact of the company’s business activities on society, the environment and the economy (inside-out).

The 2023 Annual Report presents the most important material topics and the associated objectives, the positive and negative effects and risks, as well as the measures taken and their effectiveness. The topics are unchanged from the previous year, but are now part of Swissgrid’s integrated Annual Report.

Material topics	Summary of materiality and potential impacts ¹
Purpose Security of supply Grid transfer capacity Innovation and digitalisation Healthy financial strength	Swissgrid guarantees grid-related security of supply and therefore makes a significant contribution to Switzerland’s economic and social development. By providing a needs-based grid infrastructure, Swissgrid is also laying the foundations for the integration of renewable energies and a sustainable energy future. Innovative, digital modernisation of the grid and a healthy financial strength to enable necessary investments also play a crucial role.
Planet Climate protection Biodiversity and environmental protection Circular economy, material efficiency and resource conservation	Swissgrid is making a significant contribution to the energy transition and is helping to decarbonise the Swiss economy. At the same time, Swissgrid generates greenhouse gas emissions along its value chain in the fulfilment of its legal mandate, which must be reduced under its climate policy and social obligations. The expansion of the nationwide grid infrastructure can have a negative impact on biodiversity and the environment. In line with its environmental mission statement, Swissgrid is striving to avoid or minimise these impacts and to optimise the use of materials.
People Occupational health and safety Attracting, retaining and developing skilled workers Diversity and inclusion	Safety is a top priority for Swissgrid. Occupational safety and health protection are essential for Swissgrid in order to avoid negative effects on the well-being of internal and external employees. In addition, the company is reliant on highly qualified, diverse and motivated employees in order to develop into an innovative, highly digitalised and sustainable company. The shortage of skilled labour poses new challenges for the company in the medium and long term.

Partnership	Governance	Responsible corporate governance and constructive partnerships are essential for Swissgrid as the operator of a critical infrastructure. Compliance with regulatory requirements, the appropriate handling of risks, integrity and transparency in business activities and good governance structures are important basic principles for the company. It is also crucial for Swissgrid to ensure that it has a sustainable supply chain in order to guarantee the economically, ecologically and socially sustainable use of resources and to recognise potential negative effects along the value chain, for example on human rights, at an early stage.
	Compliance	
	Anti-corruption	
	Risk minimisation	
	Supply chain sustainability	
	Stakeholder engagement	
	Transparency	







¹The potential and actual impacts described in this table and in the corresponding thematic sections of the report mainly relate to the impacts of Swissgrid’s business activities on society, the environment and the economy and/or the impacts of external factors on Swissgrid’s business activities.

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

Strategic foundations: sustainability goals and principles

Swissgrid is committed to making a positive contribution to achieving the UN Sustainable Development Goals (SDGs). To underscore this goal, Swissgrid has affirmed its commitment to the ten principles of the UN Global Compact (UNGC) and is now also a member of the UNGC Network Switzerland & Liechtenstein. Sustainability is an integral part of Swissgrid’s corporate culture and is actively practised in all of its activities.

Taking Swissgrid’s Strategy 2027 as a basis, the Executive Board has defined overarching goals in all four fields of action of its sustainability commitment, taking into account the material topics. For each of the four fields of action, the Executive Board has also set operational sustainability goals for 2023 that will have an impact on the variable remuneration of the Executive Board and that of senior and specialist managers.

Field of action and contribution to the SDGs	Overarching goals
<p>Purpose</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>7 BEZAHLBARE UND SAUBERE ENERGIE</p> </div> <div style="text-align: center;">  <p>8 MENSCHENWÜRDIGE ARBEIT UND WIRTSCHAFTSWACHSTUM</p> </div> <div style="text-align: center;">  <p>9 INDUSTRIE, INNOVATION UND INFRASTRUKTUR</p> </div> </div>	<p>Swissgrid is helping to shape the energy future – safely, innovatively and sustainably</p> <ul style="list-style-type: none"> • Swissgrid guarantees a high level of grid-related security of supply and supports Switzerland’s energy strategy. • Swissgrid constructs and manages the grid efficiently and increases its capacity in line with demand. • Swissgrid is developing into a highly digitalised, innovative company.
<p>Planet</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>12 NACHHALTIGE/R KONSUM UND PRODUKTION</p> </div> <div style="text-align: center;">  <p>13 MASSNAHMEN ZUM KLIMASCHUTZ</p> </div> <div style="text-align: center;">  <p>15 LEBEN AN LAND</p> </div> </div>	<p>Swissgrid fulfils its social mandate to protect the environment</p> <ul style="list-style-type: none"> • Swissgrid is preparing the grid to pave the way for the energy transition in Switzerland. • Swissgrid is helping to achieve Switzerland’s net-zero climate target by reducing emissions along its value chain. • Swissgrid avoids or minimises harmful effects on the environment. • Swissgrid is committed to preserving biodiversity and making responsible use of natural resources.

People



Swissgrid offers a safe, diverse and inclusive working environment

- The safety and health of employees, contractors, residents and partners is a top priority for Swissgrid.
- Swissgrid offers modern working conditions and establishes the necessary framework conditions to enable skilled workers to develop and enhance their expertise.
- Swissgrid ensures a working environment in which all employees feel comfortable and can perform to their full potential, regardless of their ethnic origin, sexual orientation, religion, age, gender or disability.

Partnership



Swissgrid creates added value for society through close and respectful cooperation with its stakeholders

- Swissgrid is perceived by its stakeholders as a credible, professional and solution-orientated partner.
- Swissgrid practises transparent corporate governance with integrity, stands for ethical, law-abiding behaviour and takes decisive action against corruption.
- Swissgrid respects human rights in its own operations and along its value chain.
- Swissgrid is committed to a sustainable supply chain.

In addition to the overarching sustainability goals for the material topics, Swissgrid is guided by the following principles for the implementation and strategic development of these goals:

- Swissgrid complies with laws and regulations as a matter of course.
- Swissgrid defines clear and ambitious sustainability goals and measures in line with its strategy. The achievement of these goals and the effectiveness of measures are regularly reviewed using internationally recognised sustainability indicators.
- Swissgrid endeavours to continuously strengthen and develop its sustainability goals and the management system to address the material topics. To do so, Swissgrid consults internal and external stakeholders, including employees, industry partners, authorities and other interest groups.
- In order to embed sustainability even more firmly into the corporate culture and to raise employee awareness, Swissgrid regularly organises training courses and initiatives in connection with the material topics.
- Once a year, Swissgrid publishes a transparent and comprehensive Sustainability Report in accordance with nationally and internationally recognised reporting standards.

Responsibilities in relation to sustainability

Responsibilities in relation to sustainability are integrated into 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 2023 Corporate Governance Report gives details of the composition of the Board of Directors and the Executive Board, of the provisions and processes relevant to corporate governance and of the corresponding areas of responsibility.

GRI 2-9, 2-12, 2-13, 2-14, 2-16, 2-17, 2-23

The role of the Board of Directors in the area of sustainability

The Board of Directors is responsible for defining Swissgrid's vision and mission. In addition, the Board

of Directors has set sustainability goals as part of the strategic management of the company. The Board of Directors is also responsible for non-financial reporting, the Code of Conduct and the Whistleblowing Policy. The annual non-financial reporting is discussed in advance by the Finance and Audit Committee, approved by the Board of Directors and submitted to the General Assembly for approval in accordance with the provisions of the Swiss Code of Obligations.

The Board of Directors oversees due diligence to identify and manage the impact of Swissgrid's activities on the environment, society and the economy. The Board of Directors has various tools available for this purpose:

- Internal Audit reports to the Board of Directors, carrying out risk-oriented, independent audits and providing advisory services on its behalf. In particular, its tasks include regular auditing of internal supervision, control and risk management processes. In accordance with the internal audit regulations, these services are provided in partnership with internal and, in some cases, external stakeholders. After each audit, the Chairman of the Board of Directors and the Finance and Audit Committee are informed of the findings and recommendations and their implementation. Internal Audit carried out a health check on sustainability reporting in 2023.
- Sustainability risks, including potential negative effects on society, the environment and the economy, are monitored as an integral part of the company-wide Enterprise Risk Management System (see chapter «Risk assessment»). In the course of semi-annual risk assessments and regular risk updates, the Finance and Audit Committee and the Board of Directors are informed about the main risks, their management and the measures implemented.
- When submitting proposals, the Board of Directors considers the impact of Swissgrid's planned activities on the four fields of action Purpose, Planet, People and Partnership. Since 2023, the positive and/or negative effects of each proposal must be presented. 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.
- Programme management ensures the continuous development of CSER projects and activities within Swissgrid's business operations, monitors the achievement of the ambition level, and adjusts it if necessary.
- 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 tours. 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.

GRI 2-13, 2-23

The role of the Executive Board in the area of sustainability

The Executive Board is responsible for Swissgrid's operational business activities. Its tasks include implementing and achieving the sustainability goals set by the Board of Directors. To this end, operational implementation plans are drawn up, including programmes of measures and adequate indicators to monitor their effectiveness. The Executive Board also sets medium and long-term sustainability goals as part of its corporate objectives. Using established reporting processes with regard to corporate risks, compliance and sustainability, the Executive Board informs the Board of Directors at least once a year about the risks, opportunities and implementation progress in the area of

sustainability.

To ensure sustainability management, the Executive Board created a Sustainability unit in 2023, which reports directly to the Head of Corporate Services & Chief Financial Officer. The Head of Sustainability ensures the preparation of sustainability goals in close cooperation with the Executive Board and in line with the corporate strategy; is responsible for sustainability management and for the supervision and further development of corporate activities in the area of sustainability; supports the operationalisation of sustainability goals, the coordination of measures and their implementation in the business units; and coordinates the preparation of annual reporting for approval by the Executive Board and the Board of Directors. The operational implementation of sustainability measures and data processing to check their effectiveness takes place in Swissgrid's respective business areas.



Planet

Swissgrid is making a significant contribution to the energy transition and is helping to decarbonise the Swiss economy. At the same time, the operation and expansion of the Swiss grid infrastructure have an impact on the environment. To avoid or minimise any negative effects, the company is particularly committed to the areas of «Climate protection» and «Environmental protection, biodiversity and circular economy».

Climate protection

Vision and goals

As the link between production and consumption and as key players in the energy system, transmission system operators make an important contribution to tackling climate change. Swissgrid considers climate protection to be part of its social mission. The company fulfils its responsibility by operating and expanding a secure, resilient and climate-friendly grid infrastructure (see chapter «2027 Strategy»). Swissgrid is paving the way for the transformation of the energy system in line with Switzerland's Energy Strategy 2050. Swissgrid is also committed to Switzerland's net-zero target and is reducing its emissions along its own value chain in line with the national reduction pathway. To this end, an implementation plan with specific reduction targets will be drawn up in 2024.

Management approach

Climate change has a significant impact on the supply of electricity and affects the entire value chain by

exerting direct and indirect effects on the availability, production, distribution and consumption of electricity. As part of this value chain, Swissgrid believes that it is important to prepare for the risks and opportunities of climate change. This will ensure that the company can continue to contribute to a secure, efficient and sustainable supply of electricity in the future.

The responsibilities and processes involved in the management of climate-related risks and opportunities are governed by Swissgrid’s corporate governance structure (see chapter «Sustainability at Swissgrid»). The procedure and responsibilities for identifying, assessing and managing significant climate risks are part of Swissgrid’s Enterprise Risk Management (ERM) system (see chapter «Risk assessment»).

GRI 201-2

Opportunities and risks of climate change

Opportunities are arising for Swissgrid as a result of climate change due to its role as a key driver of the energy transition in Switzerland (see chapter «Mission»). The company is also making an essential contribution to the decarbonisation of the Swiss economy. A detailed analysis of the transformation of the energy system and the associated opportunities and challenges for Swissgrid’s mandate was carried out as part of Strategy 2027.

In addition, Swissgrid updated the assessment of climate risks in 2023 and summarised these risks based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Overview of the risks of climate change for Swissgrid

		Risk	Classification ¹	Potential operational impact	Potential financial impact ²	Time frame ³	Measures
Physical climate risks	Acute	Increase in extreme weather events (e.g. storms, floods)	High	Damage to infrastructure with a potential impact on security of supply due to unexpected power outages	Moderate: additional costs due to repairs, reinforcements, relocations and/or maintenance work	K/M/L	<ul style="list-style-type: none"> Regular hazard assessment by means of updated hazard maps Established processes in the area of business continuity management (see chapter «Mission») Monitoring of lines, partly by collecting weather data, and its impact on the infrastructure
		Chronic		Thawing of the permafrost			Impact on the stability of the 33 pylons located in permafrost areas
	Rise in forest fires due to increasing dry weather	Threat to infrastructure from forest fires		<ul style="list-style-type: none"> Vegetation management (see chapter «Environmental protection, biodiversity and circular economy») Specific use of operating facilities with increased fire resistance requirements 			
	More rockfalls, landslides or avalanches	Damage to infrastructure (pylons and substations) with a potential impact on security of supply		<ul style="list-style-type: none"> 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. Brienz landslide slope relief tunnel) 			
	Change in snow and ice loads and shift in snow limits	Change in the static engineering requirements for overhead lines and structures in alpine areas; impact on the accessibility of installations in winter		<ul style="list-style-type: none"> Verifications and, if necessary, adaptation of static engineering requirements during the planning stage 			

Transition risks	Political and legal	Lengthy procedures for the approval of grid projects	High	Slow expansion and modernisation of the grid with potential delays in the integration of renewable energy resources Economic and social impact of delays and potential impact on Swissgrid's reputation	Moderate: additional operational and legal expenses and costs due to delays	K/M/L	<ul style="list-style-type: none"> • Transparent information and involvement of affected population groups as part of stakeholder engagement (see chapter «Stakeholder engagement») • Commitment to more efficient approval processes to speed up grid renewal and expansion
		Uncertain legal basis for the changeability of Swissgrid's emission reduction measures	Moderate	Impact on Swissgrid's emissions reduction pathway with reputational and compliance risks	Moderate: lack of tariff reimbursement	K/M	<ul style="list-style-type: none"> • Regular dialogue with the regulatory authority, Swissgrid shareholders and stakeholders • Examination of specific options as part of CSER strategy development
		New regulatory requirements for the use of SF6	Moderate	Impact on the planning and maintenance of operating facilities with SF6, including risks in terms of system availability, cost increases and time horizons	Moderate due to higher procurement costs	K/M/L	<ul style="list-style-type: none"> • Measures to reduce SF6 emissions (see chapter «Emission reduction measures and effectiveness»)
	Technological	Increasingly volatile electricity generation due to the growing proportion of renewable energies	Medium to high	More demanding planning and greater vulnerability / higher risks for grid stability	Medium to high	M/L	<ul style="list-style-type: none"> • Measures as part of «Grid transfer capacity» (see chapter «2027 Strategy») • 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 bases (e.g. via mathematical algorithms) • Closer cooperation and coordination with grid operators in Europe and Switzerland
	Market and reputation	Stricter requirements for sustainability reporting and target setting, including in climate protection	Low	Further development of the standards for sustainability reporting (Swiss, EU and ESG rating agencies) with a different focus in some cases; this increases the requirements for Swissgrid's data and information management and harbours reputational and compliance risks	Moderate due to effects on capital procurement and Swissgrid's operating expenses	K/M	<ul style="list-style-type: none"> • Optimisation of data collection processes for 2023 and 2024 • External and internal «health checks» on the maturity of non-financial reporting (2023 and 2024) • Development of an internal control system for non-financial reporting • Exchange of experience and cooperation with industry partners and affected companies

¹ Risk classification according to ERM results from the assessment of the probability of occurrence and the potential damage for Swissgrid. If a risk cannot be supported by the company (taking into account risk appetite and risk tolerance), it must be minimised, passed on or avoided.

² The extent of damage comprises different aspects depending on the assessment dimension. The financial impact is spread over seven categories (from CHF 5 million to over CHF 800 million) and has been consolidated for the Sustainability Report into the categories «Low» (CHF 5 – 100 million), «Medium» (CHF 100 – 400 million) and «High» (over CHF 400 million).

³ The timeframe includes K – short-term risks (until 2025), M – medium-term risks (2030) and L – long-term risks (2040). If a risk spans several time horizons, they are recognised accordingly (e.g. K/M/L indicates a risk with a short, medium and long-term dimension).

Inclusion in strategic, financial and operational planning

Swissgrid takes the risks and opportunities of climate change that have been identified into account in its strategic, financial and operational planning from a short, medium and long-term perspective. Relevant climate scenarios are also included indirectly.

- **Strategy 2027 – Energy Strategy 2050 as a driver:** Swissgrid launched its Strategy 2027 at the beginning of the reporting year. A strategic need for action arises in particular from the Energy Strategy 2050, which is geared towards Switzerland's climate targets. The «Grid Transfer Capacity» priority addresses climate-related transition risks with regard to the expected expansion of renewable energy resources. Physical climate risks are included in the «Security of Supply» priority (see chapter «2027 Strategy»). The climate risks identified are based on the Swiss hazard maps and climate scenarios, which take into account two emission scenarios of the Intergovernmental Panel on Climate Change (IPCC) with and without climate protection measures (RCP2.6 and RCP8.5). Forecasts include an increase in extreme weather events and a rise in heatwaves for Switzerland.
- **The grid infrastructure of the future – the Strategic Grid 2040:** Swissgrid has started to develop the Strategic Grid 2040 in line with the Swiss Energy and Climate Strategy 2050. The results of this periodic planning for several years are based on the scenario framework for Switzerland defined by the Swiss Federal Office of Energy, which contains national target values for 2030 and 2040 for each

electricity generation technology and consumer group. All scenarios stipulate climate neutrality in Switzerland by 2050. The energy industry guidelines take into account factors including climate-relevant forecasts from the International Energy Agency's (IEA) «Sustainable Development» scenario.

- **Climate-relevant corporate objectives for 2023 – with an impact on variable remuneration:** Some of the corporate objectives for 2023 are specifically related to climate protection and have an impact on the amount of variable remuneration paid to the Executive Board and senior and specialist managers. They include optimising the processes for recording greenhouse gas emissions and developing sourcing strategies that take CO₂ reduction into account.
- **Investments and project applications – factoring in the impact on the climate and the environment:** Since 2023, the positive and/or negative effects on the climate and the environment have been weighed up when submitting proposals to the Executive Board and the Board of Directors. This applies, for example, to investments, projects and operational implementation strategies.
- **Research and digitalisation – exploiting synergies between innovation, efficiency and climate:** The risks and opportunities of climate change are important drivers for innovative digitalisation projects. These include selected pilot projects, such as the targeted use of Internet-of-Things sensors to monitor the stability of pylons taking into account climatic effects as well as forecasting of the production from photovoltaics to support system operation and dynamic line rating (see chapter «2027 Strategy»).
- **Climate training – raising awareness and involving employees:** In 2023, the company held a series of climate workshops to teach the majority of employees the scientific principles of climate change. The participants in these internal training courses developed a number of solutions for climate protection, which will be included in Swissgrid's updated climate strategy in the 2024 reporting year.

GRI 305-2

Swissgrid's greenhouse gas footprint: approach, causes, measures and impact

Approach to data collection

Swissgrid has set itself the goal of recording and continuously reducing greenhouse gas emissions along the value chain. Greenhouse gas emissions in the Scope 1 (direct emissions) and Scope 2 (indirect emissions) categories have been recorded annually since 2018 in accordance with the Greenhouse Gas (GHG) Protocol. Scope 2 emissions are determined using the «location-based» approach.

Consequently, the average emission factor of consumers in Switzerland is used to calculate greenhouse gas emissions in terms of active power losses and electricity consumption. Scope 3 primarily includes business travel and emissions from the production and transport of purchased combustibles and fuels. As set out in the corporate objectives for 2023, the data processes for recording Scope 1 and 2 emissions were reviewed and optimised in order to improve the quality, comparability and traceability of the data. For this reason, methodological changes have been made to data collection¹ for the years 2022 and 2023. To ensure data comparability, only the CO₂ emissions for these two years are shown in this report.

¹ Methodological changes have been made to extrapolations of emissions, for example, and the values

of emission factors and the global warming potential used for SF6 have been updated.

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

Swissgrid's greenhouse gas footprint

In 2023, Swissgrid emitted 123,297 tonnes of CO₂equivalents (CO₂e) in Scope 1 and 2 emissions whilst fulfilling its legal mandate. Active power losses recorded as indirect greenhouse gas emissions accounted for over 95% of aggregated Scope 1 and 2 emissions, followed by direct emissions caused by SF6 losses (2.1%). Compared to the previous year, Swissgrid reduced its aggregated Scope 1 and 2 emissions by around 7.3%, driven by lower active power losses and a reduction in SF6 losses.

Greenhouse gas emissions in tonnes of CO ₂ e	2023	2022	% Scope 1 and 2 (2023)	% change
Total Scope 1 and 2	123,297	132,963		-7.3
Scope 1 (direct emissions) ¹	3,014	4,025	2.4	-25.1
SF6 losses ²	2,643	3,688	2.1	-28.3
Fuel consumption of Swissgrid vehicle fleet (diesel/petrol) ³	335	317	0.3	5.7
Fuel consumption of emergency power systems (diesel) ³	36	20	0	78
Scope 2 (indirect emissions) ¹	120,283	128,938	97.6	-6.7
Active power losses from energy transmission ⁴	117,681	126,317	95.4	-6.8
Electricity consumption of substations ^{4,5}	1,939	1,939	1.6	0
Electricity consumption of locations, bases and data centres ⁴	502	486	0.4	3.3
Electricity consumption of the Swissgrid communication network ^{4,6}	15	15	0	0
Electricity consumption of the Swissgrid vehicle fleet ⁴	0	n/a	0	n/a
District heating of locations and bases ^{7,8}	77	79	0.1	-2.5
District cooling of locations and bases ^{7,9}	68	102	0.1	-32.8
Scope 3 (indirect emissions along the value chain)	413	364		13.5
Electricity consumption of the communication network (third parties) ^{4,6}	10	10		-3.6
Air travel ¹⁰	163	133		22.1
Mobility utilisation (diesel/petrol/electricity) ^{3,4,11}	6	5		33
Rail travel ¹⁰	12	10		17.8
Fuel used to power Swissgrid vehicle fleet and emergency power systems ¹¹	178	162		9.7
Business trips by private car ¹⁰	45	44		2.5

Greenhouse gas emissions in tonnes of CO ₂ e	2023	2022	% Scope 1 and 2 (2023)	% change
Total scope 1, 2 and 3	123,710	133,327		-7.2

¹ Emissions are consolidated on the basis of 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 FOEN (2023): CO₂ emission factors of the Swiss greenhouse gas inventory.

⁴ Emission factor according to treeze (2021): 2018 Swiss consumer electricity mix.

⁵ Emissions based on measured electricity consumption values, where available, and supplemented by extrapolations taking into account the technical design data of substations.

⁶ Electricity consumption is determined for each location by means of a power calculation, taking into account the number and type of appliances.

⁷ Emission factor according to treeze (2017): greenhouse gas emissions of the Swiss electricity and district heating mix according to the GHG Protocol.

⁸ Based on measurements for Aarau and supplemented by extrapolations for other locations, taking into account the size and average heating requirements for offices in Switzerland according to the Applied Energy Journal [2021], Volume 288.

⁹ Based on measurements for Aarau; for the other locations, the cooling requirements are covered and reported via electricity consumption.

¹⁰ Emission factors according to Mobitool 3.0.

¹¹ Emission factors according to ecoinvent v 3.9.1.

N.B.: Additional information on the calculation methodology, factors and sources can be found in the GRI Index (GRI 305).

Swissgrid's emission intensity decreased by 6.9% for Scope 1 and 2 emissions to 1.66 kg CO₂e/ MWh in 2023. This is due to the 7.3% reduction in Scope 1 and 2 emissions, with only a slight reduction of 0.4% in the volume of electricity transported compared to the previous year.

Emission intensity	2023	2022
Scope 1 and 2 emissions in relation to the volume of electricity transported (kg CO ₂ e/MWh)	1.66	1.79
Scope 1, 2 and 3 emissions in relation to the volume of electricity transported (kg CO ₂ e/MWh)	1.67	1.79

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

Emission reduction measures and effectiveness

SF₆ emissions (Scope 1)

The most important source of Scope 1 greenhouse gas emissions, responsible for 87.7% of Scope 1 or 2.1% of aggregated Scope 1 and 2 emissions are SF₆ losses. SF₆ is a highly insulating gas that is used by Swissgrid in switchgears in the extra-high-voltage range. There are currently no proven alternatives available for applications at 220 kV and above. SF₆ is considered the strongest greenhouse gas, with a

global warming potential of 23,500. Despite protective measures, the risk of SF6 escaping cannot be completely ruled out. Natural leaks in small quantities can occur due to sealing technology and gas handling.

Emission reduction measures

Swissgrid applies the following measures to reduce CO2 emissions in connection with SF6

- Swissgrid permanently monitors gas rooms for possible leaks.
- Swissgrid provides clear guidelines and training to personnel responsible for handling SF6 gas.
- Swissgrid is a member of the SF6 industry solution with the aim of limiting aggregated SF6 emissions from the manufacture and operation of high and medium-voltage installations to less than one tonne per year. Based on the volume of SF6 installed, this corresponds to a theoretical loss rate of 0.13% for Swissgrid.
- Swissgrid and other European transmission system operators have formed a working group on the introduction of alternative insulating gases. The aim is to push forward the implementation of SF6 alternatives in switchgears at the highest voltage level by 2030 by transferring knowledge gained in pilot projects.
- When appliances and systems are decommissioned, the SF6 gas is either recycled in an environmentally friendly manner or disposed of, depending on gas quality.
- Where possible and in line with the state of the art, Swissgrid opts for SF6-free applications when procuring new devices and systems or replacing existing installations.

Effectiveness of measures: Swissgrid checks the effectiveness of measures by collecting SF6 data from the substations on an annual basis. The company emitted a total of 112 kg of SF6 in 2023, which corresponds to a loss rate of 0.05%. This represents a slight reduction compared to the previous year, which puts Swissgrid well below the requirements of the SF6 industry solution.

SF6 key figures for Swissgrid	2023	2022
Total amount of SF6 (kg)	231,100	230,900
SF6 losses (kg)	112	157
SF6 loss rate (%)	0.05	0.07
Greenhouse gas emissions due to SF6 losses in relation to the volume of electricity transported (kg CO ₂ e/MWh)	0.04	0.05

Active power losses (Scope 2)

Active power losses amounted to 919.4 GWh or 117,681 tonnes of CO₂e in 2023. Active power losses are the largest driver of Swissgrid's aggregated Scope 1 and 2 emissions, representing 95.4% of the

total. Active power losses occur during power transmission due to the electrical resistance of the lines and losses in the transformers.

