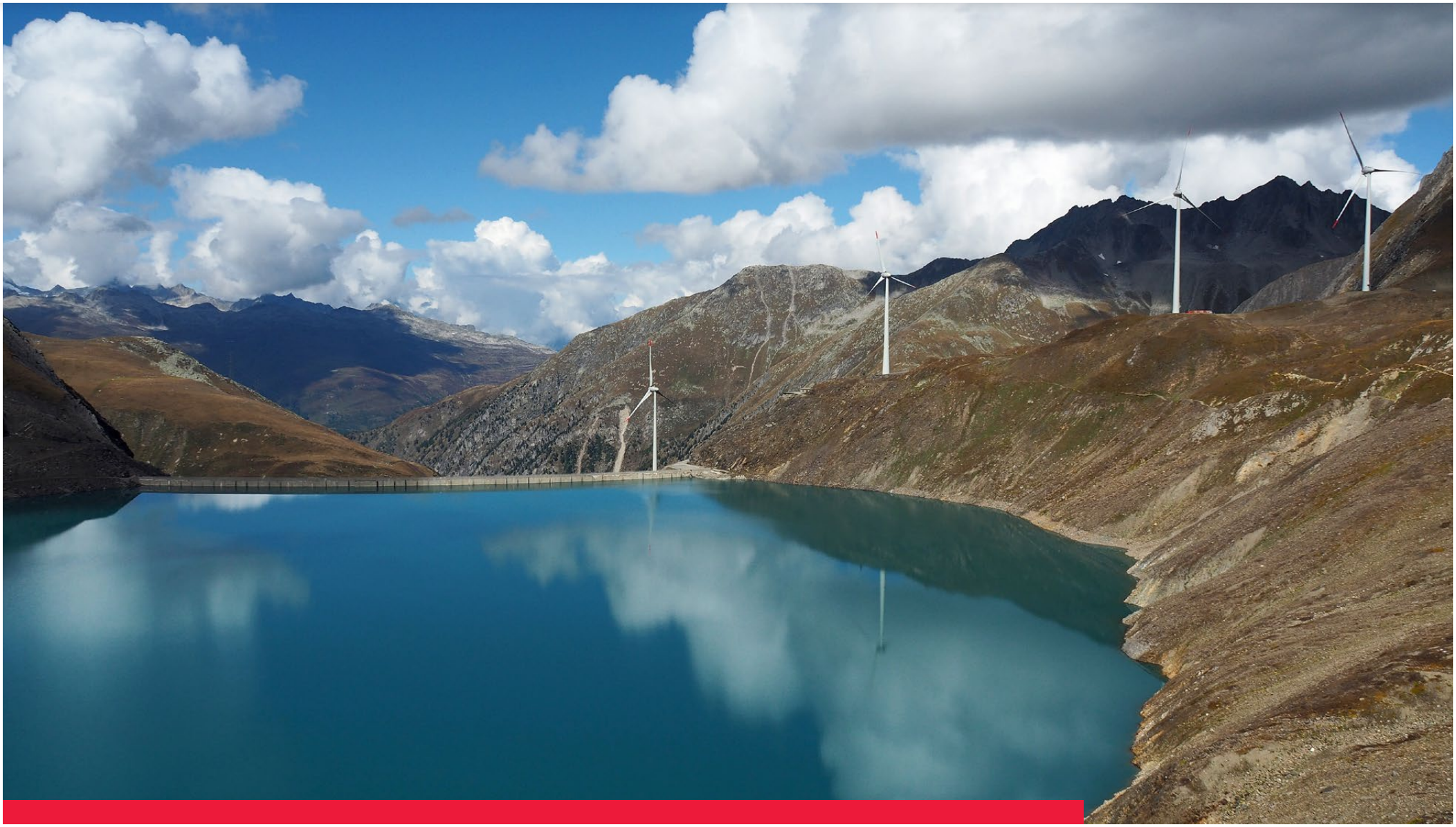
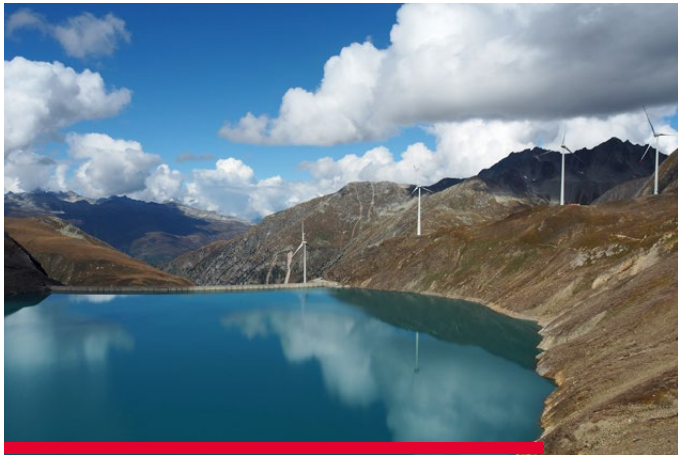
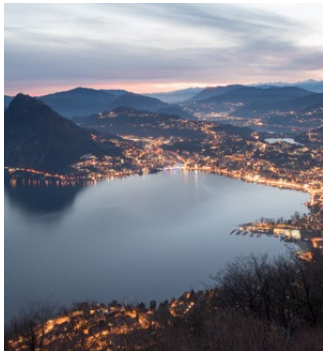