The extent of the losses is heavily dependent on various external factors such as the grid topology, the voltage and the intensity of current. The volume of energy transported and the distance travelled also play an important role. Based on the «location-based approach» for calculating Scope 2 emissions, the greenhouse gas emissions associated with active power losses depend on the available consumer electricity mix in Switzerland.

Emission reduction measures

Swissgrid applies the following measures to reduce CO₂ emissions in connection with active power losses

- Swissgrid is investing in efficiency improvements for grid modernisation, which (all things being equal) also favour a reduction in active power losses; this involves taking into account the quantity and costs of active power losses in grid expansion planning and integrating efficiency criteria into the procurement of transformers, conductors and devices for the remote control of grid systems (substation automation system).
- As part of its stakeholder dialogue, Swissgrid has undertaken to offset the costs of renewable energies (instead of grey energy) to compensate for active power losses in the future. Based on the applicable legal principles, Swissgrid is obliged to procure energy according to transparent, non-discriminatory and market-based procedures. At present, Swissgrid would not be able to offset the potential additional costs that would arise from the purchase of renewable energy to compensate for active power losses.

Effectiveness of measures: the effectiveness of measures is checked indirectly by the daily recording of active power losses. This is only done indirectly because key aspects relating to greenhouse gas emissions from 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. At 1.24%, Swissgrid's electric system losses are already relatively low by international and European standards (IEA: Electricity Grids and Secure Energy Transitions).

Given the fundamental changes in electricity demand, it is currently difficult to estimate how the energy transition will affect electric system losses. However, the faster the decarbonisation of electricity generation is completed, the fewer CO₂ emissions will be caused by Swissgrid's active power losses. This emphasises the importance of Swissgrid's strategic focus on the needs-based expansion of the transmission system with regard to the integration of renewable energy resources.

Active power losses at Swissgrid	2023	2022
Active power losses (MWh)	919,385	986,855
Active power losses (%)	1.24	1.33
Greenhouse gas emissions from active power losses in relation to the volume of electricity transported (kg CO ₂ e/MWh)	1.59	1.7

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

Energy and electricity consumption

Swissgrid's energy consumption is responsible for around 97.9% of aggregated Scope 1 and 2 emissions. Excluding active power losses, the proportion is 53.6%. Energy consumption includes electricity consumption in substations and locations, fuel consumption by the Swissgrid vehicle fleet, and district heating and cooling at various locations.

Swissgrid covers more than 99% of its energy losses and energy requirements with electricity. This means that active power losses are responsible for over 97% of energy consumption within the company, followed by electricity consumption in the 125 substations.

Consumption of electricity in MWh	2023	2022	% consumption within Swissgrid (2023)	% change (2022 – 2023)
Total consumption of electricity within the organisation	940,818	1,008,226		-6.69
Total fuel consumption within the organisation from non-renewable resources	1,387	1,260	0.15	10.05
Fuel consumption of Swissgrid vehicle fleet, diesel ¹	1,212	1,137	0.13	6.62
Fuel consumption of Swissgrid vehicle fleet, petrol ²	39	47	0	-16.55
Fuel consumption of emergency power systems (diesel) ¹	135	76	0.01	78.02
Total fuel consumption within the organisation from renewable resources	0	0	0	0
Total electricity consumption within the organisation	938,588	1,005,918	99.76	-6.69
Active power losses from energy transmission	919,385	986,855	97.72	-6.84
Electricity consumption of substations ³	15,148	15,148	1.61	0
Electricity consumption of locations, bases and data centres	3,924	3,798	0.42	3.33
Electricity consumption of the Swissgrid communication network ⁶	118	118	0.01	0
Electricity consumption of the Swissgrid vehicle fleet	13	n/a	0	n/a
Thermal energy consumption within the organisation	446	458	0.05	-2.53
District heating ⁴	446	458	0.05	-2.53
Cooling energy consumption within the organisation	396	590	0.04	-32.84
District cooling ⁵	396	590	0.04	-32.84
Total consumption of electricity outside the organisation	965	814		18.66

Consumption of electricity in MWh	2023	2022	% consumption within Swissgrid (2023)	% change (2022 – 2023)
Electricity consumption of the communication network (third parties) ⁶	75	77		-3.63
Air travel ⁷	508	412		23.34
Mobility utilisation (diesel/petrol/electricity) ^{1,2}	16	12		34.44
Journeys by private car ^{1,2,8}	151	151		0.58
Rail travel ⁹	215	162		33.11

¹ Diesel conversion factor according to the EMPA energy density for Euro-5 standard diesel.

² Petrol conversion factor according to the EMPA energy density for Euro-5 standard petrol.

³ Electricity consumption based on measured values, where available, and supplemented by extrapolations taking into account the technical design data of substations.

⁴ Based on measurements for Aarau and supplemented by extrapolations for other locations, taking into account the size and average heating requirements for offices in Switzerland according to the Applied Energy Journal [2021], Volume 288.

⁵ Based on measurements for Aarau; for the other locations, the cooling requirements are covered via electricity consumption.

⁶ Electricity consumption is determined for each location by means of a power calculation, taking into account the number and type of appliances.

⁷ Based on emission factors from Mobitool 3.0 and assumptions from treeze (2016): Life Cycle Inventories of Air Transport Services, and FOEN (2023): CO2 emission factors of the greenhouse gas inventory of Switzerland.

⁸ Electricity consumption of electric vehicles according to Mobitool 3.0.

⁹ Conversion factor from SBB emissions report for Swissgrid.

N.B.: additional information on the calculation methodology, factors and sources can be found in the GRI Index (GRI 302).

Emission reduction measures

Swissgrid is implementing the following measures to reduce the CO2 emissions of its energy and electricity consumption

- In order to reduce its own electricity consumption, Swissgrid set up a task force in the wake of the 2022/2023 energy crisis and implemented the following energy-saving measures: switching off power-operated non-operational display elements, removing or switching off permanent light sources, equipping lighting systems with LEDs, including at the Aarau and Prilly sites, requiring employees to switch off screens overnight, providing information on and adjusting ventilation, restricting ventilation operating times.
- Swissgrid uses hydropower from Switzerland to cover 100% of the electricity consumption of its sites and 16 substations that have access to the free market due to their electricity requirements.
- In order to reduce the energy consumption and greenhouse gas emissions of its vehicles, Swissgrid launched the procurement of a new vehicle fleet in 2023 with the aim of replacing 100% of passenger vehicles with electric models by 2025. Swissgrid already offers its employees electric charging stations in the car park at its main site, and is gradually expanding these facilities.
- In order to reduce its demand for cooling and thermal energy in buildings, Swissgrid has adjusted the building temperatures in winter and summer as part of its electricity-saving measures.
- Swissgrid endeavours to reduce the fuel consumption caused by business trips. In 2023, the company modified its regulations for business travel, which generally specify that public transport should be used, with certain exceptions for time reasons. For example, employees are encouraged to take the train for international business travel taking up to six hours.

Effectiveness of measures: Compared to 2022, Swissgrid's energy consumption has fallen by 6.67%. This reduction is due to the measures implemented, but also to external factors such as weather conditions or occupancy. The following additional key figures are relevant to the effectiveness of measures.

Swissgrid key energy figures	2023	2022	% change (2022 – 2023)
Total consumption of electricity (within and outside the organisation) (MWh)	941,783	1,009,040	-6.67
Electricity consumption within the organisation covered by guarantees of origin (%)	0.66	0.61	7.17
Extent of the reduction in consumption of electricity achieved as a direct result of energy savings and energy efficiency initiatives (MWh) ¹	59.23	n/a	n/a
Consumption of electricity within the organisation per volume of electricity transported (MWh consumed/MWh transported) ²	0.0127	0.0135	-6.33
Electricity consumption of locations, bases and data centres per employee (MWh/employee)	4.6	5.16	-10.84
Number of electric vehicles	4	3	33.33

¹ This amount covers the reduction in electricity and heat consumption in 2023 compared to 2022 as a

direct result of energy-saving and energy-efficiency initiatives.

² Includes fuel, electricity, heating and cooling.

Environmental protection, biodiversity and circular economy

Vision and goals

The protection of the environment, the preservation of biodiversity and the considerate use of natural resources are part of Swissgrid's social responsibility and these values represent an important part of its corporate culture. The company has set out its strategic goals in its environmental mission statement:

- Swissgrid is committed to avoiding or at least minimising negative impacts on the environment.
- Swissgrid is committed to the responsible use of natural resources and the preservation of biodiversity and is constantly looking for ways to increase energy efficiency and optimise the use of raw materials.
- Swissgrid strives to continuously avoid or minimise greenhouse gases, waste, sewage, noise and other emissions.

Management approach to environmental protection

Swissgrid's business activities have both positive and negative impacts on the environment. As the national transmission system operator, the company enables the efficient and secure transport of electrical energy thanks to a well-developed and reliable grid infrastructure. Swissgrid therefore not only bears a specific responsibility for ensuring a reliable supply of electricity, but also helps to connect renewable energy resources with the consumer centres throughout Switzerland. However, the operation, modernisation and maintenance of this nationwide infrastructure have impacts on the landscape, flora and fauna, among other things.

Swissgrid has established a comprehensive environmental management system to address these effects. This system is certified in accordance with ISO 14001 and is part of the company-wide health, safety and environment management system (HSE management system) (see chapter «Occupational health and safety»). The environmental management system is based on the environmental relevance matrix drawn up by Swissgrid. This is designed to determine and assess the impact of the company's activities on the environment. Various criteria are taken into account, such as the significance of the environmental aspect for the company and the environmental hazard potential of individual activities. The matrix also considers the vulnerability of the local, regional and global environment.

In addition, Swissgrid carries out a risk assessment to identify and evaluate environmental risks and to develop suitable strategies and measures. The environment-based risk assessment is integrated into Swissgrid's Enterprise Risk Management System. The environmental relevance matrix and the environmental risk analysis are regularly updated, fields of action and measures are derived from them, and significant changes are reported as part of the HSE management review. Finally, as part of its HSE management system, Swissgrid carries out regular stakeholder analyses in order to determine and take into account the expectations and requirements of the stakeholder groups with regard to the environment.

At Swissgrid, potential and actual environmental risks and impacts include, in particular, disturbance

and damage to protected habitats, fauna and flora caused by installations and the associated work, the release of environmentally hazardous substances, and environmental damage resulting from 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 and concerns with the aim of either eliminating them or minimising them to an acceptable residual risk.

GRI 2-25, 3-3, 413-1, 413-2

Systematic inclusion of environmental protection in grid construction projects

The potential and actual impact of Swissgrid’s business activities on the environment can be considerable, particularly in grid construction projects. Swissgrid systematically considers and minimises the environmental impact during the planning and implementation of lines and substations. Compliance with environmental protection laws and regulations is a matter of course for the company.

Compliance with environmental regulations is ensured during the federal approval process for grid construction projects. The process consists of several phases, in which the concerns of various stakeholder groups are taken into account (see chapter «Stakeholder engagement»). When carrying out major projects such as the installation of a new extra-high-voltage line, all phases must be complied with, whereas for smaller projects, relevant environmental protection measures are implemented based on the legal requirements.

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).	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • A preliminary study for the environmental impact assessment¹ takes into account the following effects: 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), perturbations, forests, flora, fauna and habitats, landscape and local blindness (incl. light emissions), cultural assets and archaeology.
Inclusion in the federal sectoral plan for transmission lines (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).	<ul style="list-style-type: none"> • A monitoring 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. • Stakeholders can make their views known as part of a public consultation and participation procedure (in accordance with Art. 15ff of the Electricity Act).
Construction project	Swissgrid prepares the specific construction project within the planning corridor defined by the Federal Council.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • Swissgrid procures materials and services taking environmental aspects into account (see «Supply chain sustainability» 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

¹The requirements are based on the Ordinance on Environmental Impact Assessments and the Environmental Impact Assessment Manual.

GRI 308-2

Environmental protection measures for grid construction projects

Measures to avoid, minimise and compensate for the environmental impact of grid construction projects are already defined as part of the approval process and are consistently implemented by Swissgrid. Ecological measures are taken during the actual construction phase and when maintaining and servicing the infrastructure. Examples of measures that have been adopted or that are already implemented for selected grid projects can be found on the Swissgrid website.

Principle of «prevention is better than cure»

Protective measures based on the principle of «prevention is better than cure» are a priority for Swissgrid, especially during the realisation phase. The aim of these preventive measures is to avoid negative interventions and impacts on the environment. Examples include covering green areas during corrosion protection work so that they are not affected by the construction activities, using protective equipment such as mobile collection pans or hoppers when working with environmentally hazardous substances, and compliance with strict regulations regarding the storage and use of machines and materials.

Implementation of restoration and alternative measures

If protection measures to prevent negative environmental impacts are not possible, restoration measures are taken. These measures are designed to remedy the temporary impact on the environment. If, for example, an access route is required for the realisation phase, the affected field must be restored to its original condition after construction. As a final option, Swissgrid implements alternative ecological measures – if protection or restoration measures are not possible – in order to maintain the region’s overall environmental balance. An example of this could be the reforestation of a comparable area if Swissgrid has to permanently clear woodland under a new line.

Ecological measures in system operation

Ecological measures are also taken in system operation and maintenance and for the upkeep of areas affected by lines and substations. For example, Swissgrid implements ecological maintenance measures such as vegetation management, neophyte control and green space management in substations.

Effectiveness of measures: 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 are carried out by the cantonal authorities once the grid project has been completed. In the past reporting year, 357 HSE inspections were conducted by project employees and the health and safety team. In addition, Swissgrid has specific control measurements carried out in certain areas. Examples include measurements and calculations to check compliance with the emission limits for electromagnetic fields and noise, as well as soil measurements to determine pollution levels.

The effectiveness of measures is reflected partly by the fact that no significant judgements were brought against Swissgrid in 2023 for compliance violations in relation to environmental protection, and no significant monetary fines from previous judgements had to be paid.

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

¹ An amount of CHF 25,000 was defined as the materiality threshold for reporting.

² In 2023, this related to deficiencies with regard to adequate firefighting equipment on site. Corresponding corrective measures were agreed, documented and implemented.

GRI 2-25, 304-2

Biodiversity management approach

The construction and maintenance of lines and substations can have a significant impact on biodiversity. This impact is taken into account during the extensive federal approval process for grid projects («Systematic inclusion of environmental protection in grid construction projects»), and appropriate measures to protect biodiversity are defined. The overarching goal of the Federal Act on the Protection of Nature and Cultural Heritage is to achieve «zero balance». 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 applies the principle of «avoidance – protection – restoration – replacement».

The environmental risk analysis prepared by Swissgrid under its HSE management system identifies various potentially negative impacts, for example on forests, on flora and fauna at pylon sites, along line routes or above underground cables due to vegetation management. Keeping vegetation down can disturb the habitat of plants and animals, as can carrying out clearing work near lines that is necessary for their safe operation. Forest aisles can also favour the spread of invasive neophytes. The grid infrastructure also has an impact on fauna, particularly birds, mainly due to the risk of collision with lines.

GRI 304-1

Inventory of grid infrastructure in protected areas of national importance

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

A total of 3,729 pylons (31%) and 73 substations (58%) belonging to Swissgrid are located in at least one protected area of national importance.

Protected areas of national importance ¹	Pylons	Substations
Federal Inventory of Landscapes and Natural Monuments ²	1,211	20
Moorlands	187	0
Floodplains	109	11
Raised and transitional bogs	5	0
Low-moor bogs	54	10
Amphibian spawning areas	112	17
Dry meadows and pastures	136	15
Emeralds	208	Not recognised

Protected areas of national importance ¹	Pylons	Substations
Hunting ban areas	346	Not recognised
Swiss parks	1,190	Not recognised
Water and migratory bird reserves	41	Not recognised
Biosphere reserves	78	Not recognised
Ramsar sites	52	Not recognised
Total in protected areas of national importance ³	3,729	73
Percentage in protected areas of national importance ³	31.3%	58.4%

¹ To determine the locations of pylons and substations in protected areas, approximately 12,000 pylon locations and 125 substations were cross-referenced with the GIS data for the protected areas from Swisstopo. The data shown includes pylons and substations within protected areas.

² According to the Federal Inventory of Landscapes and Natural Monuments.

³ Multiple counts are possible if protected areas overlap. Pylons and switchgears in the vicinity of protected areas are not included. Not all protected areas have been recorded yet for substations.

GRI 304-3

Measures for the conservation of biodiversity

Measures in the various protected zones

Swissgrid consistently implements the measures for the protection and conservation of biodiversity defined in the approval process for each grid project, and strictly complies with the relevant legal requirements. Examples in the main protected zones are:

Protected zone	Measures
Measures in protected areas and preservation of livelihoods	<ul style="list-style-type: none">• Choice of line corridors taking into account the consequences for biodiversity• Placement of installation areas outside sensitive zones such as biotopes of national importance• Minimisation of impact areas• Protection of existing earthworks, (micro) water bodies (amphibian habitats), hedges, trees and other habitat structures (e.g. dry stone walls, cairns) by marking, blocking off or covering them during construction• Determination of construction times with consideration for hoofed game
Measures to protect forests	<ul style="list-style-type: none">• Restoration of temporarily required forest areas• Real replacement or equivalent measures in favour of nature and landscape conservation• Additional alternative measures if the clearing affects habitats in need of special protection
Measures to protect flora	<ul style="list-style-type: none">• Use of elements such as 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 removal of neophytes (especially common ragwort and goldenrod) at pylon sites and substations. Currently, 31 substations are knowingly affected by invasive neophytes• Green space maintenance concepts at substations
Measures to protect fauna	<ul style="list-style-type: none">• Bird protection measures, such as:<ul style="list-style-type: none">• Routing to avoid highly sensitive areas (e.g. water and migratory bird reserves) and reduce the risk of collision• Ladder markings or bird brooms• Avoidance of disturbance by carrying out work outside breeding and setting phases• Partnership initiated by external parties to build 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. Protection of hollow trees, otherwise replacement by increasing the proportion of old wood/deadwood• Creation of new homes for cavity-nesting birds in suitable locations• Adaptation of the mowing frequency at substations• Protection or strengthening of structures at substations made of piles of sand and stones to protect species such as wild bees

Route management

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. This is not necessary under all lines, as many lines span forest areas. However, where this is not the case, the vegetation height must be kept low in wooded areas under lines. Six foresters at Swissgrid plan this work along the lines and have it carried out by specialist companies in the relevant region. This ensures that the lines can be operated safely at all times. However, the vegetation management carried out by the foresters is not only important for security of supply and line maintenance, but also creates ecological added value, for example by encouraging greater biodiversity.

Collaboration with external partners to preserve biodiversity

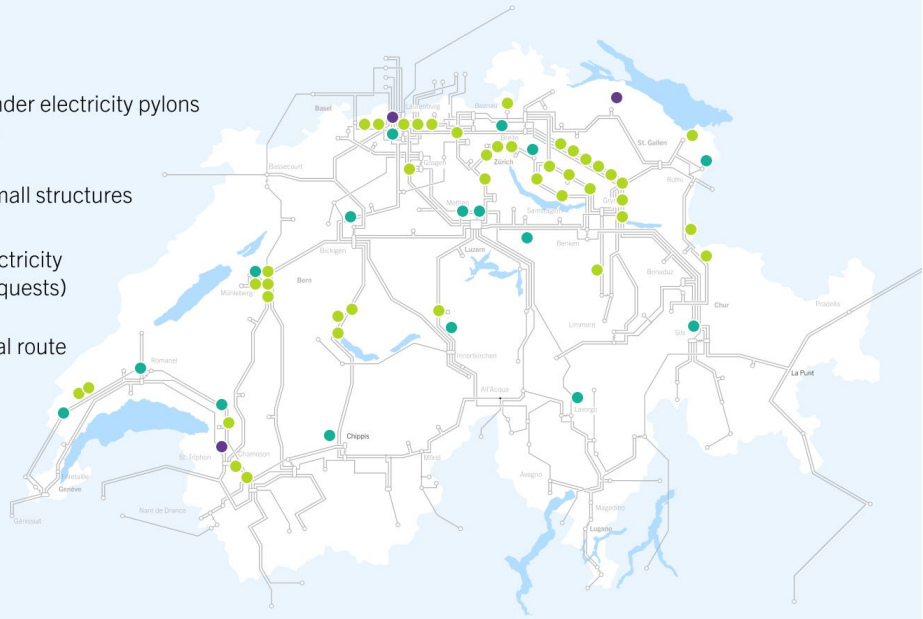
Swissgrid works with external partner organisations to protect, maintain and enhance the ecological infrastructure in Switzerland, above and beyond regulatory and official measures. Small structures under pylons are an example of this cooperation work. Piles of branches and stones or small ponds are used to create habitats for amphibians, reptiles, insects or other arthropods and small mammals. Swissgrid assists the nature conservation organisations that supervise these projects by assessing sites in association with external partners, providing the necessary geodata, and specifying the conditions that must be met to ensure the safety of the lines.

To date, a total of 107 small structures have been built under electricity pylons thanks to partnerships of this kind. Nesting aids have been installed on 15 pylons. Various small structures can be found between Uznach and Weesen, for example, where the Lebensraum Linthebene foundation has helped to create ponds and piles of branches below Swissgrid's overhead lines. Overall, the number of enquiries from nature conservation organisations has steadily increased in recent years.

Effectiveness of measures: Environmental protection measures that also focus on preserving biodiversity are defined during the approval process. The means of monitoring the effectiveness of measures is set out in the «Environmental protection measures for grid construction projects» section. Swissgrid strictly complies with the legal requirements in order to maintain, and in some cases even increase, 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 the biodiversity measures implemented along Swissgrid's grid infrastructure.

Biodiversity measures along the grid infrastructure

- **107** small structures under electricity pylons (external requests)
- **16** substations with small structures
- **15** nesting aids on electricity pylons (external requests)
- 500** metres of ecological route management
- 6,700** kilometres of lines
- 125** substations
- 12,000** pylons



Management approach to the circular economy and resource efficiency

As the operator of a nationwide infrastructure, Swissgrid pays particular attention to the optimisation and efficient use of resources along material cycles. The company prepared a material flow analysis for the years 2021 to 2023 in order to obtain information about its own material turnover. Large material flows at Swissgrid are primarily caused by grid projects. The materials used include concrete, steel, aluminium and various plastics for electrical insulation or mechanical protection. Concrete, excavated material and steel again top the list in terms of waste. Material flows in other areas such as buildings, administration, mobility, etc. are of secondary importance.

GRI 301-1, GRI 306-2, 306-3, 306-4, 306-5

Measures for the circular economy and resource efficiency

Swissgrid uses various tools and measures in the planning, procurement and realisation phases of projects and when disposing of materials in order to promote and optimise the use of resources in the interests of a circular economy.

Life cycle assessment in the planning phase

ecological design aspects play an important role in grid planning. They are implemented according to the NOVA principle (see chapter «Systematic inclusion of environmental protection in grid construction projects»). The process therefore involves examining alternatives to material-intensive grid expansion. If grid expansion is necessary, several different options are evaluated. To this end, Swissgrid carries out a life cycle assessment, which means that the environmental impacts are analysed over the entire life cycle. One example is the comparison of underground cabling and overhead line technologies: a life cycle assessment carried out in 2023 concluded that the ecological impact of an overhead line (380 kV) is lower over the entire life cycle of the line than that of underground cabling. The use of materials also plays a particularly important role. An analysis carried out in 2023 to compare the use of reinforced concrete and recycled concrete is another example. The study concluded that the use of recycled concrete reduces the extraction of gravel and sand and the amount of material sent to landfill, but does not lead to a reduction in CO

Use of selected award criteria in procurement

As part of the procurement process, Swissgrid sets technical requirement criteria to maximise the service life of the products and materials used and to reduce the need for resource-intensive repairs and alternative measures. In 2023, Swissgrid also applied various award criteria to promote the circular economy, resource optimisation and energy efficiency. Some examples are listed below:

- In steel construction and building work: the use of regional and/or recyclable building materials (reinforcement, cable protection pipes); the use of resource-efficient installations and/or the optimisation of routes;
- For switchgears: compulsory life cycle assessment of the components offered (circuit breakers, transformers or disconnectors/earth electrodes) in accordance with ISO 14044.2006 or ISO 14040.2006;
- For transformers and conductors: capitalisation of energy losses; use of green energy in production processes.

Use of recycled materials in construction

According to the material analysis, concrete is one of the most frequently used materials at Swissgrid in terms of quantity, alongside steel. In order to examine the use of recycled concrete to promote the circular economy, Swissgrid analysed the properties of various concrete options and their use cases in 2023. Based on this analysis, Swissgrid has revised its standards for the use of reinforced concrete. The Swissgrid standards specify that recycled concrete can be used for lean concrete, for internal or weather-protected ceilings and walls in buildings, and for cable conduit blocks. For other applications, especially for concrete structures exposed to the weather, primary concrete is used to achieve high resistance and durability, and to fulfil the technical requirements. In total, 600 tonnes of recycled concrete were used for noise barriers when installing new transformers in the Mettlen substation, for instance. Swissgrid plans to use a further 839 tonnes of recycled concrete by 2026. This means that around 18% of the concrete required for the project will be recycled concrete.

Waste and recycling of materials

According to Swissgrid's material flow analysis, waste from construction projects tops the list of materials for disposal or further processing. This waste includes excavated material and steel in particular, and is already estimated as part of the Environmental Impact Assessment, which also defines measures for proper further processing or disposal. Most of the metals and other materials such as ceramics are recycled and therefore remain in the cycle as recyclable materials. Around two-thirds of the concrete, which is by far the largest material in terms of volume, can be recycled in Switzerland. The rest of the concrete is mixed with other material or is of inadequate quality for recycling and is sent to a landfill. The excavated material (27,399 m³) is reused on site or restored. Only a small proportion of the materials produced during dismantling are contaminated. They are disposed of and documented professionally by service providers or specialised companies in accordance with the concepts developed in the grid projects.

There are strict legal regulations on the handling of hazardous substances and contaminated sites, which are consistently implemented by Swissgrid. Swissgrid maintains a register of contaminated sites and pollutants. There are particularly high volumes of transformer oil, which is sent to specialised companies by the service providers and recycled there, depending on its quality. It can be assumed that the recycling rate is 90%. Problematic contaminated sites are continuously remediated – at the latest when a substation is due to be renovated. For example, increased heavy metal contamination is to be expected in the ground around pylons due to the weathering of the protective coating over the decades. If these pylons are dismantled, this material is treated or disposed of by a certified service provider.

There are only low quantities of waste at sites and bases, largely generated by office operations. This waste is separated into recyclable and other waste. An external facility management company is responsible for the professional disposal of all waste arising from the ongoing operation and maintenance of the technical systems at the bases and locations. In Switzerland, non-recyclable municipal waste is incinerated in waste incineration plants with energy recovery.

Taking a three-year average for the period from 2021 to 2023, Swissgrid generated 20,912 tonnes of waste, 254 tonnes of which was controlled waste or hazardous waste containing harmful substances. Around 49% of the waste was recycled and/or reused, and 0.13% was thermally recycled with energy recovery. The remaining 51% of the waste, mainly concrete, was sent to landfill. This category also includes the foundations of pylons, 80% of which are left in the ground after the dismantling of routes. Hazardous waste was professionally disposed of by authorised service providers, who also ensured that the waste was reused after it had been properly processed.

Swissgrid waste statistics ¹	Non-hazardous waste (t)	Hazardous waste (t)
Reuse	0	0
Recycling ²	10,004	227
Composting	n/a	n/a
Recovery, including energy recovery ³	24	0
Waste/hazardous waste incineration	0	27
Storage	0	0
Landfill ⁴	10,630	0
Total waste	20,658	254

¹ Project and maintenance waste is estimated on the basis of the dismantled plants. A three-year average was used to calculate the number of plants, and the amount of waste was estimated based on the material generated during the dismantling of typical plants. Swissgrid is working on a system to record the actual quantities of waste from service providers.

² Recycled materials consist of metals (80 – 100%), electronic waste, waste glass, waste paper (together 100%), transformer oil (90%) and concrete (67%).

³ Primarily municipal waste sent to waste incineration plants with energy recovery.

⁴ Non-recyclable concrete waste is sent to type A (no contamination) or B (light contamination) landfills. The pylon foundations, which are made of concrete and reinforcing steel, are also listed here. 20% are removed and 80% are left in the ground when a route is dismantled.

Effectiveness of measures: Swissgrid examines the effectiveness of measures for the circular economy and resource efficiency on a selective and/or project basis. Swissgrid checks efficiency criteria on site during factory acceptance tests when procuring grid components, for instance. Compliance with contractually guaranteed efficiency values is linked to a financial incentive mechanism (see chapter «Supply chain sustainability»). However, with the exception of key figures on waste, Swissgrid does not yet systematically collect company-wide information and key figures on the circular economy and resource efficiency.



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 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.

GRI 2-25, 403-1

Occupational health and safety

Vision and goals

Safety is a top priority for Swissgrid in all its activities. Consequently, it is managed within the company via an integral safety policy. This defines the objectives and framework for action so that safety measures are implemented in a consistent and coordinated way. The integral approach comprises seven thematic and organisational units, referred to as security domains (see chapter «Mission»): operational security, physical security, information security, integral risk management, crisis management and business continuity management, as well as environmental protection, health and safety. The aim of this last unit is to ensure the safety and health of employees, contractors, visitors and residents. In the area of health and safety, Swissgrid has set itself the key objective of reducing the number of occupational accidents with absences of more than five days to zero. This objective was

achieved in 2023, as in 2022.

Swissgrid is obliged to comply with statutory and industry-standard provisions¹. 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 therefore 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 the employees in the workplace, 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, advanced state of the art.
- Swissgrid structures workplace conditions in accordance with recognised health and safety principles. Special attention is paid to prevention and precaution.

Management approach

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. That is why Swissgrid has made Safety & Security another priority of its Strategy 2027 (see chapter «2027 Strategy»). Swissgrid's aims to guarantee the safety of people, systems and the environment at all times.

The Executive Board delegates 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 safety domains (see chapter «Mission»). 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 comply with safety standards and relevant laws and regulations. All employees have a duty and obligation to apply these principles.

¹Federal 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 addresses the topics of occupational health and safety and environmental protection as part

of an integrated health, safety and environment management system (HSE management system) certified in accordance with ISO 45001:2018 and ISO 14001:2015. The HSE management system applies to the entirety of Swissgrid. In particular, all business areas, bases and plants are part of the HSE management system. 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.

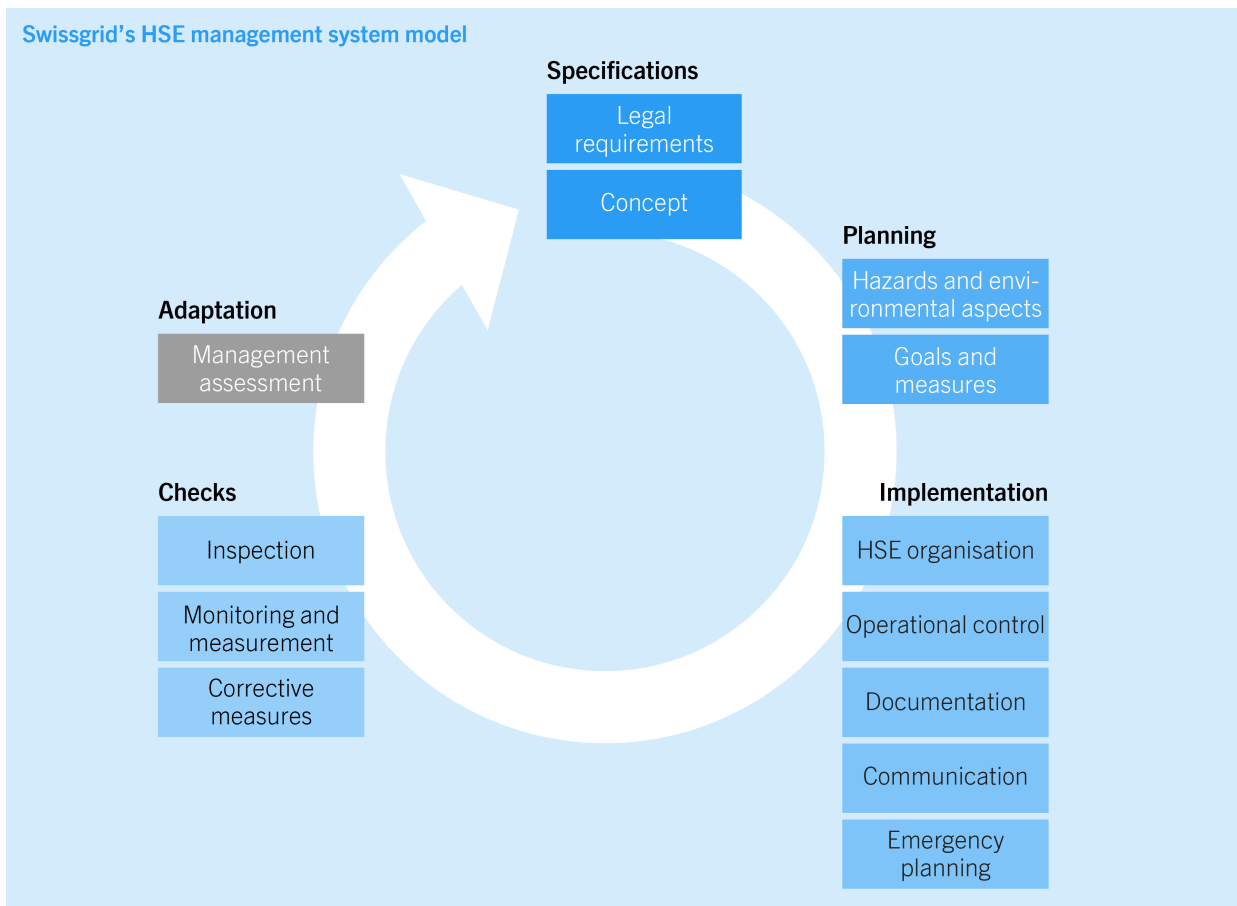
Covered by the audited and certified HSE management system	2023	2022	2021
Total Swissgrid employees	853	736	659
Proportion of internal employees covered by the ISO-certified/audited HSE management system	100%	100 %	100 %
Total external employees ¹	709	643	465
Proportion of external employees covered by the ISO-certified/audited HSE management system	100%	100 %	100 %
Total internal and external employees	1,562	1,379	1,124
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 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.

The following topics are covered by the HSE management system:

- Tasks and duties or the allocation of competences and responsibilities in the field of occupational safety, health and environmental protection;
- HSE targets for the continuous reduction of accidents, illnesses and environmental impacts, as well as measures or environmental programmes to achieve the targets;
- Behaviours and procedures to ensure occupational safety, health protection and operational environmental protection, as well as conformity with the relevant legislation.

The HSE management system follows the PDCA management model («plan-do-check-act»). This management model is based on continuous improvement of HSE performance. The following diagram gives an overview of Swissgrid's HSE management system model:



Aim and implementation of the HSE management system

The aim of Swissgrid's 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.

Proposals for possible improvement measures are derived from hazard assessments, recorded accidents and near misses, environmental relevance analysis and 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».

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 2023, the Swiss Safety Center confirmed Swissgrid's integrated HSE management system as suitable, appropriate and effective, and thus successfully recertified it. The result shows further progress compared to the previous year. Particular emphasis was placed on the «Safety First» philosophy and the continuous development of the safety culture throughout the company.

GRI 403-2, 403-3, 416-1

Risks and hazards

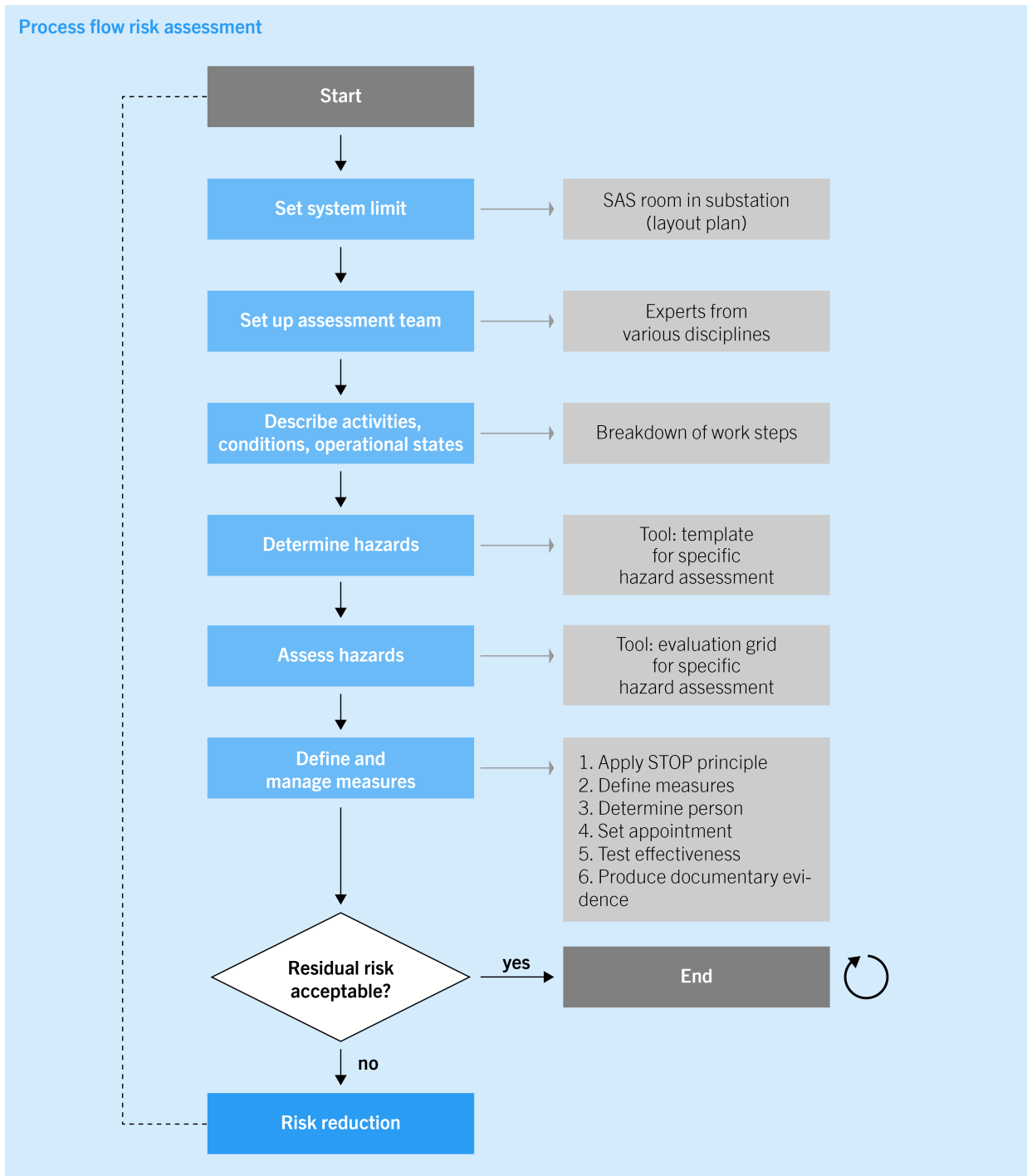
There is considerable potential for serious personal injury, environmental damage and damage to property in Swissgrid's area of activity. Swissgrid has therefore categorised the risks relating to personal safety as «high» to «very high» as part of its company-wide risk management. Swissgrid proactively identifies the relevant risks and hazards, assesses them and eliminates them 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 measures according to the STOP principle. The STOP principle describes the hierarchy of the effectiveness of measures from S (substitution) via T (technical measures) and O (organisational measures) through to P (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.



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 incident.

The findings form the basis for identifying risks that could increase the likelihood of new incidents or jeopardise Swissgrid’s objectives. The extent of these risks is also determined by the responsible departments («risk treatment strategy»). Event analyses 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 incidents 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 the following five potential hazards with a risk of serious injury. In 2023, one occupational accident was caused in one of the identified hazard areas. The accident, which occurred while a specialist company was carrying out forestry work, fortunately did not result in any serious health problems for the persons involved. An overview of the type and consequences of occupational accidents in 2023 can be found in the «Overview of key figures in the area of occupational health and safety».

Hazard potential	Accidents in the reporting period ¹	Measures
Work near live high-voltage systems	None	<ul style="list-style-type: none"> • Implementation of the legal requirements relating to plant equipment and employee training. • 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	None	<ul style="list-style-type: none"> • Promotion of training for authorised trainers in accordance with Directive No. 245 of the Federal Inspectorate for Heavy Current Installations (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	1	<ul style="list-style-type: 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	None	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: 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

Swissgrid's regular HSE inspections 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 2023, a total of 357 HSE inspections were carried out by project employees and the Health & Safety team. In 22 cases, the inspectors found situations that were classified as a medium safety risk, and in eight cases 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.

	2023	2022	2021
Number of HSE inspections carried out	357	368	239
Number of HSE inspections with medium risk	22	36	15
Percentage of HSE inspections with medium risk	6.2%	9.8%	6.3%
Number of HSE inspections with high risk	8	1	6
Percentage of HSE inspections with high risk	2.2%	0.3%	2.5%

GRI 2-26, 403-2, 403-3, 403-4, 403-5, 403-6, 403-10

Measures

Measures to strengthen the safety culture

Swissgrid attaches great importance to continuously strengthening its safety culture. That is why the company introduced the Safety Culture Ladder method in 2020. It was successfully certified at level 3 in 2022. During the 2023 recertification, 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 and the motivation to say «STOP» in the event of doubt or danger were seen as particularly positive. In addition, the systematic consideration of human and organisational influences in incident analyses was perceived as very positive. The team of auditors sees potential for improvement in the culture of dialogue in particular, as open and honest communication forms the basis for a good safety culture. 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.

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. Swissgrid's onboarding programme also includes topics such as personal protective equipment, information security, business continuity management, enterprise risk management and crisis management.
- **Safety Security Days:** The mandatory «Safety & Security Days» introduced in 2022 were held for the second time in 2023. The aim of this year's event was to raise awareness of safety among all employees in the areas of safety culture, cybersecurity, use of electricity and first aid. Employees learnt about these topics and deepened their knowledge through theoretical lessons and practical exercises. In the area of targeted cultural development, employees were encouraged to communicate on sensitive topics openly and without fear of negative consequences.
- **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 SUVA.

Safety culture in practice

The «Safety culture in practice» course was launched for the Grid Infrastructure business area in order to promote safety in everyday working life, to strengthen a sense of responsibility and to develop safety-oriented management behaviour. All employees with line and project responsibilities, as well as employees who manage service providers, took part. Topics included the various safety aspects that apply in the course of a project and the need for coordination between all parties, as well as the application of the STOP principle.

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. People who say STOP and report the corresponding risk are protected by Swissgrid's Whistleblowing Policy.

«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. Whistleblowers are protected by Swissgrid's Whistleblowing Policy. In 2023, 118 reports were submitted via the «RiskTalk» app.

Further safety measures

- **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 during planning activities and work, as well as any sports and leisure activities, that are undertaken near lines.
- **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 and immediately inform their superiors and the safety officers.
- **First aid at Swissgrid:** Trained first responders and evacuation assistants work at all Swissgrid sites. Currently, 66 Swissgrid employees are trained as first aiders. This corresponds to 8% of all employees. Repeat courses are organised every two years. In addition, Swissgrid teaches all employees basic first aid and minimum firefighting skills at the «Safety & Security Days».

Measures for health protection

- **Completion of health checks:** Swissgrid recognises its responsibility for the health of its employees and fulfils its legal mandate. Swissgrid's night and shift workers undergo a compulsory annual health check by an independent body. In addition, those employees who have to climb masts 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.
- **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. All employees also have mandatory insurance for leisure-time accidents (non-occupational accidents), including accidents during the commute to and from work (if they work at Swissgrid for at least eight hours per week). 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. In addition, Swissgrid employees benefit from various discounts to promote their health, including fresh seasonal fruit provided free of charge every day and discounted fitness offers, for example.

GRI 403-9, 403-10

Overview of key figures in the area of occupational health and safety

Occupational accidents: in the 2023 reporting year, there were no occupational accidents involving Swissgrid employees resulting in death, absence from work or health impairments. However, there were four occupational accidents without absence from work.

In the same period, five occupational accidents resulting in absence from work and minor health impairments were registered among employees who were working at Swissgrid construction sites and workplaces on behalf of a service provider.

Occupational accidents – Swissgrid employees ¹	2023	2022	2021
Number of hours worked ¹	1,512,785	1,231,256	1,134,097
Number of occupational accidents	4	2	5
Deaths due to occupational accidents	0	0	0

Occupational accidents – Swissgrid employees ¹	2023	2022	2021
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	0	0	1
Number of occupational accidents without absence from work	4	2	4
Occupational accidents per 200,000 hours worked (TRIF)	0.53	0.32	0.88
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	0	0.18
Rate of occupational accidents without absence from work ⁴	0.53	0.32	0.71

¹ Data shown for 853 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 – service providers ¹	2023	2022	2021
Number of occupational accidents	5	17	4
Deaths due to occupational accidents	0	0	0
Number of occupational accidents resulting in absence from work and serious health impairments ²	0	2	0
Number of occupational accidents resulting in absence from work and minor health impairments ³	5	15	4
Number of occupational accidents without absence from work	0	0	0

¹ Data includes all companies contacted by Swissgrid as well as accidents that occurred during work at Swissgrid construction sites and workplaces. Data on the number of employees and their hours worked for Swissgrid is not yet recorded (planned for 2024/ 2025).

² No recovery within six months or permanent impairment.

³ Recovery within six months.

Cause of occupational accidents: the most common cause of the nine occupational accidents is «cuts or pricks» (44%), followed by «colliding with objects» (22%).

Cause of accidents (employees and service providers)	2023		2022		2021	
	Number	%	Number	%	Number	%
Falls	1	11%	1	5%	2	22%

Cause of accidents (employees and service providers)	2023		2022		2021	
	Count	%	Count	%	Count	%
Overexertion	0	0%	1	5%	0	0%
Tripping	0	0%	2	11%	2	22%
Colliding with objects	2	22%	4	21%	1	11%
Falling objects	1	11%	2	11%	1	11%
Becoming trapped	0	0%	3	16%	1	11%
Flying parts	0	0%	2	11%	0	0%
Stepping on or into something	1	11%	3	16%	0	0%
Being bumped into	0	0%	1	5%	0	0%
Hot parts and fabrics	0	0%	0	0%	1	11%
Injuries caused by animals	0	0%	0	0%	1	11%
Cuts or pricks	4	44%	0	0%	0	0%
Others	0	0%	0	0%	0	0%
Total	9		19		9	

Work-related illnesses: in the last three years (2021–2023), 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.

Work-related illnesses	2023	2022	2021
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

Attracting, retaining and developing skilled workers

Vision and goals

The decarbonisation of the electricity system and rapidly changing regulatory requirements are increasing the dynamics of the environment in which Swissgrid operates. In order to be able to address these new and constantly changing requirements, Swissgrid set itself the goal of accelerating its development into an innovative, highly digitalised company in its Strategy 2027 (see chapter «2027 Strategy»). Consequently, Strategy 2027 summarises various measures to develop the relevant skills within the company as part of the «Operational Excellence» priority. Gaps in skills are closed by programmes that are tailored to individual needs. This increases Swissgrid's attractiveness as an employer, allows it to recruit the talent it needs, and strengthens employees' level of identification with the company. The following guiding principles promote the achievement of objectives:

- Employee loyalty is achieved not least through a good corporate culture. The aim is to promote cooperation, networking and mutual trust.
- Swissgrid has modern working conditions and is constantly developing them, because motivation

and health have a positive effect on individual performance. For this reason, the company promotes a working atmosphere in which all employees feel comfortable and can develop their skills. Swissgrid encourages its employees to progress, make decisions, take responsibility, and to develop and implement their own innovative ideas.

Management approach

Swissgrid is dependent on highly qualified employees. The company can only fulfil its complex mission if it has a well-trained and motivated workforce. It can also be assumed that humans will become even more important in the future, despite the increased use of machine intelligence in the world of work. 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 promoting agile, self-organised and highly customer-oriented 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.

These approaches will help Swissgrid to reduce the risks associated with the recruitment, retention and development of employees. Swissgrid considers the lack of suitable specialists to be the greatest risk. The struggle to find employees with the necessary expertise and qualifications will become even more acute in a labour market suffering from a shortage of skilled workers. In addition to the measures mentioned above, Swissgrid is therefore increasingly focusing on the training and further education of talented young employees. It is also important to respond appropriately and rapidly to the latest trends in the world of work. The original understanding of work as simply earning a living is becoming increasingly outdated: traditional principles are being replaced by new ones, such as «meaningfulness». The working methods of the future will also feature a high degree of virtualisation of working equipment, networking of people and stronger cooperation, combined with greater flexibility of employees' places of work, working times and job content.

GRI 2-7, 2-8, 405-1

Swissgrid employees

As at 31 December 2023, 853 people were employed by Swissgrid (180 women and 673 men). Compared to the 2022 reporting year, the number of employees has increased by 16%. The reasons for this growth include Swissgrid's additional areas of responsibility in accordance with the Winter Reserve

Ordinance, which came into force in February 2023, the internalisation of functions previously performed by external service providers (particularly in the Grid Infrastructure business area), the strengthening of critical functions to reduce the risk of failure (particularly in the System Operations business area) and the company's increasing need for digitalisation and innovation.

	2023				2022				2021			
	Women	Men	Total	Percentage	Women	Men	Total	Percentage	Women	Men	Total	Percentage
Swissgrid employees												
Total internal employees ¹	180	673	853	100%	163	573	736	100%	145	514	659	100%
Full-time employees	93	555	648	76%	83	481	564	77%	80	442	522	79%
Part-time employees	87	118	205	24%	80	92	172	23%	65	72	137	21%
Permanent employees	161	622	783	92%	144	535	679	92%	130	487	617	94%
Temporary employees ²	18	41	59	7%	19	30	49	7%	15	18	33	5%
Without guaranteed working hours ³	1	10	11	1%	0	8	8	1%	0	9	9	1%
< 30 years	34	81	115	13%	27	57	84	11%	30	44	74	11%
30 – 50 years	122	397	519	61%	112	344	456	62%	93	305	398	60%
> 50 years	24	195	219	26%	24	172	196	27%	22	165	187	28%
Executive Board	2	3	5	1%	1	4	5	1%	1	4	5	1%
Managers excl. Executive Board	13	99	112	13%	12	81	93	13%	10	75	85	13%
Employees without a management function	149	532	681	80%	137	460	597	81%	123	415	538	82%
Employees in training or paid by the hour	16	39	55	6%	13	28	41	6%	11	20	31	5%
Total external employees ¹	124	585	709	100%	113	530	643	100%	70	395	465	100%
Contracts via staff leasing companies ⁴	11	56	67	9%	8	34	42	7%	2	23	25	5%
Contracts via service providers ⁴	113	529	642	91%	105	496	601	93%	68	372	440	95%

¹ Data is given as numbers of employees (headcount) and not as full-time equivalents.

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 a service provider are usually employed for temporary projects that require technical competences that are only available to a limited extent within Swissgrid. This work is largely carried out in offices. 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

Measures to attract talent

Employer branding

In the reporting year, Swissgrid presented itself as a progressive employer on various platforms – for example on its website with videos of its employees. In these videos, the company addresses potential applicants directly and draws their attention to the large number of interesting positions in the company. Swissgrid also utilises recruitment events organised by universities and universities of applied sciences in Switzerland and abroad. The company ensures the right conditions for attracting the best talent by interacting directly with students and graduates. Swissgrid has created a new «Young Talent Manager» position that focuses on attracting and supporting young talent.

Training of apprentices

Switzerland's dual system for vocational education and training is unique and important for the country's economic success. Swissgrid offers various apprenticeships, such as computer scientist with a federal certificate of proficiency (EFZ) specialising in platform development, digital business developer EFZ or commercial clerk EFZ. Swissgrid has joined forces with the training partner libs (Industrielle Berufslehren Schweiz) in this area. Young apprentices can expect an exciting and varied apprenticeship in a modern, unique company.

National Future Day

As part of National Future Day, the company invites schoolchildren to watch their parents or relatives at work for a day and discover their daily routine. In the reporting year, a total of 50 children took part in the event at the Aarau and Prilly locations.

Attractive employer in the Universum survey

In the 2023 Swiss Universum survey of the most attractive employers, conducted 10,870 students, Swissgrid was ranked 28th in the «Engineering» category (previous year: 24th). Once again, this makes Swissgrid the best rated company in the energy sector in the «Engineering» category. This reflects the success of the measures implemented to attract new talent and the stronger positioning of Swissgrid as an attractive and innovative company.

New employees and employee turnover

In 2023, Swissgrid was able to recruit 159 new employees, while 58 employees left the company. This includes nine departures due to retirement and shows that the company has grown in line with its Strategy 2027.