Annual Report 2025



Financial Report



Corporate Governance

Sustainability Report

Annual Report

You can also find the annual report as an online version at:

www.report.swissgrid.ch


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

Editorial

Swissgrid is ready for the energy future

Dear readers,

The transformation of the electricity system is progressing rapidly. Decentralisation, decarbonisation and digitalisation are not only fundamentally changing where and when electricity is generated and consumed, but are also placing increasing demands on its storage and transmission.

Ensuring secure and stable grid operation is becoming increasingly challenging. What is more, complex, lengthy approval processes are holding up urgently needed grid expansion projects – to a greater extent than the transformation of the energy system can tolerate. Within the space of a few years, photovoltaic generation has risen to a level that poses major challenges for the balance groups in forecasting energy generation. Discrepancies between their forecasts and the real-time situation make the operation of the transmission grid more difficult and more expensive.

A robust grid infrastructure is the basis for a reliable supply of electricity. The transmission grid will only remain the strong backbone of Switzerland's energy supply if it is developed with foresight and expanded in good time. Switzerland's security of supply depends to a large extent on whether grid operations, market mechanisms and national and international cooperation can keep pace with the speed of change. An electricity agreement with the European Union is a key factor in ensuring Switzerland's long-term security of supply.

Swissgrid continued to play an active role in shaping the energy future during the 2025 financial year. The transmission grid achieved 100% availability – as a result of forward-thinking planning, operational excellence and continuous innovation. We have set out how we intend to develop our grid in a targeted manner over the coming years in the Strategic Grid 2040. We once again reached significant milestones in various projects for expanding and modernising our infrastructure in 2025, and took steps to ensure that approval processes would be speeded up.

Swissgrid has made significant progress in integrating solar power generation, while close collaboration with industry partners has led to improved production forecasts for solar energy. Swissgrid has also implemented innovative solutions to reduce the amount of control energy required. The AI-assisted «Optimizer Autopilot» for control energy has already allowed tens of millions of francs to be saved. At the same time, we are continuing to develop the Swiss control energy market and opening it up to new players and technologies. This will not happen overnight, but our experts are doing their utmost to ensure that the market is ready for the energy future as rapidly as possible.

Sustainability remained an integral part of our corporate strategy in 2025. We are already well on the way to meeting our targets for direct emissions. In the 2025 financial year, we defined additional climate targets for Scope 3 and adopted a decarbonisation plan. In this way, we are taking responsibility throughout the value chain.

Progress in sustainability management is reflected in improved sustainability ratings, which in turn boost the company's appeal to investors.

The grid availability rate of 100% underscores the stability and efficiency of our infrastructure. The further development of the transmission grid and the optimisation of the control energy market will strengthen Switzerland's security of supply in the long term. By pursuing a clear strategy, developing innovative solutions and building strong partnerships, we are helping to guarantee a secure supply of electricity for Switzerland at the lowest possible cost to society and the economy – both now and in the future.