	2023						2022			2021		
	Women		Men		Total		Women	Men	Total	Women	Men	Total
New employees and employee turnover												
New hires												
< 30 years	13	8%	40	25%	53	33%	15	32	47	16	23	39
30 – 50 years	22	14%	69	43%	91	57%	17	61	78	18	30	48
> 50 years	0	0%	15	9%	15	9%	2	7	9	2	6	8
Total	35	22%	124	78%	159	100%	34	100	134	36	59	95
Fluctuations, including retirements												
< 30 years	5	9%	18	31%	23	40%	14	17	31	9	15	24
30 – 50 years	9	16%	11	19%	20	34%	7	18	25	6	25	31
> 50 years	2	3%	13	22%	15	26%	3	14	17	2	10	12
Total	16	28%	42	72%	58	100%	24	49	73	17	50	67

GRI 2-21, 2-30, 201-3, 202-1, 203-1, 401-2, 402-1, 404-2, 404-3, 407-1

Measures to retain and develop talent

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 management staff (senior and specialist managers), which is based on the achievement of personal and corporate objectives, and for special remuneration for employees, 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 2023, the total annual remuneration, including performance-related remuneration, of the highest-earning person at Swissgrid was 5.89 times higher than the average total annual remuneration of all employees excluding the highest-paid person. In 2023, the average salary increase rate for all employees excluding the Executive Board was 0.8%. 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.

Comparative key figures on remuneration	2023	2022	2021
Ratio between the total annual remuneration ¹ of the highest-paid person and the median of all employees ²	5.89	5.55	5.19
Increase in annual remuneration ³ of the highest-paid person (%)	0%	6.38%	0%
Average increase ⁴ in annual remuneration ³ of all employees (%)	0.80%	0.80%	0%
Median increase ⁴ in annual remuneration ³ of all employees ² (%)	0%	0%	0%
Ratio of the percentage increase in annual remuneration ³ of the highest-paid person in relation to the median increase of all employees ²	0	7.98	0

¹ The total annual remuneration comprises both fixed and variable salary components.

² All employees excluding the highest-paid person.

³ The annual remuneration refers to the fixed salary component excluding variable remuneration.

⁴ The increase was calculated and excludes salary increases due to promotions, lump sums to adjust for inflation and/or contractually defined structural salary increases.

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 wage 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 BVG. The premiums consist of contributions by the employer and the employees.

Pension provision at Swissgrid	2023	2022	2021
Cover ratio of PKE Vorsorgestiftung Energie as at 31.12.2023	n/a ¹	107.7%	125.2%
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 The coverage ratio for the current financial year is announced by PKE in its annual report and is not yet available.

Flexible working models

The company provides working conditions that ensure optimal collaboration within teams and across departments. Swissgrid also takes into account changing needs, such as improving employees' work-life balance, including the possibility of flexible working. For example, around a quarter of Swissgrid employees worked part-time in the reporting year. In addition to the «Workation» option, Swissgrid also offers its employees the option of working from home for up to 50% of their working hours, provided this allows them to fulfil their function.

Good Work

The digital transformation and the resulting pressure to innovate are increasingly giving rise to agile, self-organised working principles. Employees' expectations of their employers are shifting towards a desire for greater participation and autonomy. Swissgrid creates an attractive working environment to make sure that its employees are motivated and will stay with the company for as long as possible: this includes key elements such as an appreciative corporate culture with a high degree of self-organisation, and flexible project structures that combine the existing skills of employees in a decentralised manner in line with requirements.

Skills management

The further development of employees is a key concern for Swissgrid and is also 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. Skills assessments were carried out for 30% of employees to determine whether their current skills match the target skills that will be required in the future. These assessments will be carried out for all employees by the end of 2024. This will enable Swissgrid to create the basis for the systematic personal development of employees, tailored to their individual needs.

Internal recruitment for management positions

Swissgrid promotes employees, for example by offering numerous internal programmes in the areas of talent management and leadership development. In 2023, 57% of the management positions to be recruited were filled internally.

Regular performance appraisals

All employees with a permanent employment contract with Swissgrid receive regular performance appraisals. These meetings are mandatory and take place annually or, if desired, every six months. To assess the performance of employees in a consistent manner, employees and supervisors are given in-depth training in performance management. Performance appraisals are also 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. In addition, a pilot programme for the «360-degree feedback» assessment was carried out in 2023 as part of the skills management approach.

Regular performance appraisals	2023	2022	2021
Employees with regular performance appraisals	94%	94%	95%
Proportion of women	91%	92%	92%
Proportion of men	94%	95%	96%
Proportion of permanent employees	100%	100%	100%
Proportion of temporary employees	25%	33%	33%

Staffing of key functions

In addition to Swissgrid's long-established system of succession planning for managers, and the ascertainment of employees' potential, key functions were also identified for the first time in 2023. Swissgrid endeavours to spread the expertise needed for these functions across the company at an early stage. This also ensures the transfer of knowledge and the retention of expertise in the absence of key personnel.

Active involvement of employees

Swissgrid uses its Ideas Forum to better integrate the needs its employees. This applies not only to technical workplaces, but also to the entire working environment. More specifically, ideas are sought for technological development, virtual networking and collaboration in the modern workplace. The focus of the Ideas Forum in 2023 was on topics that were addressed in Strategy 2027: strengthening the corporate culture and skills within the company. The Ideas Forum not only recognises and develops ideas successfully, it also enables their rapid implementation.

Transition arrangements

Swissgrid offers its employees early preparation for retirement via external courses and events. They also have the option 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.

Collective agreements and staff representation

Swissgrid is not subject to a collective labour agreement. The interests of employees 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. According to the Federal Act on Information and Consultation of Workers in Businesses (Participation Act), employee 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. 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, the employee representatives are given 14 days to be heard. They also have the opportunity to make suggestions on how redundancies can be avoided.

Employee satisfaction

In order to identify potential for improvement as an employer, Swissgrid is interested in what its existing employees think of it as a company. Swissgrid therefore conducts employee surveys every two years. The last time this took place was in 2022. A clear majority of employees were satisfied with their overall work situation and rated Swissgrid as an attractive employer (on a scale of 0 to 100). The remuneration and working atmosphere in particular were rated as very positive.

Employee satisfaction ¹	2023 ²	2022	2021 ²
Women	80	80	88
Men	78	78	86
Total	78	78	85

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.

GRI 404-1, 404-2, 404-3

Measures for training and further education

Onboarding for new employees

Training and further education are central to equipping the workforce to do their jobs. For Swissgrid employees, training begins when they join the company. The induction programme introduces the most important topics and regulations relevant to the company, including Swissgrid's Code of Conduct. There are also in-depth specialist onboarding and other training programmes tailored to the functions in various specialist areas. Examples include the training courses held as part of the new Enterprise Resource Planning solution in 2023.

Training with a strategic focus

In 2023, Swissgrid launched the Innovation Days as a measure to help it to develop into an innovative and highly digitalised company, as envisaged in the strategy. In particular, the event is designed to strengthen the company's innovative strength and culture. At the Innovation Days, Swissgrid offers all employees training on new technologies and innovative methods. Swissgrid also organised the mandatory Safety & Security Days for the second time in a row to promote a culture of safety within the company.

Train-the-trainer programme

Training courses at Swissgrid are held by internal experts, and can take the form of face-to-face events or e-learning courses. The internal experts receive didactic and pedagogical support and are given training several times a year. The train-the-trainer programme was further developed and improved in 2023. The quality of internal training and development is ensured through systematic feedback management and reviews, among other things. More than 85% of the feedback on internal training courses rated them as good or very good.

New training programme

Swissgrid has been offering opportunities for personal development since June 2023 with a comprehensive range of online training courses focusing on soft skills, health, digital skills and communication. This new range of courses is supplemented by operational training and further education: in the current reporting year, training hours were recorded primarily in the categories «Operator training» (27%), «Safety & security» (20%) and «IT and tool training» (11%). Other important topics include compliance, project management, processes and principles.

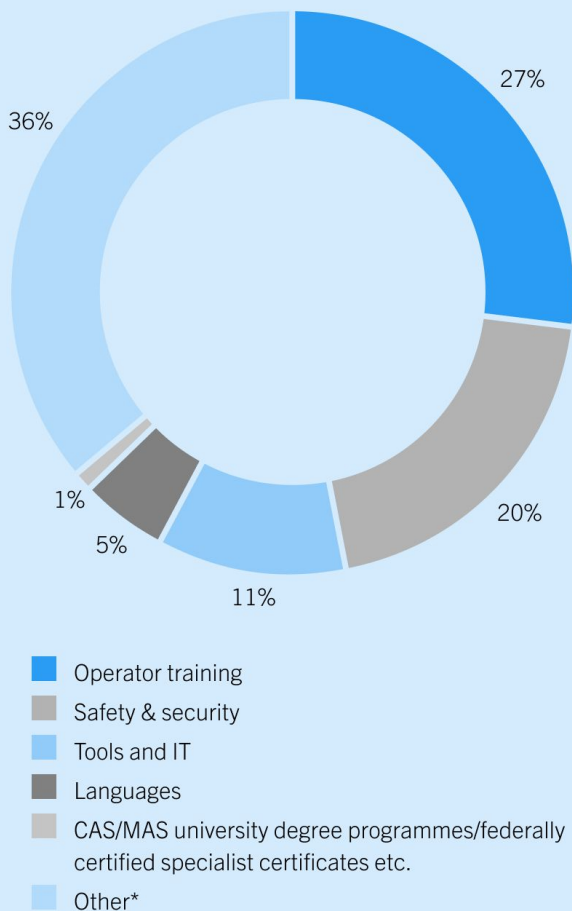
Swissgrid promotes the language skills of its employees

Swissgrid's corporate languages are defined as German and French, however knowledge of several languages is required due to employee's activities throughout Switzerland and the country's multilingualism. In 2023, 62 people attended a language course in German, 85 in French, 29 in English and 16 in Italian.

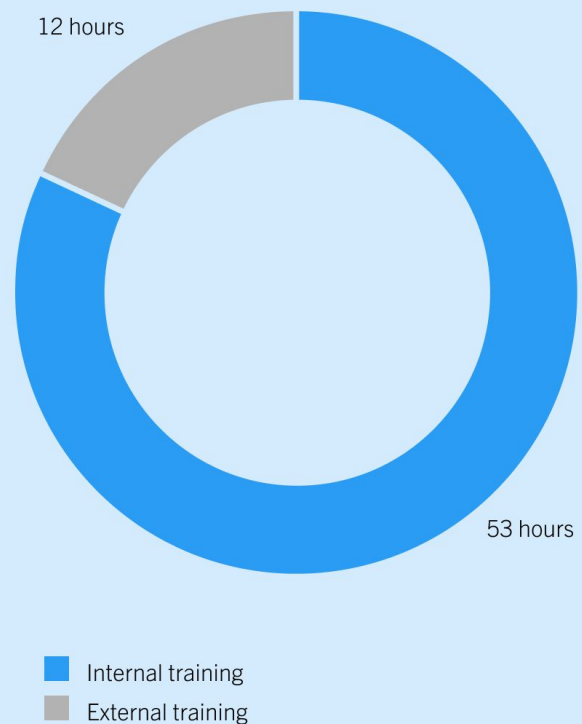
External training and further education opportunities

Whenever training needs cannot be covered internally, Swissgrid facilitates attendance of external training courses. In 2023, 31 employees completed further training at universities of applied sciences or universities. The majority obtained Certificates of Advanced Studies or Masters of Advanced Studies.

Categories of training courses in 2023



Average number of hours spent in training and further education in 2023



* Examples from the «Other» category include training on directives (e.g. compliance), project management training, individual topics such as «The Climate Fresk» or «Innovation Days», as well as

basic and onboarding training courses that are not covered by the topic categories listed here.

In 2023, Swissgrid employees invested an average of just under 65 hours or around 1.5 weeks in their training and further education.

Executive Board	Managers	Employees (without a management function) ¹	Employees in training/paid by the hour ²	Total (hours)
(excl. Executive Board)				
33.6	50.8	73.0	30.1	67.1
32.8	55.8	58.7	25.3	55.2
33.3	51.3	69.9	28.7	64.6

¹ Excluding employees in training/paid by the hour.

² This includes interns, doctoral students, apprentices and employees paid by the hour.

Diversity and inclusion

Vision and goals

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. This principle is enshrined in Swissgrid's Code of Conduct. At the same time, Swissgrid not only promotes creativity and innovation within the company, but also increases the agility and performance of its employees and business areas. The following principles are therefore part of Swissgrid's diversity and inclusion strategy:

- 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 a directive, along with corresponding implementation provisions for 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, which guarantees equal opportunities and the framework conditions for this and in which employees feel comfortable, contribute ideas, take responsibility and openly address challenges or conflicts.

Management approach

The world of work is becoming increasingly dynamic as a result of digitalisation. What is more, it is affected by the «VUCA» phenomenon, i.e. increasing volatility, uncertainty, complexity and ambiguity. Swissgrid relies on a wide variety of employees to cope with this increasingly complex environment. Diverse teams with different skills, strengths, personalities, ideas and perspectives, but also with

different characteristics such as gender, age, origin, education and length of service, are needed to promote creativity and innovation, as well as a high level of agility.

Swissgrid applies various approaches to maintain a high level of diversity within the company. This involves focusing on the structures and processes within the company, the corporate culture and the understanding of leadership. Equal opportunities are promoted by inclusive structures and processes – such as career paths – that are suitable for different groups. A culture of inclusion leads to fewer conflicts, greater employee satisfaction and lower staff turnover. These objectives are also achieved thanks to an inclusive understanding of leadership and consideration for the needs of diverse employees.

Diversity and inclusion are increasingly becoming a competitive factor. Without appropriate management, there is a risk of no longer being able to attract employees with the necessary skills and qualifications to work for Swissgrid. The company is therefore treading new paths to further increase its attractiveness as an employer.

GRI 202-2, 405-1

Overview of diversity at Swissgrid

The Executive Board has five members, including a CEO. In the reporting year, the Executive Board consisted of three men and two women from German-speaking, French-speaking and Romansh-speaking Switzerland. The Board of Directors is the company's supreme 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 of the Board of Directors and Executive Board	Board of Directors		Executive Board	
	Number	%	Number	%
Gender				
Men	8	89%	3	60%
Women	1	11%	2	40%
Age				
< 30 years	0	0%	0	0%
30 – 50 years	1	11%	1	20%
> 50 years	8	89%	4	80%
Place of origin				
German-speaking Switzerland	7	78%	2	40%
French-speaking Switzerland	1	11%	2	40%
Italian-speaking Switzerland	1	11%	0	0%
Romansh-speaking Switzerland	0	0%	1	20%

In 2023, Swissgrid employed 180 women in its operational business areas, 8% of whom have management responsibility in these areas. This corresponds to 13% of operational management

positions. A detailed overview of the composition of Swissgrid’s employees by gender, age, employment and position can be found in the «Swissgrid employees» and in the GRI index (GRI 405-1). Swissgrid’s employees come from 39 nations. The majority, 68%, are from Switzerland, and 18% are from Germany.

Country of origin of employees ¹	Number	%
Switzerland	576	68%
Germany	153	18%
France	20	2%
Italy	17	2%
Spain	11	1%
Greece	10	1%
Other (33 nations)	66	8%

¹ Multiple citizenships are not recorded.

GRI 401-2, 401-3, 405-2

Measures

Work-life balance

Promoting work-life balance is a cornerstone of Swissgrid’s HR strategy. Changing needs are taken into account, and solutions are generally made available to all employees. These can include hybrid working or alternative working models such as job sharing and part-time work. Swissgrid also 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.

Parental leave

Parental leave is granted in accordance with the statutory provisions (14 weeks) and, in the case of paternity leave, an extra week 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 2023, four female employees and 20 male employees became parents at Swissgrid. All employees resumed their roles at the end of their parental leave. The retention rate of employees 12 months after resuming work was also 100% in 2023.

2023

2022

2021

Key figures for parental leave	2022			2021			2020		
	Women	Men	Total	Women	Men	Total	Women	Men	Total
Employees entitled to parental leave	4	20	24	5	19	24	8	22	30
Employees who have taken parental leave	4	20	24	5	19	24	8	22	30
Employees who are still on parental leave ¹	0	0	0	0	2	2	2	5	7
Employees resuming their function after agreed parental leave	4	20	24	4	17	21	6	16	22
Return rate	100%	100%	100%	80%	100%	95%	100%	94%	96%
Employees who were still employed 12 months after their return to work	4	17	21	6	16	22	n/a	n/a	n/a
Retention rate	100%	100%	100%	100%	100%	100%	n/a	n/a	n/a

¹ As at the end of the relevant reporting year.

Equal pay

Equal pay for work of equal value is a matter of course for Swissgrid. Swissgrid has created transparency in this regard with the introduction of role-based salary bands in 2019. In 2023, 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 3.5% (2021: 3.8%), the result of the audit remains 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.

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 who report serious compliance violations are protected by Swissgrid's Whistleblowing Policy. This aims to encourage the reporting of misconduct and defines the confidentiality of reports and the protection of whistleblowers.

Inclusive leadership

As part of its Strategy 2027, Swissgrid is strengthening eight cultural dimensions, including feedback, trust and learning. One of these dimensions is inclusive leadership. This means that managers take into account the diversity of their employees and their needs, ensure equal opportunities and create the necessary framework conditions. Leaders promote a climate of respect, trust and (psychological) security in which all employees can contribute their knowledge and experience and develop their full potential. Inclusive leadership is part of Swissgrid's corporate culture and the aim is to anchor even more firmly throughout the company.

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. In order to establish these principles even more firmly within the company, managers receive targeted training on various aspects of inclusive leadership. At the 2023 management meeting, awareness was raised about dealing with «unconscious bias», and moderated discussions were held to promote an open feedback culture.

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 negotiation coaching.

Discrimination reports: in the 2023 financial year, no cases of discrimination were reported to the external reporting centre, via the «RiskTalk» app or to Compliance.

Reports of cases of discrimination	2023	2022
Via external reporting centre	0	0
Via RiskTalk app	0	0
Via Compliance	0	0
Total	0	0



Partnership

Swissgrid groups the material topics of «Governance, compliance, anti-corruption and risk minimisation», «Supply chain sustainability» «Stakeholder engagement» and «Transparency» together under «Partnership». Responsible corporate governance is a matter of course for Swissgrid as part of its legal mandate. It is also essential for Swissgrid to be able to network effectively to enter into constructive partnerships, and to ensure a sustainable supply chain.

Supply chain sustainability

Vision and goals

Swissgrid strives to ensure high-quality, innovative and sustainable public procurement of its required products, work and services. To this end, Swissgrid has made the following strategic directions part of its Strategy 2027:

- Swissgrid is constantly developing the procurement management system in order to strengthen due diligence along the value chain;
- Swissgrid is expanding the mandatory sustainability criteria for suppliers;
- Swissgrid is systematically integrating life cycle assessments into the procurement of various product groups.

As part of its corporate objectives for 2023, Swissgrid also aims to take sustainability into account for

the majority of public procurement contracts and develop new sourcing strategies that include reductions in CO₂.

GRI 203-1

Management approach

The Swiss transmission grid is one of the most secure and stable electricity grids in the world. Swissgrid can only ensure that this remains the case thanks to its suppliers, who support the company in various ways. Suppliers therefore play a particularly important role for Swissgrid. The main selection criteria are high quality and reliability, innovative ability, cost-effectiveness and a focus on sustainability.

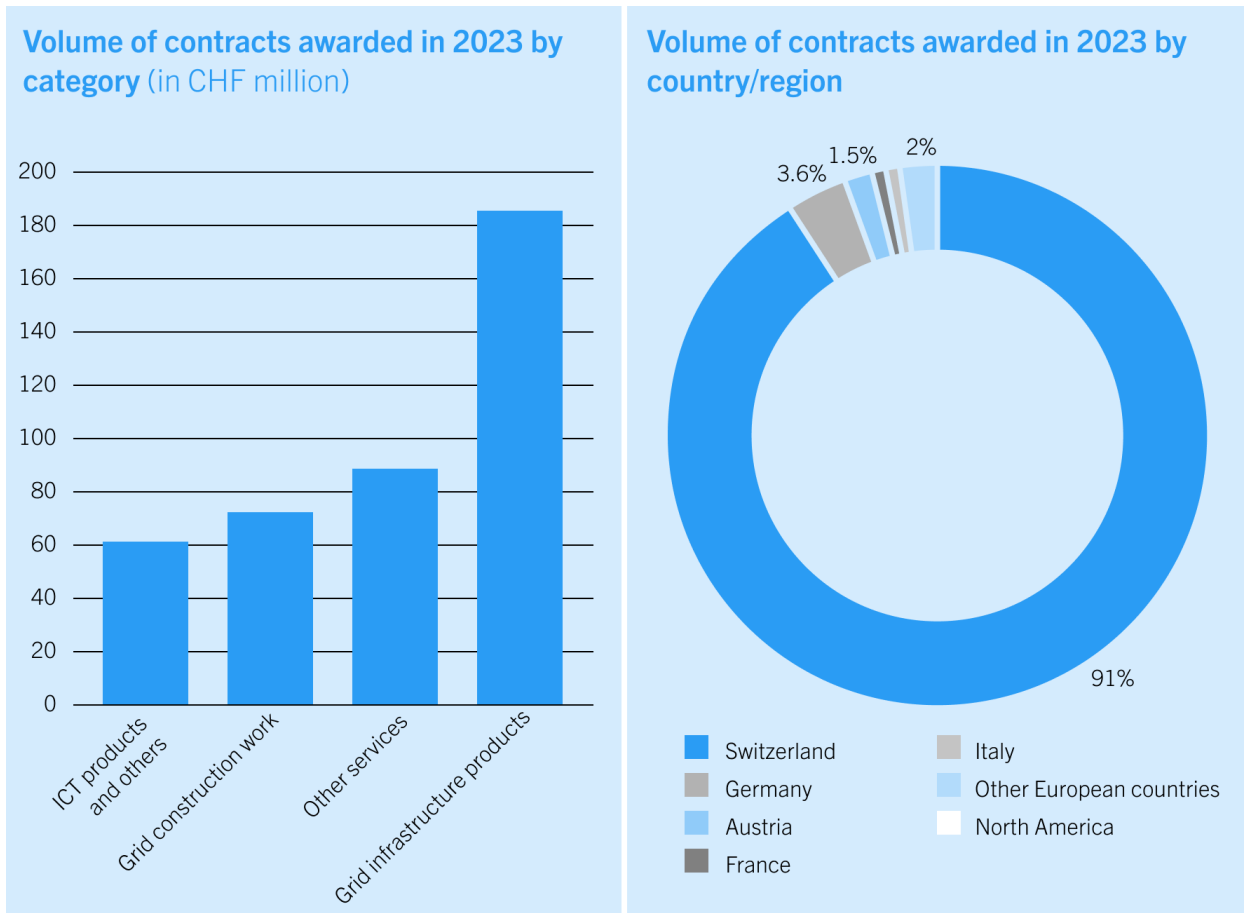
As the national grid company, Swissgrid is subject to Swiss procurement law. When issuing tenders, Swissgrid takes into account the objectives of public procurement, which include in particular the economically, ecologically and socially sustainable use of resources. As an awarding authority with a total procurement volume of over CHF 400 million in 2023¹, Swissgrid is aware of its special economic responsibility and therefore also promotes effective and fair competition among providers. Swissgrid fully digitalised its procurement process in January 2023 and, in accordance with the regulatory requirements, provides information once a year on contracts subject to public procurement law that are worth in excess of CHF 50,000.

¹ All key figures for procurement given in this section relate to the period January – November 2023, except for the key figures that were explicitly collected as at 31 December 2023.

GRI 2-6, 203-1, 204-1

Swissgrid's supplier portfolio

Swissgrid procures a wide range of products and services. In 2023, work in building construction and civil engineering represented a contract volume of CHF 257 million. This also included the provision of technical components for the grid infrastructure such as transformers, high-voltage switching substations and components, conductors, high-voltage cables and steel for pylons. The remaining expenditure relates to IT, other operating products (15%) and various services (22%). Around CHF 371.6 million, which corresponds to over 90% of the contracts awarded by Swissgrid, was attributable to local suppliers headquartered in Switzerland, followed by suppliers from Germany and Austria (5%).



In total, Swissgrid awarded contracts to 282 suppliers in 2023. Of these, around 30 suppliers were categorised as critical in the past financial year in terms of order volume, the importance of the products and/or services procured, and the scope and complexity of the relationship with the supplier.

GRI 2-23, 2-24, 205-2

Sustainability Charter for Suppliers

Sustainability is a major consideration for Swissgrid in the supplier selection process. In 2022, the Executive Board adopted the Sustainability Charter, which is a central component of the qualification process and is mandatory for all suppliers whose contract threshold value exceeds CHF 150,000. The charter comprises 13 sustainability principles – including respect for human rights, the prohibition of child labour, forced labour and discrimination, freedom of association, fair remuneration, employee health and safety, the implementation of anti-corruption measures and environmental protection. Swissgrid also requires its suppliers to oblige their subcontractors to comply with these sustainability principles.

The Sustainability Charter also stipulates that suppliers must report any incidents, behaviour or other circumstances that constitute, could be regarded as or could potentially 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 (see table on «Supplier inspections»). In the event of a breach of the principles of the

Sustainability Charter, Swissgrid may also take the steps as outlined in the contractual provisions.

GRI 308-1, 308-2, 414-1, 414-2

Risk analysis and assessment

Supply chain risks are recorded as part of the company-wide Enterprise Risk Management (ERM) System. Occupational safety risks due to potential personal accidents on installations were generally categorised as «very high» – both for Swissgrid employees and for external employees. A detailed description of the risks and the management approach in the area of occupational health and safety can be found in the corresponding section.

Other risks identified under ERM with regard to Swissgrid’s supply chain include delays to grid projects due to poor-quality deliveries or significant excess costs, reduced grid capacity caused by bottlenecks in material deliveries and the provision of services, and reputational risks due to inadequate sustainability practices on the part of suppliers. The latter also include risks in the area of human rights and environmental protection (see subsections within the report). These three risk categories are classed as «low» to «medium», taking into account their probability of occurrence, the extent of damage and the risk mitigation strategies implemented. In order to recognise risks of this kind at an early stage, Swissgrid regularly monitors price trends, congestion risks and other elements for all procurement criteria.

In addition, Swissgrid has had the sustainability performance of its suppliers and providers assessed by an independent, specialised agency since the beginning of 2023. Participation is voluntary. In the past financial year, 72 suppliers and providers were assessed by Swissgrid to rate their sustainability with regard to the environment, labour and human rights, ethics and sustainable procurement. More than 86% of the companies assessed have a good or advanced sustainability performance on average. For 10 companies (around 14%), the sustainability assessment was only partially satisfactory. Seven of these ten companies are small to medium-sized service providers from the IT sector and have a need to catch up, particularly when it comes to the sustainability management of their own supply chain. This may be due to a lack of guidelines and risk analyses for sustainable procurement, or to a lack of verification mechanisms along the supply chain, such as audits, for instance.

Evaluation of environmental and social impacts ¹	Number
Potential environmental impacts²	
Total suppliers and providers screened for environmental impacts	72
of which with a good, progressive or above-average environmental sustainability rating	58
of which with a partially satisfactory environmental sustainability rating	14
of which with an unsatisfactory environmental sustainability rating	0
Areas identified with a need to catch up (examples)	Lack of environmental and biodiversity guidelines, lack of ISO 14001 certification, no meaningful reporting
Potential social impacts in the area of labour and human rights²	
Suppliers and providers screened for social impacts with regard to labour and human rights	72

of which with a good, progressive or above-average sustainability rating	70
of which with a partially satisfactory sustainability rating	2
of which with an unsatisfactory sustainability rating with regard to labour and human rights	0
Areas identified with a need to catch up (examples)	Lack of guidelines on working conditions, social dialogue and/or human rights, no meaningful reporting

¹ As at 31 December 2023.

² The assessment of the potential impact is based on a sustainability assessment by an independent agency and takes various aspects into account. These include guidelines, implementation programmes and key figures, as well as non-financial public reporting.

In order to provide a more detailed analysis of the medium and long-term risks and challenges associated with a resilient supply chain, Swissgrid, in collaboration with five other European transmission system operators, also commissioned a risk study in 2023 focusing on five critical grid components (transformers, pylons, conductors and high-voltage cables, switchgears and power electronics). It assessed risks relating to the international gap in supply and demand, competition with other sectors, market concentration, bottlenecks in the downstream value chain, critical dependence on raw materials, technical expertise and sustainability. The results of the study are expected to be available in 2024.

GRI 308-1, 308-2, 414-1, 414-2

Measures for a sustainable supply chain

Sustainability as a suitability or award criterion

In order to address the risks identified in its supply chain and to promote sustainability in its procurement processes, Swissgrid systematically integrates environmental and/or social aspects as suitability and/or award criteria in the procurement of products, work and services. The specific criteria and their weighting are defined depending on the procurement category, taking into account the market situation, volume and potential risks, and include requirements in one or more of the following areas:

- **Certifications:** When it comes to the relevant procurement of construction work, grid components and/or engineering services, Swissgrid requires internationally recognised certifications, for example in the areas of quality management (ISO 9001), occupational health and safety (ISO 45001, Safety Culture Ladder and/or environmental protection (ISO 14001); for the procurement of IT equipment, internationally recognised energy efficiency and management certificates are required (e.g. ISO 50001, TCO certifications, Energy Star or Blue Angel).
- **Capitalisation of quantitative sustainability criteria for products:** When procuring selected grid components, such as transformers, Swissgrid requires the capitalisation of active power losses as standard. These are taken into account by adding them to the bid price as self-constructed assets. The calculated losses are checked on-site by Swissgrid during factory acceptance tests. If the contractually agreed loss values are exceeded or undercut, a contractually agreed monetary penalty or bonus is applied. In this way, the capitalisation of active power losses ensures and combines the legal requirements with regard to economic efficiency and sustainability in procurement. A similar approach is adopted in relation to noise emissions from products.
- **Sustainable business practices:** Swissgrid uses award criteria to promote sustainable business practices, which vary depending on the type of product group. Examples 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 sustainability ratings and/or strategies, including measures to reduce emissions, social inclusion and/or the well-being of employees; the existence of calculations of greenhouse gas emissions and/or emission reduction targets; and life cycle assessment calculations in accordance with ISO 14004:2006 or ISO 14040:2006 of at least one component to be procured.

In 2023, Swissgrid took at least one sustainability criterion into account in more than 98% of tenders carried out in accordance with public procurement law (i.e. contracts worth over CHF 150,000). Providers were evaluated according to environmental sustainability criteria in 143 of these tenders, while social sustainability criteria were used to evaluate providers in 135 tenders. In several tenders, both ecological and social requirements were demanded as suitability and/or award criteria.

Application of sustainability criteria	Number
Total tenders carried out (contract value > CHF 150,000)	165
Of which tenders ¹ with environmental sustainability criteria	143

Of which tenders¹ with social sustainability criteria

135

¹ At least one supplier is awarded the contract for each tender. However, depending on the type and volume of the tender, more than one supplier may be selected.

Procurement strategies that take sustainability into account

Swissgrid regularly develops and updates its procurement strategies for specific product groups in order to proactively counter procurement risks and capitalise on opportunities. Sustainability risks, opportunities and options have also been included since the beginning of 2021, and have even been systematically integrated into procurement strategies since 2023. In 2023, Swissgrid developed an updated procurement strategy for air-insulated switchgears, taking into account the CO₂ reduction potential over the entire life cycle of the systems. The company has also started updating its procurement strategies to include sustainability aspects in four other product groups (pylons, construction, own requirements and firefighting). The updated procurement strategy in the construction sector includes options for strengthening the circular economy in addition to the CO₂ reduction potential (see chapter «Environmental protection, biodiversity and circular economy»).

Partnership with other transmission system operators

Along with five other 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. Swissgrid and three members of the initiative developed a joint catalogue of social and ecological criteria for products and services in 2023, and undertook to introduce these criteria in future procurements. Based on a comprehensive exchange of experience, the transmission system operators have also developed recommendations to harmonise the procedure and requirements for suppliers with regard to life cycle assessment of critical grid components.

Risk-based review during the implementation phase

For contract management purposes, Swissgrid also carries out a risk-based review of sustainability principles and focuses accordingly on the areas of occupational safety and environmental protection (see subsections within the report). In 2023, Swissgrid had a total of 357 HSE inspections carried out by suppliers' employees, including inspections of structural and civil engineering work and work involving substances hazardous to the environment and health. In addition, Swissgrid organises training programmes on occupational safety for its grid system operators at least once a year.

Supplier inspections ¹	Number
HSE inspections carried out	357
Suppliers audited	105
Suppliers with whom corrective measures were agreed upon	40
Suppliers whose contracts were cancelled due to violations	0

¹As at 31 December 2023.

Respect for human rights

GRI 2-23

Vision and goals

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 standards. 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.

Swissgrid's commitment to respecting human rights is in accordance with the principles of the Code of Conduct adopted by the Board of Directors, the Sustainability Charter for Suppliers and internal directives on occupational health and safety, environmental protection and the protection of personal integrity. It includes the following fundamental principles in particular:

- 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 recognises its obligation to respect human rights throughout the company. This applies to all internal employees, members of the Executive Board and the Board of Directors, and to external employees and suppliers of Swissgrid.

GRI 2-23

Management approach

Swissgrid updated its risk analysis with regard to compliance with human rights in 2023. This took place in accordance with the Enterprise Risk Management System and considers the following aspects:

- Probability of occurrence and extent of risk due to Swissgrid's business activities and direct suppliers («Tier 1» suppliers). This area focused on compliance with the human rights listed in the

guiding principles, i.e. child labour, forced labour, human trafficking, illegal employment, freedom of assembly, collective bargaining and freedom of expression, fair and non-discriminatory remuneration, working conditions, personal integrity and discrimination.

- Risk analysis of potentially vulnerable groups, especially women, children, indigenous population groups, migrants and local population groups. The analysis was also carried out for Swissgrid employees.
- Identification and evaluation of existing measures to reduce potential human rights risks.
- Analysis of any need for further action.

GRI 2-24, 3-3, 407-1, 408-1, 409-1, 410-1, 411-1, 414-1

Results of the risk analysis and definition of measures

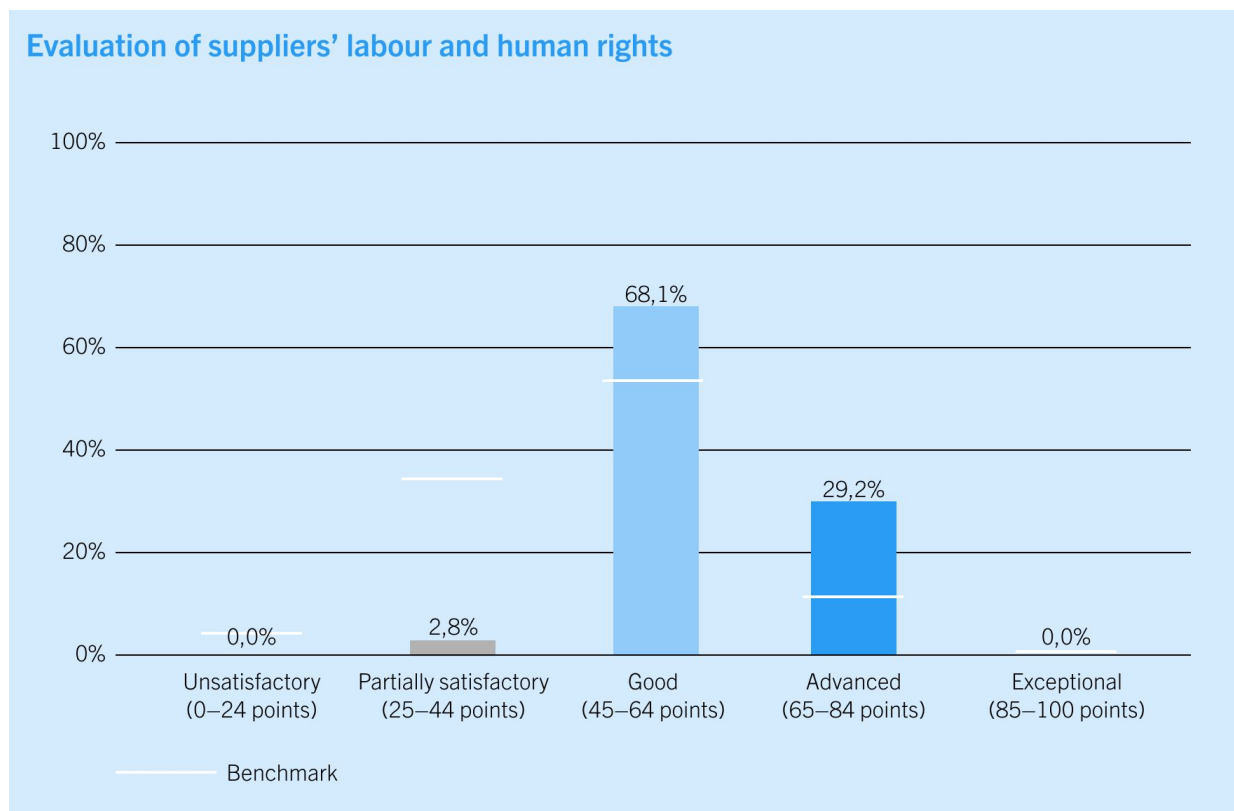
The analysis revealed a very low risk of human rights violations due to the company's own business activities. There are several reasons for this: as the national grid company, Swissgrid only operates in Switzerland, except when cooperating with other grid operators in Europe to ensure grid-related security of supply. Swissgrid does not pursue any activities in areas with recognised indigenous populations whose rights may be violated. In addition, Swissgrid carries out targeted risk assessments and measures in the areas of occupational health and safety, diversity and inclusion, as well as human resources and remuneration policy (see subsections within the report), to ensure that the rights of employees are guaranteed in accordance with the human rights principles.

Risks relating to violations of human rights in connection with the activities of direct suppliers are rated as low, while risks relating to fair remuneration and appropriate working conditions are rated as medium. The following aspects have a significant influence on the risk assessment:

- Over 95% of Swissgrid's procurement volume is provided by companies based in Switzerland (>91%), Germany (3.6%) and Austria (1.5%). These countries have a high level of regulatory protection with regard to the human rights and potentially vulnerable groups analysed. There is therefore also a low risk potential as far as child labour is concerned.
- «Tier 1» suppliers of Swissgrid are not directly involved in the extraction of minerals and other raw materials. In 2023, Swissgrid tested the requirements for Copper Mark certification as an additional criterion for the procurement of selected electricity 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.
- In order to reduce the identified risks, Swissgrid systematically uses specific suitability and award criteria in its procurement processes (see chapter «Supply chain sustainability»). In particular, it sets out requirements for suppliers in accordance with the Sustainability Charter, ISO 45001 certifications and Safety Culture Ladder certifications, and demands proof of strategies and measures for the well-being and participation of employees. Swissgrid also carries out occupational safety inspections during the contract implementation stage (see key figures on «Supplier inspections» in the «Measures for a sustainable supply chain» sections).
- Swissgrid's security personnel, who are employed through a third-party company, receive training on ethical principles and human rights as part of their basic training. This applies to 100% of the security staff permanently employed by Swissgrid.

The results of the risk analysis are validated by the sustainability assessments available for 72 «Tier

1» Swissgrid suppliers. These assessments are carried out by an independent, specialised agency and confirm that over 97% of the Swissgrid suppliers surveyed have management approaches in the area of labour and human rights that are rated as good or advanced. Only two suppliers (3%) have only partially satisfactory management approaches: this shows potential for improvement, particularly with regard to the adoption of human rights guidelines and meaningful reporting. The two suppliers with the poorest performance operate in the IT sector in Austria and in cable production in Italy. As a result of the assessment, both suppliers are implementing additional measures on labour and human rights in the areas that require further improvement. Overall, the Swissgrid suppliers evaluated perform better than the reference portfolio (benchmark), which consists of all service providers evaluated by the third-party provider.



Due to the low exposure and the measures in place, all the identified risks are clearly within Swissgrid's risk appetite. Consequently, no further need for action was identified for 2023.

GRI 406-1, 407-1

Outcome and process for complaints

Swissgrid employees have various internal and external channels available to them for reporting violations of their human rights. These include an external reporting centre, the «RiskTalk» smartphone app and the Compliance department, in addition to line managers or internal contact persons from the HR department. Swissgrid's direct suppliers have a duty to report violations of human rights in accordance with the mandatory Sustainability Charter for Suppliers. Suppliers' employees also have the opportunity to report violations of labour and human rights via the RiskTalk app or via Swissgrid contact offices. Direct dialogue with employees of service providers is also proactively sought in the course of occupational safety inspections. Whistleblowers of potential violations of labour and human rights are

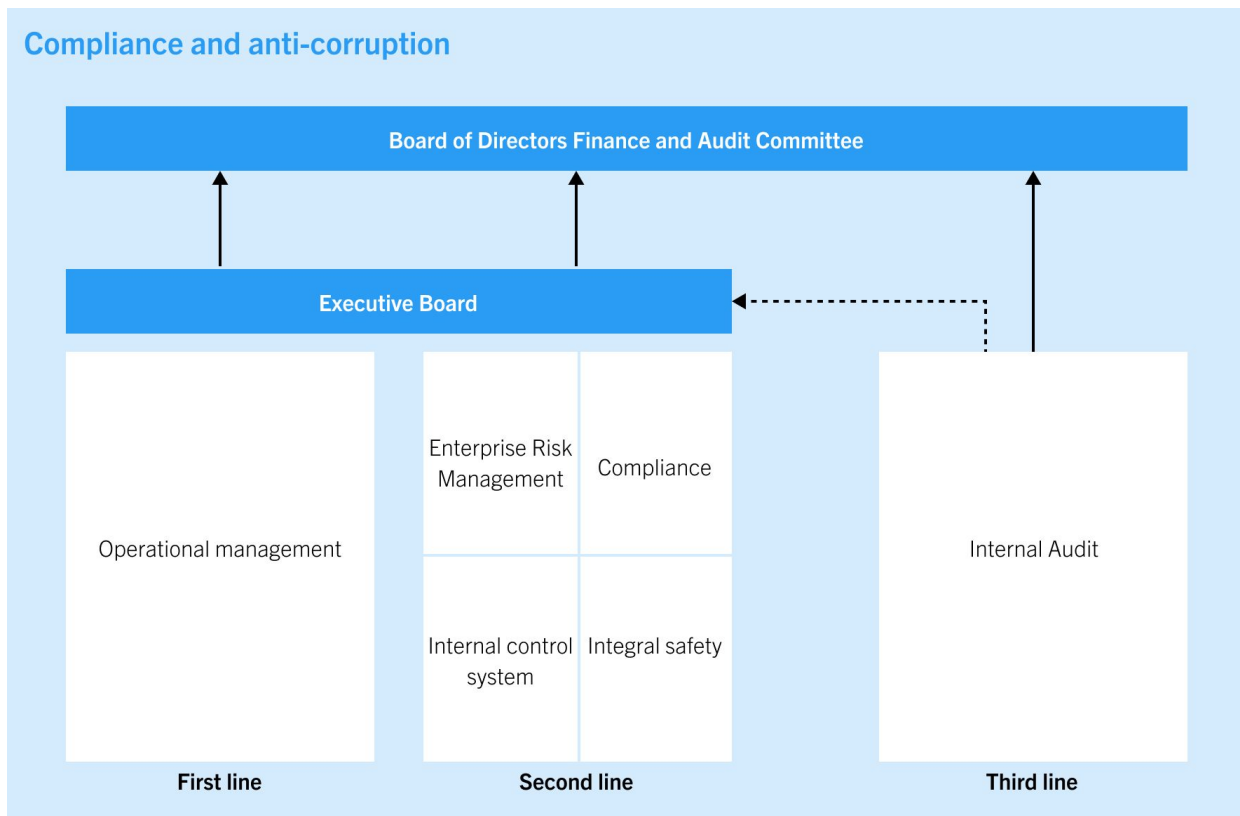
protected against retaliation by Swissgrid's Whistleblowing Policy. In 2023, no human rights violations were reported via the internal and external channels available.

Compliance and anti-corruption

GRI 2-16, 2-23, 2-24, 2-25

Compliance

Swissgrid's corporate governance is based on compliance with legal provisions, the Articles of Incorporation, internal regulations and directives. The Board of Directors is responsible for overall supervision and, as part of the company's corporate governance structure, has various monitoring, control and audit functions to ensure compliance with regulatory and internal provisions. The «three-line model»¹ serves as a framework for defining structures and processes in areas including compliance, and divides responsibilities into three lines:



¹This visualisation of the «three-line model» represents a simplification that focuses on compliance-relevant functions at Swissgrid.

First line: compliance with internal and external regulations in day-to-day work is the responsibility of all Swissgrid employees. They are all ambassadors for exemplary and ethical conduct.

Second line: the second line helps employees to implement compliance requirements. This also

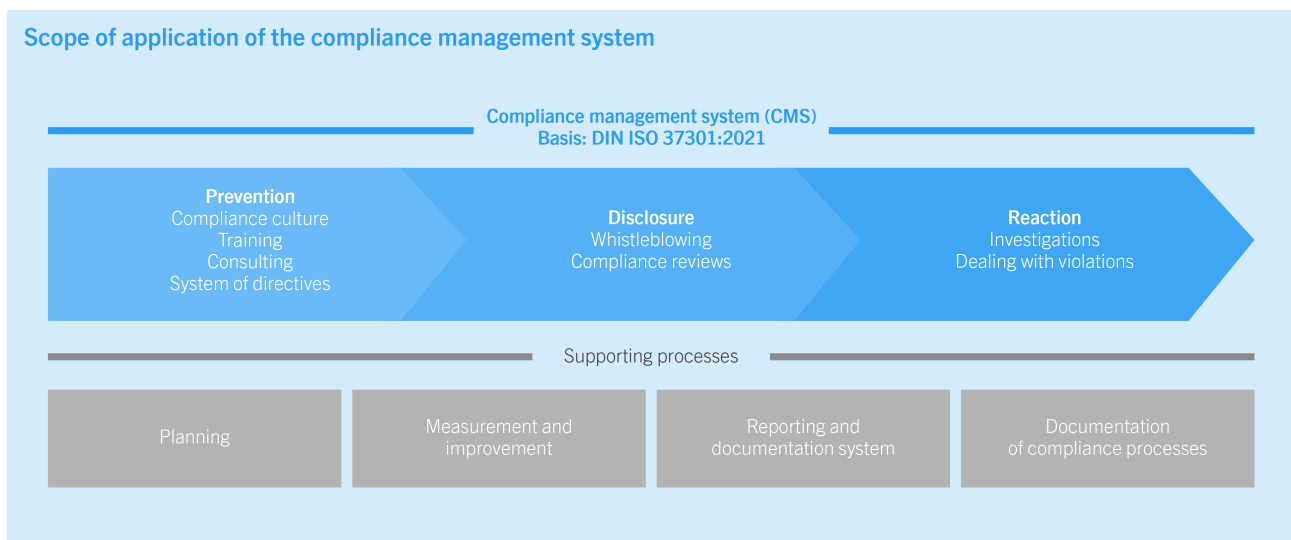
applies to company-wide governance domains that issue requirements, define the methodology and structure for operational business activities and monitor implementation. By establishing and operating a compliance management system, the Compliance function helps the Board of Directors and the Executive Board to ensure that the applicable legal framework is complied with and that ethical principles are adhered to. In addition, the HSE management system (see chapter «Occupational health and safety»), which is a component of integral safety, and the internal control system (see chapter «Corporate Governance») support compliance with legal and internal requirements in the areas of occupational health and safety, health protection, the environment, corruption and bribery. The Enterprise Risk Management System (see chapter «Risk assessment») also serves to identify and mitigate compliance-relevant risks.

Third line: Internal Audit supports the Board of Directors, its committees and the Executive Board by providing independent and objective auditing services to ensure compliance with legal and internal regulations, among other things.

Scope of application of the compliance management system

The Board of Directors sets out the basic principles of second-line compliance management in an annex to the organisational regulations. At a strategic level, the CEO firms up these requirements in the compliance concept. The Head of Compliance is responsible for the operational implementation of compliance management in accordance with the requirements of the Board of Directors and the CEO.

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.



GRI 2-23, 2-24, 2-26

Prevention

Prevention includes measures to strengthen the compliance culture and the directive system, as well as

training and advisory services.

Code of Conduct lays the foundations

The Code of Conduct issued by the Board of Directors lays the foundations for an active compliance culture. It summarises the most important compliance obligations governing Swissgrid and its employees. It also applies to staff leasing employees and members of the Board of Directors and Executive Board.

The Code includes provisions in relation to ethical principles, compliance with requirements, conflicts of interest, confidentiality of company information, internal and external information, professional and financial integrity, bribery and corruption, occupational health and safety, sustainability and social responsibility, as well as reporting and dealing with misconduct. The principles and values set out in the Code of Conduct form an integral part of Swissgrid's corporate culture. 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 was revised in 2023 and adapted to current standards.

A comprehensive guide to the Code of Conduct is available to employees that explains the meaning and organisation of compliance at Swissgrid. In 2023, all Swissgrid employees received training on the revised Code of Conduct.

Internal directives and training on new or amended directives:

Swissgrid's compliance management system comprises a standardised and legally compliant system of directives. These requirements are made available to all employees on a centralised basis. When new directives are introduced or changes are made, the Compliance function and/or the employees responsible for the directive hold training sessions. These sessions are prepared in such a way as to ensure that information is conveyed to participants in an easy-to-understand manner.

New employees are informed about the applicable standards, including the Code of Conduct and internal directives, as part of the onboarding programme. Acknowledgement of existing, new or amended directives is confirmed by the employees concerned using an electronic tool.

Personal advisory services for specific directives and standards

The Compliance function advises employees on internal and external standards relating to compliance. The unit also organises personal compliance training for individual teams on the directives and topics that are particularly relevant to them. Around 15% of employees attended these specific team training courses in 2023. When developing its training sessions, the Compliance function applies a training concept that it reviews and improves on an ongoing basis.

GRI 2-26

Detection

The detection process utilises various tools for identifying misconduct, including compliance reviews. The revised Whistleblowing Policy lays the foundations for reporting violations more easily.

Revision of the Whistleblowing Policy

The Board of Directors of Swissgrid revised the Whistleblowing Policy in 2023 to make it easier to report serious breaches of regulations. 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 will follow up and investigate these leads in a structured and confidential manner. In particular, an external anonymous reporting channel for violations was created in 2023 and announced throughout the company.

Implementation of compliance reviews

The Compliance function conducts regular compliance reviews on behalf of the CEO. To this end, it prepares an annual risk-based plan. These reviews verify compliance with legal requirements and directives and ensure that measures to prevent violations are in place and function effectively. Swissgrid conducts an average of one to two compliance reviews per year.

GRI 2-25

Response

The Compliance function is obliged to respond to reports of serious violations or to indications of violations that emerge from compliance reviews.

Following up on reports or tips

The Compliance function is obliged to investigate all whistleblowing reports. It also examines indications of violations from the compliance reviews. 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 shall 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.

GRI 2-16, 2-25, 2-27, 206-1, 406-1, 416-2

Violations in 2023

In 2023, there were no significant judgements against Swissgrid due to compliance violations. This includes judgements in connection with negative environmental or social impacts caused by Swissgrid or unfair business activities. No significant monetary fines were paid out during this period. An amount of CHF 25,000 was defined as the materiality threshold for reporting.

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' Finance and Audit Committee in the annual compliance report. No critical matters due to legal judgements were identified in 2023.

Furthermore, the CEO is provided with a report and outlook in relation to compliance activities on a quarterly basis. 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 Finance and Audit Committee 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, 2-25, 2-27, 406-1, 416-2

Overview of compliance key figures

The effectiveness of Swissgrid's compliance management system is reflected in the compliance key figures for 2023 and 2022.

Compliance key figures	2023	2022
Significant ¹ violations of laws and ordinances (including monetary and non-monetary sanctions)	0	0
Fines paid or deferred for significant ¹ violations committed in previous years	0	0

Compliance key figures	2023	2022
Whistleblowing reports	2	1
Reports concerning discrimination	0	0
Reports concerning harassment	0	0
Reports concerning conflicts of interest	1	0
Reports concerning confidentiality of information	1	0
Reports concerning financial integrity	0	1
Reports concerning other areas	0	0
Number of cases in which an investigation was initiated ²	0	0
Number of cases confirmed	0	0
Number of whistleblowing cases in which disciplinary measures were taken	0	0

¹ An amount of CHF 25,000 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 there was no initial suspicion of a serious breach of the law by employees.

GRI 205

Anti-corruption

Swissgrid takes decisive action against corruption. Corruption is incompatible with the ethical principles of the company. Since Swissgrid, as the owner of the Swiss transmission grid, awards significant contract volumes, great importance is attached to combating corruption. Swissgrid has an appropriate anti-corruption concept and assesses the risk of corruption in accordance with ISO 37001:2016.