We would like to say a special thank you to Swissgrid's 980 employees. They work with great dedication, a high level of expertise and real passion day in, day out to make the operation of the transmission grid even more reliable and secure. Their dedication is the foundation for our success.

Adrian Bult
Chairman of the
Board of Directors

Yves Zumwald
CEO

Year in review

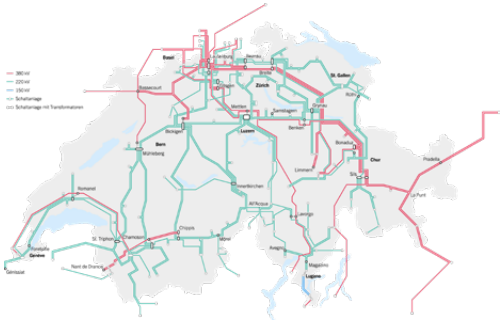
Swissgrid is actively helping to shape Switzerland's energy future. As the country's transmission system operator, it plays a key role in the transformation of the energy system. Thanks to Swissgrid, electricity flows reliably and securely around the clock. What is more, we are working with the entire industry to pave the way for a sustainable energy system: we are facilitating the integration of renewable energy sources, heat pumping technology and battery storage systems into the grid. And not only that: we are developing and testing innovative technologies for the smart grid of the future and facilitating its efficient management.

Details of Swissgrid's main grid projects, innovative solutions and milestones for 2025 are set out below. Our aim in everything we do is to ensure the secure operation of the transmission grid as efficiently as possible, 365 days a year, with a motivated and professional team.

Grid operations in the reporting year: very high availability of the transmission grid

In 2025, Swissgrid was able to guarantee 100% grid-related security of supply.

Overall, grid operations in 2025 ran more smoothly than in the previous year. Lower electricity generation from storage and run-of-river power stations resulted in fewer exports and higher imports for Switzerland. Exports from France and imports into Germany and Italy dominated the European energy supply. Swissgrid significantly reduced the amount of redispatch energy deployed thanks to dynamic methods for calculating line capacity and optimised outage planning for maintenance. At the same time, discrepancies between actual photovoltaic production and the forecasts made at the lower grid levels led to deviations in the system frequency above or below 50 hertz. Nevertheless, coordinated action by European transmission system operators to stabilise the frequency was required less frequently than in the previous year.

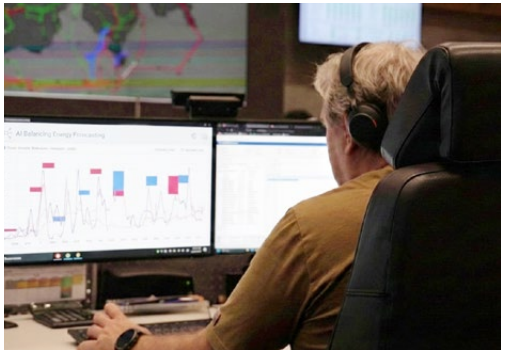


Strategic Grid 2040: grid development projects up to 2040 approved by ElCom

The transmission grid is the backbone of a secure and sustainable supply of electricity. It is essential for prosperity and quality of life in Switzerland. Swissgrid has updated its long-term plan for the Swiss transmission grid by preparing the Strategic Grid 2040. In April 2025, following a thorough review, the Swiss Federal Electricity Commission (ElCom) confirmed the need for additional grid development. Based on comprehensive grid and market simulations, Swissgrid has identified 31 key projects – comprising line reinforcements and additional controllable transformers – that will improve the grid's controllability and transmission capacity.

Investments in the transmission grid

During the reporting year, Swissgrid invested CHF 281.2 million in the renovation and expansion of the transmission grid, and spent a total of CHF 63.0 million on grid repair and maintenance. Examples of maintenance work include the replacement of conductors and insulators, the revision of circuit breakers, corrosion protection for supporting structures, forest clearing, avalanche protection and the repair of installations after a damaging event.



Better use of control energy via the «Optimizer Autopilot»

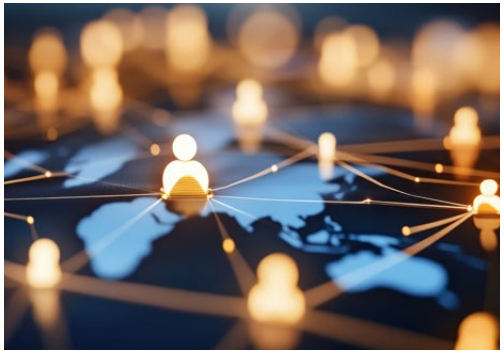
The «Optimizer Autopilot» for control energy was gradually enhanced during the reporting year. It supports system operations by identifying the expected imbalance between electricity generation and consumption in the Swiss electricity system at an early stage and making recommendations for the efficient use of control energy in the secondary and tertiary markets. The clear added value, which was already apparent during the concept phase, meant that the proof of concept was delivered earlier than planned. Furthermore, the use of the tool was expanded and stabilised thanks to the support of the shift teams. The operational roll-out of the «Optimizer Autopilot» and its subsequent ongoing development have created a solid basis for improving the quality of forecasts even further and strengthening operating efficiency in the long term.

PV4Balancing: photovoltaics as part of the system solution

PV4Balancing is a pilot project run by Swissgrid to investigate how photovoltaic plants can contribute to grid stability. The aim is to integrate the growing volume of PV generation into the control energy market via a new product. Working in collaboration with ancillary services providers (ASPs) and system operators, a product was developed within seven months and has been in operational use since June 2025. For the first time, photovoltaic plants were grouped together to form virtual power plants and used to provide negative tertiary control energy. By October, the number of participants had risen to six ASPs and six parties with 75 photovoltaic plants offering up to 26 MW, activated over 272 quarter-hours. The results show that accurate forecasts, automated processes and integration into existing operational processes are crucial. These findings will be incorporated into the further development of a PV ancillary services product with a view to its potential launch on the Swiss control energy market.

Further development of photovoltaic forecasts for secure transmission system management

In 2025, Swissgrid enhanced its own photovoltaic forecasts in order to provide a more accurate picture of Switzerland's rapidly growing decentralised solar generation of electricity. The automated hourly forecast is based on master data from around 310,000 plants, as well as detailed weather information, and allows regionally differentiated forecasts to be drawn up. The inclusion of systematic validation was vital: since December 2025, real-time data from around 100 photovoltaic plants has been available, enabling forecast discrepancies to be identified and reduced. Operational applications have also been integrated, including dashboards for system operation and functions for balance group monitoring. In addition, the groundwork has been laid for estimating the number of missing photovoltaic plants and for analysing the impact of battery storage systems. The advancements made in 2025 will form the basis for gaining a better understanding of decentralised energy sources.



TSO-DSO Coordination is moving towards roll-out

The TSO-DSO Coordination innovation project between Swissgrid, the transmission system operator (TSO), and the distribution system operators (DSOs) has made further progress. The aim is to develop a joint market mechanism to integrate decentralised energy sources into the electricity grid in a flexible and secure manner. The focus during the reporting year was on preparing for practical implementation: Phase C began in April, during which the previously developed coordination plan was assessed to determine whether it was ready for implementation. This was followed in October by a market potential study among Swiss distribution system operators and ancillary services providers. In December, the coordination mechanism was successfully simulated for the first time using a software prototype. This has established the essential conditions for making targeted use of decentralised energy sources to ensure grid stability in the future.

TSO Innovation Alliance: working together to ensure a highly resilient grid

In 2025, eight TSOs joined forces to form the TSO Innovation Alliance. The founding members are Terna, RTE, the Elia Group (comprising Elia and 50Hertz), TenneT, Red Eléctrica, Amprion and Swissgrid. Swissgrid's specialists showed great commitment to the alliance and drove the collaboration forward. The aim is to pool innovative expertise within the electricity sector in order to tackle challenges such as decarbonisation, digitalisation and grid resilience. The TSO Innovation Alliance focuses on joint research, technology scouting and open innovation competitions. In 2025, the first call for ideas on the topic of «Weather and Grid Resilience» was launched to address the growing challenges posed by weather-related factors. Numerous start-ups and technology partners took part in the European innovation competition. Knowledge sharing, proofs of concept and close collaboration with start-ups will enhance the efficiency and stability of Europe's grid infrastructure in the long term.