Swissgrid has assessed its corruption risk as part of its company-wide Enterprise Risk Management System (see chapter «Risk assessment»). The effectiveness of Swissgrid's internal control system is reviewed annually as one of the company's risk mitigation measures. Compared to the other corporate risks, corruption is not one of Swissgrid's significant risk factors and is therefore not dealt with separately in the publicly available risk assessment. The risk of corruption and compliance with the relevant requirements are also regularly verified as part of risk-based compliance reviews. A compliance review on corruption was also carried out in 2023.

Swissgrid has taken various measures to combat corruption.

Stricter anti-corruption regulations

In accordance with the Code of Conduct, Swissgrid does not tolerate bribery or any other form of corrupt business behaviour. Employees avoid conflicts of interest and bias and safeguard the company's assets. Following the revision of the Code of Conduct in 2023, these requirements were defined in more detail, and employee awareness was raised about corruption.

Revision of the directive on gifts

The directive on gifts and invitations was also revised in 2023 and adapted to current standards. A number of principles, such as the value, timing and frequency of gifts, must be taken into account. This directive represents the central measure for combating corruption.

Compliance training on corruption

All employees are trained in corruption prevention via an e-learning course. Compliance training for all new employees includes information on situations in which conflicts of interest arise and on how they can be recognised and avoided. Correct behaviour in an observed case of corruption is clearly explained using examples. As part of the revision of the Code of Conduct in 2023, a training course was held for employees that also covered this topic. In addition, Swissgrid organises personal compliance training sessions for individual teams in which forms of corruption are discussed and the limits for gifts and invitations are explained using examples.

Awareness and training on corruption	2023		2022	
	Number	%	Number	%
Members of the Board of Directors and employees who have been informed of anti-corruption policies and procedures ¹	862	100 %	745	100 %
– Board of Directors	9	100 %	9	100 %
– Executive Board (EB)	5	100 %	5	100 %
– Managers excl. EB	112	100 %	93	100 %
– Employees without a management function	681	100 %	597	100 %
– Employees in training or paid by the hour	55	100 %	41	100 %
Members of the Board of Directors and employees who have received anti-corruption training ²	727	84 %	117	16 %
– Board of Directors ³	0	0 %	2	22 %
– Executive Board (EB) ³	0	0 %	0	0 %
– Managers excl. EB	97	87 %	4	4 %
– Employees without a management function	592	87 %	106	18 %
– Employees in training or paid by the hour	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 2023 or 2022; this is in contrast to the acknowledgement (see 1).

³ Anti-corruption training courses planned for 2024.

Whistleblowing as a proven measure against corruption

The revision of the relevant policy and the new external reporting channel will make whistleblowing easier, including with regard to corruption. The new measures were also announced throughout the company. No reports of corruption were made via the whistleblowing channel in 2023.

Awarding of high-value contracts

The awarding of high-value contracts (CHF 50,000 or more) is jointly reviewed by evaluation teams, and the parties involved must declare their impartiality. Employees must avoid conflicts of interest or, if necessary, disclose them and step aside. The placing of high-value orders, including follow-up orders, is supervised by specially trained procurement managers. In addition to price criteria, Swissgrid's tenders always include quality criteria. Price negotiations (bidding rounds) are not permitted under federal 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.

Violations: In 2023, there were no judgements on corruption cases at Swissgrid. The measures taken are considered to be effective.

Stakeholder engagement and transparency

Stakeholder engagement

GRI 2-29

Stakeholder engagement and transparency

Swissgrid relies on active relationship management and dialogue with stakeholders. The company communicates openly and transparently with the public, media, politicians, authorities, associations and industry partners, as well as with neighbouring transmission system operators.

Swissgrid uses various in-house platforms for networking. These are tailored to the specific needs of stakeholders, and include personal discussions, digital channels, media work, industry events and information events in regions where Swissgrid is implementing grid projects. Possible collaboration with

partners and references on third-party platforms are systematically examined.

The transmission system is one of Switzerland's most critical infrastructures and makes a significant contribution to a functioning society and economy. Swissgrid communicates with the public, the economy, politicians and authorities to keep them informed of its tasks and the challenges it faces. Swissgrid sees itself as a provider of knowledge and a trustworthy source of information.

The further development of stakeholder dialogue was incorporated into Strategy 2027. Swissgrid intends to invest even more in its relationships with stakeholders in the future. Swissgrid considers it particularly important to raise awareness of the need for good cooperation with European partners and for regulatory action in Switzerland. Further priorities will be set in this area in the future.

Management approach

As a transmission system operator in Switzerland and Europe, Swissgrid carries out activities covering a wide range of interests. Due to its legal mandate, the company is also affected by corresponding political and regulatory changes in the EU. European and Swiss energy policy and the regulatory environment are becoming increasingly complex, ambitious and dynamic, resulting in a greater need for action by transmission system operators.

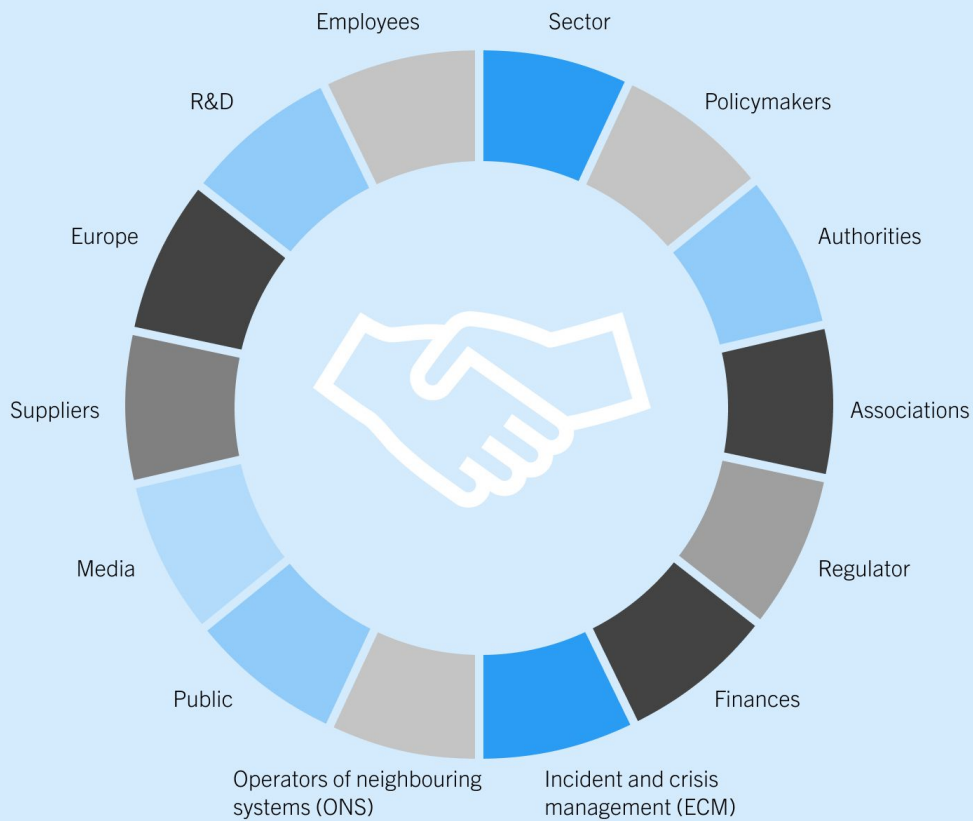
The transformation of the energy system initiated by policymakers requires close cooperation between all players in the electricity system. Sustainable restructuring of the system is only possible if everyone works together. Close dialogue with Swiss and European stakeholders from politics, authorities and industry is therefore crucial for Swissgrid.

Swissgrid endeavours to create broad acceptance for construction projects in the Swiss transmission grid. To this end, Swissgrid not only works closely with the authorities at federal, cantonal and municipal level, but also engages in dialogue with the affected population, interest groups, associations and the media.

Swissgrid has carried out a comprehensive stakeholder analysis to identify and prioritise relevant players and groups, and to define corresponding approaches for engaging with them. This analysis incorporated various aspects, including the extent to which stakeholders are affected by a specific Swissgrid topic or project, and how much influence the stakeholders have on Swissgrid with regard to a specific topic or project.

An engagement concept forms the basis for achieving the strategic objectives for stakeholder relationships. It defines material topics for Swissgrid and corresponding measures specifically intended for the various stakeholder groups. The concept takes into account the 2027 corporate strategy and the 2023 corporate objectives. It is reviewed as part of the annual planning process to ensure that it is up to date and in line with objectives, and is then adapted accordingly.

Swissgrid's stakeholder groups



Group	Description
Employees	Centrally important for the successful fulfilment of Swissgrid's legal mandate
Sector	Owners and operators of grid and power plant facilities, grid users of Swissgrid, shareholders, market players
Policymakers	National, cantonal and municipal decision-makers
Authorities	National, cantonal and municipal offices and supervisory authorities such as the Swiss Federal Office of Energy (SFOE) or the Federal Inspectorate for Heavy Current Installations (ESTI)
Associations	Associations that are directly or indirectly active in the Swiss energy sector, such as the Association of Swiss Electricity Companies (VSE); environmental organisations that Swissgrid liaises with on issues including grid projects
Regulator	The Federal Electricity Commission (ElCom) monitors Swissgrid's costs and tariffs
Finances	Creditors, lenders, investors and insurance companies
Research & development (R&D)	Universities, universities of applied sciences, companies and start-ups
Suppliers	Manufacturers and suppliers of grid components and service providers in the field of IT and consulting
Public	Residents living in the vicinity of existing installations and grid projects, landowners
Media	Major specialist media in Switzerland, mass media
Operators of neighbouring systems (ONS)	Owners and operators of grid systems in the rail, gas and telecommunications sectors (e.g. SBB)

Europe	Foreign transmission system operators and European bodies such as the European Network of Transmission System Operators for Electricity (ENTSO-E), the European Commission and the Agency for the Cooperation of Energy Regulators (ACER)
Incident and crisis management (ECM)	Crisis teams from partner companies and national crisis organisations such as the Organisation for Power Supply in Extraordinary Situations (OSTRAL)

GRI 2-25, 2-26, 415, 201-4

Measures

Swissgrid has defined various priorities that require particular attention in terms of stakeholder engagement.

Focus on Europe

ENTSO-E and the European transmission system operators are the most important stakeholders at a European level, followed by the EU authorities (EU Commission, ACER).

There is currently no electricity agreement between Switzerland and the EU. This is resulting in the progressive exclusion of Switzerland from European processes, platforms, committees and cooperation. Swissgrid is committed to close cooperation with the European transmission system operators in order to mitigate the negative effects for Switzerland. The company has taken various measures: Swissgrid is implementing all the regulatory requirements stipulated by the European authorities for secure system operation. In addition, the company has concluded contracts under private law with the transmission system operators from the «Italy North» capacity calculation region in order to be included in the cross-border capacity calculation. However, these contracts under private law are not an adequate long-term substitute for an electricity agreement, partly because they can be overridden by changes in EU law and concern issues of a political nature that are outside Swissgrid's area of expertise. Adoption of EU law is crucial in order to be able to participate in processes such as regional operational security coordination (ROSC) and in the various control energy platforms – TERRE, MARI and PICASSO¹. Switzerland is currently under threat of exclusion from some of these cooperations and platforms for political reasons. Swissgrid has lodged an appeal in the EU courts concerning its participation in the above-mentioned control energy platforms. Swissgrid is represented in numerous European technical committees and working groups (see chapter «Swissgrid committee memberships») in order to remain in constant dialogue with its European partners and to represent Switzerland's interests, although there is also a risk of exclusion from these committees if no electricity agreement is reached.

¹ MARI, PICASSO and TERRE are three digital platforms that will be used for auctioning, billing and monitoring control energy within the European internal electricity market in the future. These are standard products covering a defined time in the control energy segment.

Focus on the Swiss electricity industry

Power plant and distribution system operators are among the most important stakeholders in Switzerland. Swissgrid is implementing the EU regulatory requirements necessary for secure grid operation in Switzerland in association with these industry partners. The new Transmission Code, the Balancing Concept and other contracts such as operating agreements and the operational management interface manual have therefore been or will be revised and relaunched. By implementing the monitoring area, Swissgrid and the distribution system operators are endeavouring to set up data interchange processes for grid operation planning and management.

Swissgrid also works closely with the industry to implement Swiss laws and regulations. For instance, the «Electricity Network Strategy» gradually introduced by the federal government between 2019 and 2021 calls for closer cooperation between grid operators in long-term grid planning. In 2023, Swissgrid and an industry working group were able to complete the regionalisation process, which forms the basis for Swissgrid's Strategic Grid 2040.

Swissgrid is also carrying out various projects with the industry, for example on the integration of decentralised energy resources into grid and ancillary services (see chapter «2027 Strategy»). Close cooperation also takes place in day-to-day business activities, be it the planning of grid operations, real-time operation or the procurement and utilisation of control reserves. In order to maintain contact outside of day-to-day business, the company organises various industry events such as the Grid Forum, the Balance Group Management Partner Meeting and the grid usage conference.

Focus on authorities and politics in Switzerland

As the national grid company with a legal mandate, Swissgrid is in contact with authorities at federal level, including the SFOE, the Federal Office for the Environment (FOEN), the ESTI and ElCom. Cooperation often takes place when new legal and regulatory requirements are prepared and introduced. This was the case during the operational implementation of the power reserve, for instance. Another example is the planning of the Strategic Grid 2040, which Swissgrid will continue to develop in 2024. This is partly based on the SFOE's scenario framework for Switzerland.

The most important stakeholders in the Swiss Parliament include the members of the two environment, spatial planning and energy committees (ESPEC), as well as the two foreign affairs committees (FAC) and the EFTA/EU delegation. Swissgrid has maintained active and transparent dialogue with political representatives for many years. Swissgrid is committed to winning over members of parliament in favour of its concerns and to recognising areas of political tension at an early stage. Swissgrid is also keen to gain alliance partners in order to represent common interests. In 2023, Swissgrid once again organised a session event with partners from the electricity industry.

Swissgrid does not make any financial contributions to political parties or organisations. As a legally created monopolist, Swissgrid has a special responsibility with regard to independence and reputation. Swissgrid therefore does not receive any subsidies from the public sector.

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. Swissgrid is in close contact with the responsible authorities at federal, cantonal and municipal level as part of grid project communication throughout all the phases of each construction project. Information on dialogue with and the involvement of the authorities and politicians is given in the overview of the approval process.

Focus on the Swiss public

In the course of grid projects, Swissgrid seeks close contact not only with the authorities and politicians, but also with the public, interest groups and environmental organisations. It is important for Swissgrid to involve stakeholder groups and to provide them with comprehensive information during the approval process, which comprises several phases. To this end, the company has developed special guidelines for systematically implementing the applicable measures. In 2023, the following events were held as part of grid projects: information events to present the planning corridor in the Maggia Valley, a groundbreaking ceremony at the Bonaduz substation and an open day for cabling in the Gotthard Road Tunnel. Swissgrid was also present at public fairs in important grid construction regions in the canton of Valais and Central Switzerland.

The modernisation of the transmission system is a vital issue that is perceived as important and necessary by the public. Swissgrid is keen to create an even greater understanding of its important role in ensuring security of supply and of its contribution to the transformation of the energy system. Swissgrid has taken various measures to address new topics: in 2023, the company established a newsroom and expanded the content on its digital channels. In order to strengthen personal dialogue, Swissgrid has increased its attendance of various events and, in addition to its own visitor exhibitions, now also presents its activities at the «Experience Energy» exhibition at the Swiss Museum of Transport in Lucerne.

GRI 413-1

The approval process at a glance – involving and informing the authorities and the general public

Grid expansion – in particular for grid construction projects from the strategic grid – follows a legally prescribed procedure consisting of several phases. The authorities and the public are kept informed and can participate actively during each phase.

Phase	Details	Involvement of various stakeholders in the legally prescribed procedure	Stakeholders from authorities and politics	Public stakeholders	Swissgrid measures: authorities/politicians	Swissgrid measures: the public
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 needs of the Swiss population, underground cable and overhead line corridors for the area in which a line is planned for each grid projects.	Swissgrid and the cantons affected by the project conclude a coordination agreement during this phase. It ensures that the interests of the cantons are incorporated into the planning process early on.	Authorities at federal level, national and cantonal politicians	Environmental organisations, interest groups, researchers, the media, the public		<ul style="list-style-type: none"> Industry working group on regionalisation under the leadership of Swissgrid
Preparation	Swissgrid submits the application for the SUL 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 monitoring 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. Stakeholders can make their views known as part of a public consultation procedure organised by the SFOE (in accordance with Art. 19 of the Spatial Planning Ordinance).	Authorities at federal, cantonal and municipal level, local politicians	Environmental organisations, interest groups, directly affected parties, the media	<ul style="list-style-type: none"> Information from the SFOE on the procedure and the planned submission of the application for the sectoral plan for transmission lines (SUL) Presentation to parliamentarians of the cantons involved Events with local councillors and interest groups along the line under discussion 	<ul style="list-style-type: none"> Publication of current information on the grid project website
Inclusion in the federal sectoral plan for transmission lines (SUL)	Swissgrid submits the application for the SUL 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 monitoring 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. Stakeholders can make their views known as part of a public consultation procedure organised by the SFOE (in accordance with Art. 19 of the Spatial Planning Ordinance).	Authorities at federal, cantonal and municipal level, local politicians		<ul style="list-style-type: none"> Before submitting the application: personal discussions with the municipalities 	<ul style="list-style-type: none"> Personal discussions with the organised public (interest groups, associations) Initial communication when submitting the application via various channels Media releases and flyers distributed to households Information events when making decisions in favour of a planning area and a corridor
Construction project	Swissgrid prepares the specific construction project within the planning corridor defined by the Federal Council.	During this phase, negotiations on easements are held and the exact line route is determined. Swissgrid appoints a project advisory council, which ideally also includes representatives of the affected municipalities. The project advisory council has the task of raising the concerns of the population and other stakeholders and identifying options for action in order to make the best possible use of the design latitude of the project.	Municipalities, local politicians	Environmental organisations, interest groups, directly affected parties, the media	<ul style="list-style-type: none"> Organisation of the project advisory council and regular meetings Ongoing information about the activities of the project advisory council 	<ul style="list-style-type: none"> Organisation of the project advisory council and regular meetings Flyers distributed to households
Planning approval procedure	Swissgrid submits an application for planning permission to the relevant authorities. At the end of this phase, the authorities – either the ESTI or the SFOE – issue Swissgrid with the planning approval decision, and may impose additional conditions that must be included in the project planning.	During this phase, the project is presented to the public, and stakeholders and affected parties can lodge complaints. If the differences cannot be resolved by the ESTI, the SFOE continues the negotiations. Responsibility for the negotiations lies with the authorities. Complaints can be referred to the courts.	Authorities at federal level	Environmental organisations, interest groups, directly affected parties, the media	<ul style="list-style-type: none"> Information on the start of the planning approval procedure 	<ul style="list-style-type: none"> Media and information events at the start of the planning approval procedure Flyers distributed to households Attendance of trade fairs

Construction	Once the legally binding planning approval has been granted, the construction work can begin. Swissgrid procures the necessary supplies and services in accordance with the provisions of public procurement law.	Municipalities, local politicians	Environmental organisations, interest groups, directly affected parties, the media	• Information events for local and regional authorities	<ul style="list-style-type: none"> • Media events and visits to mark important milestones • Flyers distributed to households about the status of work • Extensive information on the grid project website • Attendance of trade fairs • Construction signs on site
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GRI 2-28

Memberships

In order to fulfil its legal mandate, Swissgrid represents its concerns and interests in around 120 Swiss and European bodies¹. Certain committees are classified as highly relevant by the Executive Board and coordinated by committee management. Annual committee targets are defined for these committees on the basis of Swissgrid's corporate objectives. In addition, briefings and debriefings are held for meetings where Swissgrid's position is presented, along with all the technical, economic, legal, regulatory and strategic aspects, and pending tasks are assigned internally. Currently, 18 committees are classified as highly relevant by the Executive Board (see chapter «Swissgrid committee memberships»).

¹Swissgrid considers a «committee» to be any collaboration in a defined group (consisting of several internal and external stakeholders) that is established for the purpose of discussion, consultation or reaching decisions on a specific and clearly defined range of topics over an extended period of time (generally at least six months) and requires internal coordination.

GRI 418

Transparency

Transparency is the basis for Swissgrid's credibility and therefore represents an important pillar in its communication with the various stakeholders. Swissgrid sees it as its mission to provide the general public with precise, easily accessible and comprehensible information on its business activities. Swissgrid fulfils its legal obligations in financial and non-financial matters by publishing an Annual Report.

Swissgrid also meets the requirements for transparency in its activities on the financial and power markets, for instance by complying with all the requirements of the Financial Market Infrastructure Act (FMIA). The rules laid down in the FMIA are intended to ensure that the financial markets function fairly and transparently for all investors and that the stability of the financial system is guaranteed. The rules prohibit activities such as insider trading and market manipulation, and stipulate reporting and risk minimisation obligations in derivatives trading. Swissgrid also ensures fair behaviour and transparency on the European wholesale energy markets. The relevant legal standards, in particular Regulation (EU) No. 1227/2011 (REMIT Regulation) and Regulation (EU) No. 543/2013 (Fundamental Data Ordinance), prohibit activities such as insider trading and market manipulation, and oblige Swissgrid to publish certain information.

In the current reporting year, Swissgrid updated the internal company principles 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. In the past reporting year, no complaints about breaches of data protection or cases of data theft or loss in connection with customer data were reported to or identified by the data protection officer.

Swissgrid pursues a high degree of transparency when publishing its grid data. Key figures and data, such as frequency, imports and exports, as well as wide area monitoring and the Swiss energy overview, are available on its website. The monitoring area is implemented with the aim of achieving greater transparency in data interchange with distribution system operators for grid operation planning and management purposes, and to ensuring even greater operational security as a result. Swissgrid is currently putting this major project into practice with the industry.



Notes

This is the first time that Swissgrid has published an integrated Annual and Sustainability Report. The 2023 Sustainability Report was approved by the Board of Directors of Swissgrid Ltd on 19 March 2024 for publication on 16 April 2024, and was submitted to the General Assembly for acceptance on 15 May 2024.

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

Scope of reporting

The scope of reporting covers the period from January to December 2023 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. The non-financial report was prepared in accordance with the obligations under Article 964 of the Swiss Code of Obligations (CO). This report provides an account of the material sustainability topics in accordance with the Swissgrid materiality analysis and Art. 964b of the CO. To ensure transparent reporting, Swissgrid refers to the standards of the Global Reporting Initiative and integrates the recommendations of the Task Force on Climate-related Financial Disclosures.

For the first time, Swissgrid is reporting relevant sustainability key figures over a period of several years to illustrate trends. Due to changes in data collection methods, the following key figures relating to the 2022 financial year have been restated: greenhouse gas emissions (including SF6 losses, electricity consumption of substations, district heating sites, upstream and downstream emissions from Scope 3 categories) and occupational accidents per 200,000 hours worked by Swissgrid employees. The key

figures from 2022 were revised to ensure comparability and consistency of information. Swissgrid has tasked PricewaterhouseCoopers with conducting a limited assurance audit of selected key figures in accordance with Note «Limited Assurance» in order to ensure the reliability of the most important key figures in the areas of greenhouse gas emissions, energy consumption, occupational safety, employees and diversity.

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GRI Index

Application note: Swissgrid has reported the information specified in this GRI Index for the period from 1 January 2023 to 31 December 2023 with reference to the GRI standards.