Digital asset management: more efficient planning, construction and maintenance

Swissgrid is pressing ahead with the digitalisation of the transmission grid in order to enhance the reliability, capacity and efficiency of its assets (lines, pylons and substations) during the most significant transformation in its history. Digital asset management is designed to improve grid availability and reduce costs. The use of a digital twin (digital grid image) is intended to optimise the entire value chain. The Asset Management 4.0 programme coordinates the associated transformation projects. Significant progress was made during the reporting year: new grid construction projects for substations will be managed using Building Information Modelling (BIM) or 3D models as standard. In addition, the enhanced asset performance model now provides the key basis for making decisions about grid construction projects and maintenance work. New processes and data quality KPIs will bring about a lasting improvement in the quality of asset data.

IoT hub for a secure grid

Sensorhub is Swissgrid's central Internet of Things hub. It consolidates sensor data from pylons, circuit breakers and gas-insulated switchgear on the Swissgrid data platform, creating a uniform basis for monitoring the condition of critical equipment and for performing data-driven analyses of operating facilities. In 2025, Swissgrid further expanded its sensor network, fitting over 300 pylon sensors and around 60 sensors for monitoring circuit breakers and disconnectors across the country. Around 500 sensors were installed at five sites to measure the SF_6 gas pressure in gas-insulated switchgear. Swissgrid also stabilised its data platform, which processes around 90,000 measured values per day. The first dashboards featuring integrated language models and chatbots make it easier to analyse large volumes of data. These advancements strengthen grid monitoring capabilities and form an important basis for predictive maintenance and high system availability.

Efficient detection of damage in the transmission grid thanks to drone technology

The Swiss transmission grid comprises 6,700 kilometres of lines and 12,000 pylons. Two-thirds of Swissgrid's grid infrastructure is between 50 and 80 years old and will need to be replaced over the coming years and decades. Inspections of this infrastructure were often time-consuming in the past, but autonomous drones and AI-powered analysis of image databases now allow efficient, safe inspections to be carried out much more rapidly. The pilot phase, which was successfully completed in June 2025, has established the necessary conditions: potential damage was specifically identified and classified using 1.5 million drone images. These results will enable predictive maintenance to be carried out and serve as a basis for the further roll-out of the technology.

Cybersecurity: further improvement of security standards

In the fourth quarter of 2025, Swissgrid successfully had its information security management system recertified in accordance with the ISO/IEC 27001:2022 standard. This recertification confirms the ongoing improvement in security standards and the proactive approach to managing increasing digital complexity. It delivers clear added value for future innovation and transformation initiatives and bolsters confidence in Swissgrid's ability to tackle new challenges successfully. In addition, the area of validity has been extended: following the initial certification in 2022, which covered information and communication technologies, as well as central operational technology systems in the data centres, the certification now also applies to substation-related processes and decentralised OT systems in selected substations. This shows that Swissgrid is taking account of the growing importance of decentralised systems and ensuring that appropriate safety standards are in place.

Physical security: planning is good, training is better

Swissgrid is responsible for operating one of Switzerland's most critical infrastructures. It carries out exercises and exchanges information with the scientific community and public authorities to ensure that it is prepared for extraordinary events. The partnership with Lucerne University of Applied Sciences and Arts continued in 2025: Swissgrid contributed its expertise to the CAS programme in crisis management, enabling students to practise incident management. Swissgrid is thereby helping to ensure resilience beyond its own organisation.

Physical security has also been strengthened. On 27 November 2025, the «Helios» emergency exercise was organised by the Aargau Cantonal Police to simulate a real-life emergency and optimise procedures between Swissgrid and the emergency services. Swissgrid also practised its business continuity management procedures in the «Notlicht 2025» exercise.