GRI STANDARDS	DISCLOSURE	REFERENCE	EXPLANATIONS
GRI 1 Lead	Foundation 2021		

GRI 2: General disclosures 2021

2-1 Organizational details	Corporate Governance Report / Corporate structure and shareholders Annual Report / Company / Establishment as the Swiss transmission system owner	
2-2 Entities included in the organization's sustainability reporting	Sustainability Report / Scope of non-financial reporting	
2-3 Reporting period, frequency and contact point	Sustainability Report / Scope of non-financial reporting	The period for financial and non-financial reporting is January – December. The report on non-financial matters is drawn up once a year and published in April.
2-4 Restatements of information	Sustainability Report / Scope of non-financial reporting	
2-5 External assurance	Sustainability Report / Scope of non-financial reporting	The external auditors present their recommendations to the Board of Directors' Finance and Audit Committee.
2-6 Activities, value chain and other business relationships	Annual Report / Company Sustainability Report / Supply chain sustainability / Management approach / Swissgrid's supplier portfolio	
2-7 Employees	People / Attracting, retaining and developing skilled workers / Swissgrid employees	As the national grid company, Swissgrid only employs internal staff in Switzerland. This eliminates the need for a regional breakdown.
2-8 Workers who are not employees	People / Attracting, retaining and developing skilled workers / Swissgrid employees	As the national grid company, Swissgrid only employs internal staff in Switzerland. This eliminates the need for a regional breakdown.
2-9 Governance structure and composition	Corporate Governance Report / Board of Directors / Members of the Board of Directors, Other activities and vested interests Sustainability Report / Sustainability at Swissgrid / Responsibilities in relation to sustainability People / Diversity and inclusion / Overview of diversity at Swissgrid	
2-10 Nomination and selection of the highest governance body	Corporate Governance Report / Board of Directors / Election and term of office	
2-11 Chair of the highest governance body	Corporate Governance Report / Board of Directors / Internal organisation	
2-12 Role of the highest governance body in overseeing the management of impacts	Corporate Governance Report / Board of Directors / Internal organisation Corporate Governance Report / Board of Directors / Information and control instruments with regard to the Executive Board Sustainability Report / Sustainability at Swissgrid / Responsibilities in relation to sustainability	
2-13 Delegation of responsibility for managing impacts	Corporate Governance Report / Board of Directors / Internal organisation Corporate Governance Report / Board of Directors / Information and control instruments with regard to the Executive Board Sustainability Report / Sustainability at Swissgrid / Responsibilities in relation to sustainability	
2-14 Role of the highest governance body in sustainability reporting	Sustainability Report / Sustainability at Swissgrid / Responsibilities in relation to sustainability / The role of the Board of Directors in the area of sustainability	
2-15 Conflicts of interest	Corporate Governance Report / Board of Directors / Members of the Board of Directors, Other activities and vested interests Corporate Governance Report / Board of Directors / Internal organisation	
2-16 Communication of critical concerns	Sustainability Report / Sustainability at Swissgrid / Responsibilities in relation to sustainability Sustainability Report / Partnership and anti-corruption / Compliance Sustainability Report / Partnership and anti-corruption / Scope of application of the compliance management system / Violations in 2023	
2-17 Collective knowledge of the highest governance body	Corporate Governance Report / Board of Directors / Internal organisation Sustainability Report / Sustainability at Swissgrid / Responsibilities in relation to sustainability / The role of the Board of Directors in the area of sustainability	
2-18 Evaluation of the performance of the highest governance body	Corporate Governance Report / Board of Directors / Internal organisation	
2-19 Remuneration policies	Corporate Governance Report / Board of Directors / Remuneration	
2-20 Process to determine remuneration	Corporate Governance Report / Board of Directors / Remuneration	
2-21 Annual total compensation ratio	Sustainability Report / People / Attracting, retaining and developing skilled workers / Measures to retain and develop talent	
2-22 Statement on sustainable development strategy	Sustainability Report / Sustainability at Swissgrid	
2-23 Policy commitments	Sustainability Report / Sustainability at Swissgrid / Strategic foundations: sustainability goals and principles Sustainability Report / Sustainability at Swissgrid / The role of the Board of Directors in the area of sustainability Sustainability Report / Partnership / Compliance and anti-corruption / Prevention Sustainability Report / Partnership / Supply chain sustainability / Code of Conduct for Suppliers	
2-24 Embedding policy commitments	Sustainability Report / Partnership / Human rights Sustainability Report / Sustainability at Swissgrid / Strategic foundations: sustainability goals and principles Sustainability Report / Sustainability at Swissgrid / Responsibilities in relation to sustainability Sustainability Report / Partnership / Compliance and anti-corruption Sustainability Report / Partnership / Supply chain sustainability / Code of Conduct for Suppliers Sustainability Report / Partnership / Human rights / Results of the risk analysis and mitigation measures	
2-25 Processes to remediate negative impacts	Sustainability Report / Partnership / Compliance and anti-corruption Sustainability Report / Panel / Environmental protection, biodiversity and circular economy / Systematic inclusion of environmental protection in the approval of grid projects Sustainability Report / People / Occupational health and safety / Vision and goals Sustainability Report / Partnership / Stakeholder engagement and transparency / Measures / The approval process at a glance – involving and informing the authorities and the general public	The objectives and the procedure for eliminating negative impacts are described in detail for each material topic (e.g. climate protection, environmental protection, biodiversity and occupational safety) in the relevant sections. The references given are indicative and not exhaustive.
2-26 Mechanisms for seeking advice and raising concerns	Sustainability Report / Partnership / Compliance and anti-corruption / Prevention Sustainability Report / Partnership / Compliance and anti-corruption / Detection Sustainability Report / Panel / Environmental protection, biodiversity and circular economy / Management approach to environmental protection / Systematic inclusion of environmental protection in the approval of grid projects Sustainability Report / Partnership / Stakeholder engagement and transparency / Measures / The approval process at a glance – involving and informing the authorities and the general public Sustainability Report / People / Measures to strengthen the safety culture / Employee participation	
2-27 Compliance with laws and regulations	Sustainability Report / Partnership / Compliance / Violations in 2023 Sustainability Report / Partnership / Compliance / Overview of compliance key figures	
2-28 Membership associations	Sustainability Report / Partnership / Stakeholder engagement / Memberships	
2-29 Approach to stakeholder engagement	Sustainability Report / Partnership / Stakeholder engagement	
2-30 Collective bargaining agreements	Sustainability Report / People / Attracting, retaining and developing skilled workers / Measures to retain and develop talent	

Material topics			
Material topics	CR1 1: Material topics 2021	3-1 Process to determine material topics	Sustainability at Swissgrid / Basis of the sustainability commitment: materiality analysis / Procedure for determining material topics
		3-2 List of material topics	Sustainability at Swissgrid / Basis of the sustainability commitment: materiality analysis / Swissgrid's materiality matrix
	Sustainability in general	3-3 Management of material topics	Sustainability at Swissgrid / Basis of the sustainability commitment: materiality analysis / Swissgrid's materiality matrix
A summary of the actual and potential negative and positive impacts on the economy, environment and people can be found in the form of a table in the Swissgrid's materiality matrix section, including reference to the fact that these impacts are understood to be the result of Swissgrid's activities. Aspects of CR1 3-3 are discussed in detail in the individual sections on the material topics, including obligations, measures, effectiveness and stakeholder engagement. References to the relevant sections are also included in the table in the Swissgrid's materiality matrix section.			
Economy			
CR1 201: Economic performance 2016	201-1 Direct economic value generated and distributed	Financial Report / Management Report / Business performance	Since Swissgrid, as the national grid company, only operates in Switzerland, there is no need for a regional breakdown.
	201-2 Financial implications and other risks and opportunities due to climate change	Sustainability Report / Planet / Climate protection / Management approach / Opportunities and risks of climate change	
	201-3 Defined benefit plan obligations and other retirement plans	Sustainability Report / People / Management approach / Measures to retain and develop talent	Swissgrid is affiliated with the PKE Vorsorgekantung Energie pension fund. The defined benefit plan obligations and other retirement plans are not covered by Swissgrid's general funds.
	201-4 Financial assistance received from government	Sustainability Report / Partnership / Stakeholder engagement / Measures / Focus on authorities and politics in Switzerland	
CR1 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	Not applicable	Swissgrid employees are not subject to a statutory minimum wage. Similarly, over 90% of suppliers, including service providers with employees who work for Swissgrid, come from Switzerland and are therefore not subject to a statutory minimum wage. As part of the Sustainability Charter for Suppliers, the supplier confirms that its employees receive fair remuneration.
	202-2 Proportion of senior management hired from the local community	Sustainability Report / People / Diversity and inclusion / Management approach / Overview of diversity at Swissgrid	The Executive Board consists of members from three areas of the country. As Swissgrid is a national grid company, no further distinction is made between regions. The proportion of local employees (Switzerland region) in senior management is 100%.
CR1 203: Indirect economic impacts 2016	203-1 Infrastructure investments and services supported	Annual Report / Mission / Relevant contribution to the energy transition Annual Report / Mission / Security of supply Annual Report / Mission / Grid transfer capacity Sustainability Report / Partnership / Supply chain sustainability / Swissgrid's supplier portfolio	
	203-2 Significant indirect economic impacts	Annual Report / Mission / Relevant contribution to the energy transition Annual Report / Mission / Security of supply Annual Report / Mission / Grid transfer capacity	
CR1 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Sustainability Report / Partnership / Supply chain sustainability / Management approach / Swissgrid's supplier portfolio	As the national grid company, Swissgrid defines Switzerland as 'local'. According to Swissgrid's supplier portfolio, over 91% of Swissgrid's contract award volume is attributable to local suppliers headquartered in Switzerland.
CR1 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Sustainability Report / Partnership / Anti-corruption	The risk of corruption was assessed under the company-wide Enterprise Risk Management System and therefore covers all of Swissgrid's business activities at its two main local operating sites (100%).
	205-2 Communication and training about anti-corruption policies and procedures	Sustainability Report / Partnership / Anti-corruption Sustainability Report / Partnership / Supply chain sustainability / Management approach / Code of Conduct for Suppliers	
	205-3 Confirmed incidents of corruption and actions taken	Sustainability Report / Partnership / Anti-corruption	
CR1 206: Anti-competitive Behaviour 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Sustainability Report / Partnership / Compliance / Violations in 2023	In the reporting period, there were no significant judgments against Swissgrid regarding anti-competitive behaviour, cartels or monopolies. An amount of CHF 25,000 was defined as the materiality threshold for reporting.
CR1 207: Tax 2019	207-1 Approach to tax	Not applicable	Swissgrid operates exclusively in Switzerland, pays its taxes in Switzerland and complies with national tax legislation. Due to its regulated business model, a tax strategy is not applicable.
	207-2 Tax governance, control, and risk management	Not material	Due to Swissgrid's regulated business model and localised, long-term investments, its tax expense 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 applicable	Swissgrid Ltd is only liable for tax in Switzerland. Please refer to the Financial Report for detailed tax figures.
Ecology			
CR1 301: Materials 2016	301-1 Materials used by weight or volume	Information is not yet systematically collected.	The main material flows are caused by construction projects. Swissgrid does not yet have a centralised recording system for these material flows. A method for centralised recording and better estimation of the materials used is currently being developed.
	301-2 Recycled input materials used		
	301-3 Reclaimed products and their packaging materials		

GRI 302: Energy 2016

302-1 Energy consumption within the organization

Sustainability Report / Planet / Climate protection / Swissgrid's greenhouse gas footprint: approach, causes, measures and impact / Energy and electricity consumption

Swissgrid does not sell energy. The company does not consume or sell steam.

Methodology for electricity consumption of substations: Swissgrid's own requirements are determined on the basis of measured electricity consumption values, where available, supplemented by estimations based on the measured average values for the number of available feeds, taking into account the technology used, i.e. air-insulated, gas-insulated or air- and gas-insulated substation.

Methodology for heat consumption: With the exception of the main site in Aarau, where measured values are available, heat consumption was determined by substation based on the size of the buildings and the average heat requirements for office buildings in Switzerland, i.e. 82 kWh/m² according to Benchmarking cooling and heating energy demands considering climate change, population growth and cooling device uptake, Applied Energy Journal (2021), Volume 288.

Use of proxy values: As invoices with measured energy consumption values were not yet available for certain locations at the time of data collection (31 January 2024), proxy values based on measured values from the same months of the previous year or the previous month were used.

Conversion factors: The following conversion factors were used to determine energy consumption:

- Petrol: 8.67 kWh/litre (EMPA energy density for Euro-5 standard petrol)
- Diesel: 9.79 kWh/litre (EMPA energy density for Euro-5 standard diesel)

Conversion factors: The following conversion factors were used to determine energy consumption:

- Petrol: 8.67 kWh/litre (EMPA energy density for Euro-5 standard petrol)
- Diesel: 9.79 kWh/litre (EMPA energy density for Euro-5 standard diesel)
- Electric vehicles: 20.9 kWh/100 km (0.209 kWh/km) (Swiss fleet average for battery-electric passenger cars according to mobibid 3.0)
- Rail journeys in Switzerland: 0.49 MJ/km (SBB emissions report for Swissgrid)
- International rail journeys: 1.09 MJ/km is used (SBB emissions report for Swissgrid)
- Airframe: 0.0432 TAJ (FCM) (2023), CO₂ emission factors of the greenhouse gas inventory of Switzerland

302-2 Energy consumption outside of the organization

Sustainability Report / Planet / Climate protection / Swissgrid's greenhouse gas footprint: approach, causes, measures and impact / Energy and electricity consumption

The energy consumption values for 2022 serve as a reference for calculating the reduction in energy consumption, as relevant data of a comparable scope and methodology is available for 2022.

Swissgrid does not produce or market any products or services directly to end consumers. Relevant energy consumption figures are already collected and reported as part of other GRI 302 standards.

According to the Swissgrid materiality analysis, water consumption is assessed as not material/less material. Swissgrid is responsible for transporting electricity in the water high-voltage grid and not for electricity generation. Water is mainly used at Swissgrid stations, bases and substations for cleaning, or in the company restaurants. It comes from the normal drinking water supply.

GRI 303: Water and Effluents 2018

303-1 Interactions with water as a shared resource

Not material

303-2 Management of water discharge-related impacts

Not applicable

303-3 Water withdrawal

Not applicable

303-4 Water discharge

Not applicable

303-5 Water consumption

Not applicable

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

Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Biodiversity management approach / Inventory of grid infrastructure in protected areas of national importance

304-2 Significant impacts of activities, products and services on biodiversity

Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Management approach to environmental protection

Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Biodiversity management approach

304-3 Habitats protected or restored

Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Biodiversity management approach / Measures for the conservation of biodiversity

304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations

Information not available/complete

Decentralised data is available for the projects with an environmental impact report. Data is not compiled for existing systems and routes.

CR 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Sustainability Report / Planet / Climate protection / Swisgrid's greenhouse gas footprint: approach, causes, measures and impact / Swisgrid's greenhouse gas footprint	<p>Green taken into account in the calculations: CO₂, SF₆. Swisgrid does not cause any biogenic emissions from the incineration or biodegradation of biomass.</p> <p>Emission factors used for fuels: The emission factors used are based on FOEN (2023), CO₂ emission factors of the greenhouse gas inventory of Switzerland, and include:</p> <ul style="list-style-type: none"> • For petrol: 2.32 t CO₂/m³ (2.32 kg CO₂/l) • For diesel: 2.62 t CO₂/m³ (2.62 kg CO₂/l) <p>Revised values for 2022:</p> <ul style="list-style-type: none"> • CO₂ emissions for SF₆ according to the currently available GWP for SF₆ (23,500) based on the IPCC values • Diesel consumption for the emergency power system based on accurate available data <p>Methodology: Swisgrid uses the location-based approach to calculate Scope 2 emissions, as no detailed data is available on the electricity mix purchased to compensate for active power losses. For this reason, the average consumer mix in Switzerland is used, i.e. 139 kg CO₂/MWh according to the life cycle inventories of Swiss electricity mixes 2018 (treva.ch, 2021)</p> <p>Green taken into account in the calculations: CO₂, CH₄, N₂O, SF₆.</p> <p>Emission factors used: An emission factor of 172.5 g CO₂/MWh is used for district heating and cooling in accordance with the greenhouse gas emissions of the Swiss electricity and district heating mix according to the GHG Protocol (treva.ch, 2017)</p>
	305-2 Energy indirect (Scope 2) GHG emissions	Sustainability Report / Planet / Climate protection / Swisgrid's greenhouse gas footprint: approach, causes, measures and impact / Swisgrid's greenhouse gas footprint	
	305-3 Other indirect (Scope 3) GHG emissions	Sustainability Report / Planet / Climate protection / Swisgrid's greenhouse gas footprint: approach, causes, measures and impact / Swisgrid's greenhouse gas footprint	<p>Green taken into account in the calculations: CO₂, CH₄, N₂O, FKW, FPKW, SF₆, NF₃. Swisgrid does not cause any indirect biogenic emissions from the incineration or biodegradation of biomass.</p> <p>Emission factors used: the following emission factors were used for the calculations:</p> <p>economy (291.8 g CO₂/kWh), business (199.4 g CO₂/kWh) according to life cycle emission factors from mobil3.0. In addition, the values for 2022 in this category were adjusted with the same emission factors.</p> <ul style="list-style-type: none"> • Business trips with private cars: 0.196 kg CO₂/km (Swiss fleet average) according to life cycle emission factor from mobil3.0 • Rail travel: a) in Switzerland: 0.007 kg CO₂/km (SBB average for regional & long-distance transport) according to life cycle emission factors from mobil3.0 and b) international: 0.033 kg CO₂/km (high-speed train in Germany) according to life cycle emission factors from mobil3.0 • Mobility utilization: Emission factors for diesel, petrol and electric vehicles according to 305-1 and 305-2 (electricity consumer mix), plus an additional 1.5 kg CO₂/l for petrol and 1.24 kg CO₂/l for diesel to include upstream emissions according to Ecomint 3.0.1 • Upstream fuel emissions of the Swisgrid vehicle fleet: emission factors according to Ecomint 3.0.1 <p>Green taken into account in the calculations: CO₂, CH₄, N₂O, FKW, FPKW, SF₆, NF₃.</p>
	305-4 GHG emissions intensity	Sustainability Report / Planet / Climate protection / Swisgrid's greenhouse gas footprint: approach, causes, measures and impact / Swisgrid's greenhouse gas footprint	
	305-5 Reduction of GHG emissions	Sustainability Report / Planet / Climate protection / Swisgrid's greenhouse gas footprint: approach, causes, measures and impact / Swisgrid's greenhouse gas footprint	
	305-6 Emissions of ozone-depleting substance (ODS)	Not material	
305-7 Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	Not material		
CR 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Management approach to the circular economy and resource efficiency	Data on waste includes the material flows generated by Swisgrid itself based on a three-year average. Waste generated upstream or downstream is not included.
	306-2 Management of significant waste-related impacts	Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Measures for the circular economy and resource efficiency	
	306-3 Waste generated	Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Measures for the circular economy and resource efficiency	Data on waste includes the material flows generated by Swisgrid itself based on a three-year average. Waste generated upstream or downstream is not included.
	306-4 Waste diverted from disposal	Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Measures for the circular economy and resource efficiency	
	306-5 Waste directed to disposal	Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Measures for the circular economy and resource efficiency	
	306-6 Negative environmental impacts in the supply chain and actions taken	Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Measures for the circular economy and resource efficiency	
CR 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Sustainability Report / Partnership / Supply chain sustainability / Management approach / Risk analysis and assessment	
	308-2 Negative environmental impacts in the supply chain and actions taken	Sustainability Report / Partnership / Supply chain sustainability / Management approach / Risk analysis and assessment	
Social issues	401-1 New employee hires and employee turnover	Sustainability Report / People / Attracting, retaining and developing skilled workers / Management approach / Measures to attract talent	
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Sustainability Report / People / Attracting, retaining and developing skilled workers / Management approach / Measures to attract and develop talent	Natural persons cannot hold shares in Swisgrid.
	401-3 Parental leave	Sustainability Report / People / Diversity and inclusion / Management approach / Measures	As Swisgrid operates nationally, no regional distinctions are made.
	401-4 Minimum notice periods regarding operational changes	Sustainability Report / People / Attracting, retaining and developing skilled workers / Management approach / Measures to retain and develop talent	

GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Sustainability Report / People / Occupational health and safety / Management approach / The HSE management system		
	403-2 Hazard identification, risk assessment, and incident investigation	Sustainability Report / People / Occupational health and safety / Management approach / Risks and hazards Sustainability Report / People / Occupational health and safety / Management approach / Measures to strengthen the safety culture / Employee participation		
	403-3 Occupational health services	Sustainability Report / People / Occupational health and safety / Management approach / Measures for health protection Sustainability Report / People / Occupational health and safety / Management approach / Risks and hazards	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	Sustainability Report / People / Occupational health and safety / Management approach / Measures to strengthen the safety culture / Employee participation	The right of employees to have a say is effected through staff representation.	
	403-5 Worker training on occupational health and safety	Sustainability Report / People / Occupational health and safety / Management approach / Measures to strengthen the safety culture / Safety training		
	403-6 Promotion of worker health	Sustainability Report / People / Occupational health and safety / Management approach / Measures for health protection		
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Sustainability Report / People / Occupational health and safety / Management approach / Measures to strengthen the safety culture		
	403-8 Workers covered by an occupational health and safety management system	Sustainability Report / People / Occupational health and safety / Management approach / The HSE management system		
	403-9 Work-related injuries	Sustainability Report / People / Occupational health and safety / Management approach / Overview of key figures in the area of occupational health and safety		
	403-10 Work-related ill health	Sustainability Report / People / Occupational health and safety / Management approach / Measures for health protection Sustainability Report / People / Occupational health and safety / Management approach / Overview of key figures in the area of occupational health and safety		
	GRI 404: Training and Education	404-1 Average hours of training per year per employee	Sustainability Report / People / Attracting, retaining and developing skilled workers / Management approach / Measures for training and further education	
		404-2 Programs for upgrading employee skills and transition assistance programs	Sustainability Report / People / Attracting, retaining and developing skilled workers / Management approach / Measures to retain and develop talent Sustainability Report / People / Attracting, retaining and developing skilled workers / Management approach / Measures for training and further education	
		404-3 Percentage of employees receiving regular performance and career development reviews	Sustainability Report / People / Attracting, retaining and developing skilled workers / Management approach / Measures to retain and develop talent Sustainability Report / People / Attracting, retaining and developing skilled workers / Management approach / Measures for training and further education	
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Sustainability Report / People / Attracting, retaining and developing skilled workers / Management approach / Swissgrid employees	See additional diversity key figures at the end of the GRI Index.	
	405-2 Ratio of basic salary and remuneration of women to men	Sustainability Report / People / Diversity and inclusion / Management approach / Overview of diversity at Swissgrid Sustainability Report / People / Diversity and inclusion / Management approach / Measures	As inequality of pay with a deviation rate of 3.5% is below the Swiss threshold of 5%, no distinction is made according to employee category. As Swissgrid is a national company and only operates in Switzerland, no regional breakdown is given.	
GRI 406: Non-discrimination 2015	406-1 Incidents of discrimination and corrective actions taken	Sustainability Report / People / Diversity and inclusion / Management approach / Measures Sustainability Report / Partnership / Compliance / Violations in 2023 Sustainability Report / Partnership / Compliance / Overview of compliance key figures	As no incidents of discrimination were reported or are known in 2023, no cases were investigated or corresponding remedial measures implemented.	
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	Sustainability Report / People / Attracting, retaining and developing skilled workers / Measures to retain and develop talent Sustainability Report / Partnership / Human rights / Management approach and due diligence with regard to human rights / Result of the risk analysis and mitigation measures Sustainability Report / Partnership / Human rights / Management approach and due diligence with regard to human rights / Outcome and process for complaints		
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Sustainability Report / Partnership / Human rights / Management approach and due diligence with regard to human rights / Result of the risk analysis and mitigation measures		
GRI 409: Forced or Compulsory Labor	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Sustainability Report / Partnership / Human rights / Management approach and due diligence with regard to human rights / Result of the risk analysis and mitigation measures	As part of its risk analysis with regard to compliance with human rights, Swissgrid examined the risk of forced labour and illegal employment at its own operating sites and Tier 1 suppliers, and did not identify any significant risks, as described in detail in the «Respect for human rights» section.	
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	Sustainability Report / Partnership / Human rights / Management approach and due diligence with regard to human rights / Result of the risk analysis and mitigation measures	Every member of the security personnel employed by Swissgrid is trained in ethical principles and human rights. The training of additional security personnel required 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	Sustainability Report / Partnership / Human rights / Management approach and due diligence with regard to human rights / Result of the risk analysis and mitigation measures		
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Management approach to environmental protection / Systematic inclusion of environmental protection in the approval of grid projects Sustainability Report / Partnership / Stakeholder engagement and transparency / Stakeholder engagement / Management approach / Measures / The approval process at a glance – involving and informing the authorities and the general public	Impacts on the population are analyzed as part of the preparatory phases of grid projects, but with no distinctions by gender, as this is not considered material for grid projects in Switzerland.	
	413-2 Operations with significant actual and potential negative impacts on local communities	Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Management approach to environmental protection / Systematic inclusion of environmental protection in the approval of grid projects		
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Sustainability Report / Partnership / Supply chain sustainability / Management approach / Risk analysis and assessment Sustainability Report / Partnership / Supply chain sustainability / Measures for a sustainable supply chain Sustainability Report / Partnership / Human rights / Management approach and due diligence with regard to human rights / Result of the risk analysis and mitigation measures		
	414-2 Negative social impacts in the supply chain and actions taken	Sustainability Report / Partnership / Supply chain sustainability / Management approach / Risk analysis and assessment Sustainability Report / Partnership / Supply chain sustainability / Measures for a sustainable supply chain Sustainability Report / Partnership / Human rights / Management approach and due diligence with regard to human rights / Result of the risk analysis and mitigation measures		
GRI 415: Public Policy 2016	415-1 Political contributions	Sustainability Report / Partnership / Stakeholder engagement and transparency / Stakeholder engagement / Management approach / Measures / Focus on authorities and politics in Switzerland		

GRI 416: Customer Health and Safety	416-1 Assessment of the health and safety impacts of product and service categories 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Sustainability Report / People / Occupational health and safety / Management approach / Roles and hazards Sustainability Report / Partnership / Compliance and anti-corruption / Scope of application of the compliance management system / Overview of compliance key figures	Swissgrid carries out risk and hazard assessments with regard to occupational safety for 100% of activities that are hazardous to health.
GRI 417: Marketing and Labelling 2016	417-1 Requirements for product and service information and labelling 417-2 Incidents of non-compliance concerning product and service information and labelling 417-3 Incidents of non-compliance concerning marketing communications	Not material due to Swissgrid's activities Not material due to Swissgrid's activities Not material due to Swissgrid's activities	
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and loss of customer data	Sustainability Report / Partnership / Stakeholder engagement and transparency / Transparency	

Index for non-financial reporting in accordance with the Swiss Code of Obligations (Art. 964)

Article	Requirements	Reference	Reference to GRI
Art. 964b para. 2.1.	Description of the business model	Annual Report / Company	GRI 2-6
Environmental issues – climate protection			
Art. 964b para. 1.	CO ₂ targets	Sustainability Report / Planet / Climate protection / Vision and goals	GRI 3-3
Art. 964b para. 2.2.	Concepts and due diligence	Sustainability Report / Planet / Climate protection / Management approach Sustainability Report / Planet / Climate protection / Inclusion in strategic, financial and operational planning	GRI 3-3, 305
Art. 964b para. 2.3.	Measures taken and evaluation of the effectiveness of these measures	Sustainability Report / Planet / Climate protection / Emission reduction measures and effectiveness	GRI 2-25, 305-4
Art. 964b para. 2.4.	Significant risks and management of these risks	Sustainability Report / Planet / Climate protection / Opportunities and risks of climate change	GRI 201-2
Art. 964b para. 2.5.	Key performance indicators	Sustainability Report / Planet / Climate protection / Swissgrid's greenhouse gas footprint	GRI 305-1, 305-2, 305-3, 305-4, 305-5
Environmental issues – environmental protection, biodiversity and circular economy			
Art. 964b para. 2.2.	Concepts and due diligence	Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Vision and goals Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Management approach to environmental protection Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Biodiversity management approach Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Management approach to the circular economy and resource efficiency	GRI 3-3, 304-2
Art. 964b para. 2.3.	Measures taken and evaluation of the effectiveness of these measures	Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Environmental protection measures for grid projects Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Measures for the conservation of biodiversity Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Measures for the circular economy and resource efficiency	GRI 304-3, 306-2
Art. 964b para. 2.4.	Significant risks and management of these risks	Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Management approach to environmental protection Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Environmental protection measures for grid projects Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Biodiversity management approach Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Measures for the conservation of biodiversity Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Measures for the circular economy and resource efficiency	GRI 3-3, 304-2, 304-3

Art. 964b para. 2.5.	Key performance indicators	Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Environmental protection measures for grid projects – table of key figures on environmental protection Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Inventory of grid infrastructure in protected areas of national importance Sustainability Report / Planet / Environmental protection, biodiversity and circular economy / Measures for the circular economy and resource efficiency – table of Swissgrid waste statistics	GRI 304-1, 306-3, 306-4, 306-5
Social issues – stakeholder engagement and sustainable supply chain			
Art. 964b para. 2.2.	Concepts and due diligence	Sustainability Report / Partnership / Supply chain sustainability / Vision and goals Sustainability Report / Partnership / Supply chain sustainability / Management approach Sustainability Report / Partnership / Supply chain sustainability / Code of Conduct for Suppliers Sustainability Report / Partnership / Stakeholder engagement / Vision and goals Sustainability Report / Partnership / Stakeholder engagement / Management approach	GRI 2-23, 3-3
Art. 964b para. 2.3.	Measures taken and evaluation of the effectiveness of these measures	Sustainability Report / Partnership / Supply chain sustainability / Measures for a sustainable supply chain Sustainability Report / Partnership / Stakeholder engagement / Measures Sustainability Report / Partnership / Stakeholder engagement / Measures / The approval process at a glance – involving and informing the authorities and the general public	GRI 413-1
Art. 964b para. 2.4.	Significant risks and management of these risks	Sustainability Report / Partnership / Supply chain sustainability / Risk analysis and assessment Sustainability Report / Partnership / Stakeholder engagement / Management approach Sustainability Report / Partnership / Stakeholder engagement / Focus on the Swiss public Sustainability Report / Partnership / Stakeholder engagement / Focus on Europe	GRI 3-3
Art. 964b para. 2.5.	Key performance indicators	Sustainability Report / Partnership / Supply chain sustainability / Management approach / Swissgrid's supplier portfolio Sustainability Report / Partnership / Supply chain sustainability / Measures for a sustainable supply chain – table on the application of sustainability criteria Sustainability Report / Partnership / Supply chain sustainability / Measures for a sustainable supply chain – table on supplier inspections	GRI 203-1, 204-1, 414-1, 414-2
Employee issues – occupational health and safety			
Art. 964b para. 2.2.	Concepts and due diligence	Sustainability Report / People / Occupational health and safety / Vision and goals Sustainability Report / People / Occupational health and safety / Management approach	GRI 3-3, 403-1
Art. 964b para. 2.3.	Measures taken and evaluation of the effectiveness of these measures	Sustainability Report / People / Occupational health and safety / Measures to strengthen the safety culture Sustainability Report / People / Occupational health and safety / Measures for health protection Sustainability Report / People / Occupational health and safety / Overview of key figures in the area of occupational health and safety	GRI 403-3 to 403-10
Art. 964b para. 2.4.	Significant risks and management of these risks	Sustainability Report / People / Occupational health and safety / Risks and hazards	GRI 403-2
Art. 964b para. 2.5.	Key performance indicators	Sustainability Report / People / Occupational health and safety / Overview of key figures in the area of occupational health and safety	GRI 403-9, 403-10
Employee issues – attracting, retaining and developing skilled workers as well as diversity and inclusion			
Art. 964b para. 2.2.	Concepts and due diligence	Sustainability Report / People / Attracting, retaining and developing skilled workers / Vision and goals Sustainability Report / People / Diversity and inclusion / Vision and goals Sustainability Report / People / Attracting, retaining and developing skilled workers / Management approach Sustainability Report / People / Diversity and inclusion / Management approach	GRI 2-23, 3-3,

Art. 964b para. 2.3.	Measures taken and evaluation of the effectiveness of these measures	<p>Sustainability Report / People / Attracting, retaining and developing skilled workers / Measures to attract talent</p> <p>Sustainability Report / People / Attracting, retaining and developing skilled workers / Measures to retain and develop talent</p> <p>Sustainability Report / People / Attracting, retaining and developing skilled workers / Measures for training and further education</p> <p>Sustainability Report / People / Attracting, retaining and developing skilled workers / Measures to attract talent – table of new hires and fluctuations</p> <p>Sustainability Report / People / Attracting, retaining and developing skilled workers / Measures to retain and develop talent – table of comparative key figures on remuneration</p> <p>Sustainability Report / People / Attracting, retaining and developing skilled workers / Measures to retain and develop talent – employee satisfaction table</p>	GRI 2-21, 2-30, 202-1, 203-1, 401-1, 401-2, 401-3, 404-2, 404-3, 405-2, 407-1, 501-2,
Art. 964b para. 2.4.	Significant risks and management of these risks	<p>Sustainability Report / People / Diversity and inclusion / Measures</p> <p>Sustainability Report / People / Attracting, retaining and developing skilled workers / Management approach</p>	GRI 3-3
Art. 964b para. 2.5.	Key performance indicators	<p>Sustainability Report / People / Diversity and inclusion / Management approach</p> <p>Sustainability Report / People / Attracting, retaining and developing skilled workers / Swissgrid employees</p> <p>Sustainability Report / People / Diversity and inclusion / Overview of diversity at Swissgrid</p> <p>Sustainability Report / People / Diversity and inclusion / Measures – Key figures for parental leave table</p> <p>Sustainability Report / People / Diversity and inclusion / Measures – Reports of cases of discrimination table</p>	GRI 2-7, 2-8, 202-2, 405-1
Respect for human rights			
Art. 964b para. 2.2.	Concepts and due diligence	<p>Sustainability Report / Partnership / Respect for human rights / Vision and goals</p> <p>Sustainability Report / Partnership / Respect for human rights / Management approach and due diligence with regard to human rights</p>	GRI 2-23, 3-3
Art. 964b para. 2.3.	Measures taken and evaluation of the effectiveness of these measures	<p>Sustainability Report / Partnership / Respect for human rights / Results of the risk analysis and definition of measures</p> <p>Sustainability Report / Partnership / Respect for human rights / Outcome and process for complains</p> <p>Sustainability Report / Partnership / Supply chain sustainability / Measures for a sustainable supply chain</p>	406-1, 407-1, 410-1, 414-1
Art. 964b para. 2.4.	Significant risks and management of these risks	Sustainability Report / Partnership / Respect for human rights / Results of the risk analysis and definition of measures	GRI 2-24, 3-3, 407-1, 408-1, 409-1, 410-1, 411-1, 414-1
Art. 964b para. 2.5.	Key performance indicators	<p>Sustainability Report / Partnership / Respect for human rights / Results of the risk analysis and definition of measures</p> <p>Sustainability Report / Partnership / Supply chain sustainability / Risk analysis and assessment</p>	GRI 414-1, 414-2
Combating corruption			
Art. 964b para. 2.2.	Concepts and due diligence	<p>Sustainability Report / Partnership / Compliance and anti-corruption / Anti-corruption</p> <p>Sustainability Report / Partnership / Compliance and anti-corruption / Compliance</p>	GRI 2-23, 2-24, 3-3
Art. 964b para. 2.3.	Measures taken and evaluation of the effectiveness of these measures	<p>Sustainability Report / Partnership / Compliance and anti-corruption / Scope of application of the compliance management system</p> <p>Sustainability Report / Partnership / Compliance and anti-corruption / Anti-corruption</p> <p>Sustainability Report / Partnership / Compliance and anti-corruption / Overview of compliance key figures</p>	GRI 2-23, 2-26, 3-3
Art. 964b para. 2.4.	Significant risks and management of these risks	Sustainability Report / Partnership / Compliance and anti-corruption / Anti-corruption	GRI 205-1
Art. 964b para. 2.5.	Key performance indicators	<p>Sustainability Report / Partnership / Compliance and anti-corruption / Anti-corruption</p> <p>Sustainability Report / Partnership / Compliance and anti-corruption / Anti-corruption – Awareness and training on corruption table</p>	GRI 205-2, 205-3

Index for reporting in accordance with TCFD

TCFD core element	Required information	Reference
Governance Disclose the organization's governance around climate-related risks and opportunities	a) Describe the board's oversight of climate-related risks and opportunities	Sustainability Report / Planet / Climate protection / Management approach Sustainability Report / Sustainability at Swissgrid / The role of the Board of Directors in the area of sustainability
	b) Describe management's role in assessing and managing risks and opportunities	Sustainability Report / Planet / Climate protection / Management approach Sustainability Report / Sustainability at Swissgrid / The role of the Executive Board in the area of sustainability
Strategy Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	Sustainability Report / Planet / Climate protection / Opportunities and risks of climate change
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	Sustainability Report / Planet / Climate protection / Overview of the risks of climate change for Swissgrid Sustainability Report / Planet / Climate protection / Inclusion in strategic, financial and operational planning
	c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	Sustainability Report / Planet / Climate protection / Inclusion in strategic, financial and operational planning Sustainability Report / Planet / Climate protection / Overview of the risks of climate change for Swissgrid Note: see in particular Strategy 2027 – Energy Strategy 2050 as a driver, The grid infrastructure of the future – the Strategic Grid 2040, and the resilience measures listed in the «Overview of the risks of climate change for Swissgrid» table
Risk management Disclose how the organization identifies, assesses, and manages climate-related risks	a) Describe the organization's processes for identifying and assessing climate-related risks	Sustainability Report / Planet / Climate protection / Management approach Financial Report / Management Report / Risk assessment / Process Sustainability Report / Planet / Climate protection / Overview of the risks of climate change for Swissgrid Note: see also the footnote on the classification of risks and assessment of financial impact according to the «Overview of the risks of climate change for Swissgrid» table
	b) Describe the organization's processes for managing climate-related risks	Sustainability Report / Planet / Climate protection / Overview of the risks of climate change for Swissgrid
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	Sustainability Report / Planet / Climate protection / Management approach Sustainability Report / Sustainability at Swissgrid / The role of the Board of Directors in the area of sustainability Financial Report / Management Report / Risk assessment
Metrics and targets Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process	Sustainability Report / Planet / Climate protection / Inclusion in strategic, financial and operational planning Sustainability Report / Planet / Climate protection / Emission reduction measures and effectiveness Note: see in particular Climate-relevant corporate objectives for 2023 – with an impact on variable remuneration; SF6 key figures for Swissgrid; Active power losses at Swissgrid; Consumption of electricity in MWh; Swissgrid energy key figures
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	Sustainability Report / Planet / Climate protection / Swissgrid's greenhouse gas footprint Sustainability Report / Planet / Climate protection / Emission reduction measures and effectiveness
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	Sustainability Report / Planet / Climate protection / Vision and goals

Limited assurance

Swissgrid AG

Aarau

Bericht des unabhängigen Wirtschaftsprüfers
mit begrenzter Sicherheit über ausgewählte As-
pekte

an den Verwaltungsrat



Bericht des unabhängigen Wirtschaftsprüfers

mit begrenzter Sicherheit über ausgewählte Aspekte im Nachhaltigkeitsbericht 2023 an den Verwaltungsrat der Swissgrid AG

Aarau

Wir wurden von der Geschäftsführung beauftragt, eine betriebswirtschaftliche Prüfung mit einer begrenzten Sicherheit über ausgewählte Aspekte im Nachhaltigkeitsbericht 2023 (einschliesslich der Aussagen zu den Treibhausgasen) der Swissgrid AG für den Zeitraum vom 1. Januar 2023 bis 31. Dezember 2023 durchzuführen. Die ausgewählten Aspekte waren die Folgenden:

Umwelt

CO2 Emissionen für Scope 1,2 und 3:

- Tabelle «Treibhausgasemissionen in Tonnen CO2e»
- Tabelle «Emissionsintensität»
- Tabelle «SF6 Kennzahlen von Swissgrid»
- Tabelle «Wirkverluste von Swissgrid»

Energieverbrauch:

- Tabelle «Energieverbrauch in MWh»
- Tabelle «Energiekennzahlen Swissgrid»

Soziales

Arbeitssicherheit:

- Tabelle «Abgedeckt durch auditiertes und zertifiziertes HSE-Managementsystem»
- Absatz «HSE Inspektionen» inklusive der Tabelle
- Tabelle «Berufsunfälle Swissgrid Mitarbeitende»
- Tabelle «Berufsunfälle Dienstleister»
- Tabelle «Ursache der Unfälle (Mitarbeitende und Dienstleister)»
- Tabelle «Arbeitsbedingte Erkrankungen»

Beschäftigung und Vielfalt & Chancengleichheit:

- Tabelle «Übersicht Mitarbeitende von Swissgrid»
- Tabelle «Neue Anstellungen/ Fluktuationen, einschliesslich Pensionierungen»
- Tabelle «Vergleichskennzahlen zur Vergütung»
- Tabelle «Vorsorge bei Swissgrid»
- Tabelle «Regelmässige Leistungsbeurteilung»
- Tabelle «Zufriedenheit Mitarbeitende»
- Die erste Tabelle innerhalb des Kapitels «Überblick Diversität bei Swissgrid»
- Tabelle «Herkunftsland Mitarbeitende»
- Tabelle «Kennzahlen Elternzeit»
- Tabelle Meldungen von Diskriminierungsfällen

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PricewaterhouseCoopers AG ist Mitglied eines globalen Netzwerks von rechtlich selbständigen und voneinander unabhängigen Gesellschaften.

Die ausgewählten Aspekte im Nachhaltigkeitsbericht 2023 (einschliesslich der Aussagen zu den Treibhausgasen) wurde durch die Geschäftsführung der Swissgrid AG auf Basis der folgenden geeigneten Kriterien erstellt:

Umwelt

- Energieverbrauch gemäss GRI 302
- CO2 Emissionen für Scope 1, 2 und 3 gemäss GRI 305-1 – 305-4

Soziales

- Beschäftigung gemäss GRI 401
- Arbeitssicherheit gemäss GRI 403 (exklusiv Kennzahlen, für welche die Arbeitsstunden von Auftragnehmern benötigt werden)
- Vielfalt und Chancengleichheit gemäss GRI 405

Inhärente Grenzen

Die Genauigkeit und Vollständigkeit der Daten der ausgewählten Aspekte im Nachhaltigkeitsbericht 2023 (einschliesslich der Aussagen zu den Treibhausgasen) unterliegen inhärent vorhandenen Grenzen, welche aus der Art und Weise der Datenerhebung, -berechnung und -schätzung resultieren. Darüber hinaus unterliegt die Quantifizierung der ausgewählten Aspekte im Nachhaltigkeitsbericht 2023 (einschliesslich der Aussagen zu den Treibhausgasen) einer inhärenten Unsicherheit aufgrund unvollständiger wissenschaftlicher Erkenntnisse, die zur Bestimmung von Faktoren im Zusammenhang mit den ausgewählten Aspekten und den für die Kombination erforderlichen Werten verwendet werden, z.B. Emissionen verschiedener Gase. Unser Prüfbericht sollte deshalb im Zusammenhang mit den geeigneten Kriterien gelesen werden.

Verantwortung der Geschäftsführung

Die Geschäftsführung ist für die ausgewählten Aspekte im Nachhaltigkeitsbericht 2023 (einschliesslich der Aussagen zu den Treibhausgasen) in Übereinstimmung mit den geeigneten Kriterien verantwortlich. Diese Verantwortung beinhaltet die Ausgestaltung, Implementierung und Aufrechterhaltung angemessener interner Kontrollen mit Bezug auf den ausgewählten Aspekten im Nachhaltigkeitsbericht 2023 (einschliesslich der Aussagen zu den Treibhausgasen), die frei von wesentlichen falschen Darstellungen als Folge von Verstössen oder Irrtümern sind. Darüber hinaus ist die Geschäftsführung für die Auswahl und die Anwendung der Kriterien verantwortlich.

Unabhängigkeit und Qualitätsmanagement

Wir sind im Einklang mit dem International Code of Ethics for Professional Accountants (einschliesslich den International Independence Standards) ausgegeben vom International Ethics Standards Board for Accountants (IESBA Code) von Swissgrid AG unabhängig. Diese Anforderungen legen fundamentale Grundsätze für das berufliche Verhalten bezüglich Integrität, Objektivität, beruflicher Kompetenz und erforderlicher Sorgfalt, Verschwiegenheit und berufswürdigen Verhaltens fest.

PricewaterhouseCoopers AG wendet den Internationalen Standard für Qualitätsmanagement 1 an, der von ihr verlangt, ein Qualitätsmanagementsystem zu entwerfen, zu implementieren und zu betreiben, einschliesslich Richtlinien oder Verfahren zur Einhaltung ethischer Ansprüche, beruflicher Standards und geltender gesetzlicher und behördlicher Anforderungen.

Verantwortung des unabhängigen Wirtschaftsprüfers

Unsere Verantwortung ist es, eine betriebswirtschaftliche Prüfung durchzuführen und auf der Grundlage unserer Prüfung eine Schlussfolgerung über den ausgewählten Aspekten im Nachhaltigkeitsbericht 2023 (einschliesslich der Aussagen zu den Treibhausgasen) abzugeben. Wir haben unsere Prüfung in Übereinstimmung mit dem International Standard on Assurance Engagements ISAE 3000 (Revised) „Betriebswirtschaftliche Prüfungen, die weder Prüfungen noch Reviews von vergangenheitsorientierten Finanzinformationen darstellen“ und dem International Standard on Assurance Engagements 3410 «Assurance Engagements on Greenhouse Gas Statements ('ISAE 3410')», publiziert vom International Auditing and Assurance Standards Board vorgenommen. Nach diesen Standards haben wir unsere Prüfungshandlungen so zu planen und durchzuführen, dass begrenzte Sicherheit darüber erlangt wird, ob die ausgewählten Aspekte im Nachhaltigkeitsbericht 2023 (einschliesslich der Aussagen zu den Treibhausgasen) in allen wesentlichen Belangen in Übereinstimmung mit den geeigneten Kriterien sind.



3 Swissgrid AG | Bericht des unabhängigen Wirtschaftsprüfers mit begrenzter Sicherheit

Unter Berücksichtigung von Risiko- und Wesentlichkeitsüberlegungen haben wir Prüfungshandlungen durchgeführt, um ausreichende geeignete Prüfungsnachweise zu erlangen. Die Auswahl der Prüfungshandlungen liegt im pflichtgemässen Ermessen des unabhängigen Prüfers. Bei einer betriebswirtschaftlichen Prüfung zur Erlangung einer begrenzten Sicherheit sind die durchgeführten Prüfungshandlungen im Vergleich zu einer betriebswirtschaftlichen Prüfung zur Erlangung einer hinreichenden Sicherheit weniger umfangreich, so dass dementsprechend eine geringere Sicherheit gewonnen wird.

Im Wesentlichen haben wir folgende Arbeiten durchgeführt:

- Beurteilung der Eignung und Anwendung des erweiterten Abschnitts «Umfang der Berichterstattung» oder einem besonderen Abschnitt, wie beispielsweise «Grundlage für die Erstellung des Nachhaltigkeitsberichtes»;
- Überprüfung der Anwendung des erweiterten Abschnitts «Umfang der Berichterstattung» etc. für die Berichterstattung als geeignetes Kriterium;
- Beurteilung der ausgewählten Aspekte (einschließlich der Aussagen zu den Treibhausgasen) auf der Grundlage des erweiterten Abschnitts «Umfang der Berichterstattung» im Nachhaltigkeitsbericht 2023;
- Befragungen und detaillierte Walkthroughs mit relevanten Stakeholdern für die ausgewählten Aspekte (einschließlich der Aussagen zu den Treibhausgasen);
- Einsichtnahme in Prozess- und Kontrollbeschreibungen sowie andere interne Richtlinien und relevante Dokumente;
- Analytische Verfahren;
- Wiederholung ausgewählter Berechnungen (einschließlich der Aussagen zu den Treibhausgasen);
- Zusätzliche Verfahren zur Erlangung von Prüfnachweisen, die wir als notwendig erachten (beispielsweise stichprobenartige Rückverfolgung der Nachweise mittels Belegeinsicht).

Wir sind der Auffassung, dass die von uns erlangten Prüfungsnachweise ausreichend und geeignet sind, um als Grundlage für unsere Schlussfolgerung zu dienen.

Schlussfolgerung

Bei unserer Prüfung sind wir nicht auf Sachverhalte gestossen, aus denen wir schliessen müssten, dass die ausgewählten Aspekte im Nachhaltigkeitsbericht 2023 (einschliesslich der Aussagen zu den Treibhausgasen) der Swissgrid AG für den Zeitraum vom 1. Januar 2023 bis 31. Dezember 2023 nicht in allen wesentlichen Belangen in Übereinstimmung mit den geeigneten Kriterien sind.

Vorgesehene Nutzer und Verwendungszweck des Berichts

Dieser Bericht ist nur für den Verwaltungsrat der Swissgrid AG bestimmt und wurde ausschliesslich erstellt, um ihm über die ausgewählten Aspekte im Nachhaltigkeitsbericht 2023 (einschliesslich der Aussagen zu den Treibhausgasen) Bericht zu erstatten, und für keinen anderen Zweck. Mit der Abgabe unserer Schlussfolgerung akzeptieren und übernehmen wir keine Verantwortung (rechtlich oder in anderer Weise) oder Haftung für die Verwendung unseres Berichts einschliesslich der Schlussfolgerung für andere Zwecke oder gegenüber anderen Personen, welchen unser Bericht vorgelegt wird oder in dessen Händen er gelangen mag, und andere Personen können sich auf unsere Schlussfolgerung nicht berufen.

Wir erlauben die Weitergabe unseres Berichts nur als Ganzes und zusammen mit den angemessenen Kriterien, damit die Geschäftsführung darlegen kann, dass sie ihrer Governance Verantwortung mit der Beauftragung eines unabhängigen Berichts nachgekommen ist, ohne dass wir damit eine Verantwortung oder Haftung gegenüber irgendeiner anderen Partei übernehmen. Soweit gesetzlich zulässig, übernehmen oder akzeptieren wir keine Verantwortung gegenüber irgendjemand anderes als der Geschäftsführung der Swissgrid AG für unsere Arbeiten oder diesen Bericht.



PricewaterhouseCoopers AG

Stefan Räsamen

Petar Lesic

Zürich, 19. März 2024

Die Pflege und Integrität der Internetseite der Swissgrid AG liegt in der Verantwortung der Geschäftsführung; Die von den unabhängigen Wirtschaftsprüfern durchgeführten Arbeiten beinhalten keine Berücksichtigung der Pflege und Integrität der Internetseite von Swissgrid AG, und dementsprechend übernehmen die unabhängigen Wirtschaftsprüfer keine Verantwortung für Änderungen, die möglicherweise an den präsentierten Informationen oder Kriterien aufgetreten sind, seit sie auf der Internetseite präsentiert wurden.



5 Swissgrid AG | Bericht des unabhängigen Wirtschaftsprüfers mit begrenzter Sicherheit

Swissgrid committee memberships

ENTSO-E Assembly (mandatory participation under the Articles of Incorporation): this body is one of the two governing bodies of the European Network of Transmission System Operators for Electricity (ENTSO-E). It represents the 40 members of ENTSO-E.

ENTSO-E Board: the Board is the second governing body of ENTSO-E. It consists of 12 elected members.

TSO-E ICTC: the ENTSO-E Information and Communication Technologies Committee meets the business needs of the association by ensuring the governance and oversight of the technical management, development and operation of the association's ICT infrastructure, products, portfolio, standards, architecture and services.

ENTSO-E LRG: the ENTSO-E Legal and Regulatory Group is responsible for ensuring ENTSO-E's compliance with laws and regulations.

JAO SH (mandatory participation under the Articles of Incorporation): the Joint Allocation Office is the leading service provider for transmission system operators on the European electricity market. Cross-border transfer capacity rights can be auctioned via a uniform trading platform. JAO also provides accounting (clearing and settlement), contracting, reporting, project support and IT services.

TSC/TSCNET committees (mandatory participation under the Articles of Incorporation): TSCNET Services, the regional security coordinator based in Munich, supports transmission system operators in keeping the world's largest synchronous power grid stable. TSCNET Services is one of the leading regional security coordinators (RCC) in Europe. The company provides integrated services to electricity transmission system operators and their control centres to maintain the operational security of our electricity system – 24 hours a day, seven days a week.

ENTSO-E SOC: the ENTSO-E System Operations Committee is responsible for developing and maintaining a European operational framework.

ENTSO-E RG CE:

The Regional Group Continental Europe of ENTSO-E defines the framework for the regional activities of the transmission system operators of the continental European synchronous zone.

ENTSO-E RG CE CSO: the Coordinated System Operations subgroup of ENTSO-E RG CE is mainly concerned with existing regular operations according to the interconnection rules and aims to improve them and develop new processes specific to the RG CE.

ENTSO-E MC: the objective of the ENTSO-E Market Committee and the associated working groups and projects is to implement the third internal energy market package and the Clean Energy package, as they point the way to the development of a well-functioning European electricity market.

ENTSO-E SDC: the System Development Committee of ENTSO-E is responsible for the cooperation of transmission system operators in grid development and planning. Its main task is to coordinate the development of a secure, environmentally sound and economic transmission system with the aim of creating a robust European grid.

IBWT SC: the Italian Borders Working Table is the joint market coupling project for the allocation of cross-border transfer capacity between 12 European countries (Italy, Greece, France, Switzerland, Slovenia, Germany, Austria, Belgium, the Netherlands, Luxembourg, Denmark and Norway), in which the transmission system operators (ADMIE, APG, ELES, RTE, SWISSGRID and TERNA) and the power exchanges work together.

HGRT/EPEX SB (mandatory participation under the Articles of Incorporation): Swissgrid participates in the Holding des Gestionnaires de Réseau de Transport d'Électricité. The holding company is owned by European transmission system operators and combines their influence on the leading spot exchange for power in Central and Western Europe, EPEX SPOT, via a 49% stake. Swissgrid sits on the Boards of Directors of HGRT and EPEX SPOT.

Core SG: Core is an association of transmission system operators in Central and Eastern Europe, which represents a capacity calculation region with uniform rules. Core sets the direction and strategic planning for its core activities, and monitors and manages projects to implement EU ordinances.

VSE Board of Directors: the Association of Swiss Electricity Companies is the nationally and internationally recognised umbrella organisation of the Swiss electricity industry, founded in 1895. It has more than 400 members who operate along the entire value chain (electricity producers, distribution system operators, cross-connected companies) and produce more than 90% of Switzerland's electricity. The VSE Board is made up of 13 representatives of eight interest groups and industry associations.

Operational Coordination Switzerland: close cooperation between all nationally involved players in the electricity sector is imperative for security of supply in Switzerland. The Operational Coordination Switzerland committee ensures coordination between the various players and the appropriate flow of information.

Other bodies:

Renewable Grid Initiative (RGI): RGI is an association of non-governmental organisations and transmission system operators from all over Europe who are committed to transparent and sustainable grid expansion. The aim is to promote the growth of renewable energies and to achieve complete decarbonisation in line with the Paris Agreement.

CIGRE: at an international level, CIGRE addresses matters relating to all grid levels, from extra-high voltage to decentralised, intelligent electricity systems. CIGRE's main goal is to optimise existing grids and energy systems and to further develop them for the future. The focus is primarily on the areas of sector coupling, storage and controllable consumers (hydrogen, hydro/heat/gas storage, heat pumping technology and electromobility).