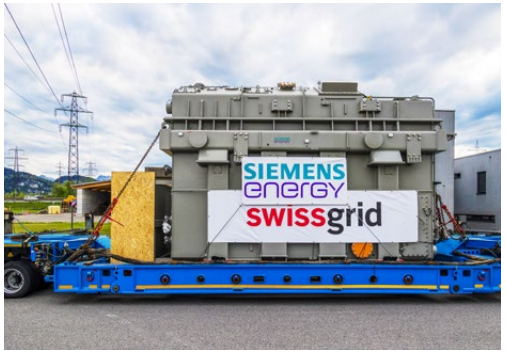
Operational security: proactive rather than reactive

The energy system is changing rapidly, challenges are becoming more complex, and interdependencies within the system are increasing. Anticipating risks at an early stage is already a major aspect of risk management, but is becoming even more important as a result of the transformation of the energy system.

To address this development, Swissgrid has laid the foundations for the new Swissgrid Situation Center (SSC). The SSC links existing functions even more closely so that it can form a joint picture of the situation and support operational units by providing recommendations for action. The aim is to further strengthen the resilience of the transmission grid and the company as a whole.

HR and digitalisation: improving efficiency through digital solutions

Improving user-friendliness and process efficiency is paramount when testing or introducing digital solutions. In addition to automating repetitive processes, digital solutions are being trialled in the field of Learning & Development in particular. An avatar that can be used to practise handling difficult conversations is just one example.



New transformer in Bonaduz and no objections to the La Punt – Sils line

Upgrading the extra-high-voltage grid in the Canton of Grisons is a crucial factor in transporting energy from the hydroelectric power stations and alpine solar parks in the Grisons to consumer centres in Central Switzerland, and is also important for electricity exchange with Austria and Italy. A powerful modern transformer with a capacity of 400 megavolt-amperes (MVA) was delivered and installed in Bonaduz during the reporting year. The 380 kV and 220 kV switchgear in Bonaduz were also upgraded.

The extra-high-voltage power line between La Punt and Sils in Domleschg (the Albula line), which is over 60 years old, will soon reach the end of its technical service life. Swissgrid is therefore replacing the entire overhead line along the existing route. Swissgrid submitted the planning application to the relevant authorities in the course of the year. No objections were lodged during the public consultation period.

Mörel – Ernen grid project: substation construction delays

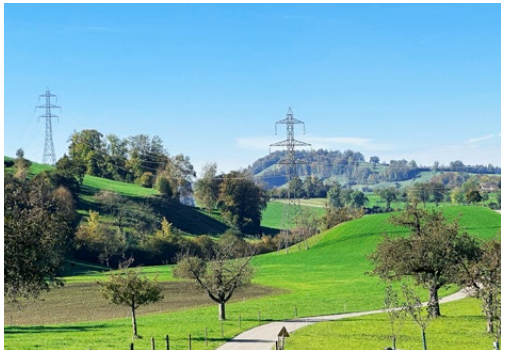
Construction work on the new extra-high-voltage line between Mörel-Filet and Ernen has been completed. The new electricity pylons have been fully erected and painted green, so the new line is now theoretically ready. However, it will not be able to transport the electricity generated by the Valais hydroelectric power stations securely and reliably until the end of 2028 at the earliest, when the new 65 kV Ernen substation becomes operational.

Obfelden – Samstagern grid project: start of construction of the Sihlhalden – Kilchberg section

Swissgrid is upgrading the 150 kV line between Samstagern, Thalwil, Waldegg (Zurich) and Obfelden to 220 kV in stages in order to increase capacity and strengthen the connection between the city of Zurich and the transmission grid in the south. Swissgrid began construction work on the second section of the overhead line between Sihlhalden and Kilchberg in 2025 and will submit further sections for approval in 2026. The new line will run as an underground cable from Kilchberg – passing through the Uetliberg Tunnel along its route – all the way to Zurich and the new Waldegg substation.

Flumenthal – Froloo grid project: the search for a corridor has started

Swissgrid is planning a new extra-high-voltage line between Flumenthal (SO) and Therwil (BL) to replace the current 145 kV line operated by Industrielle Werke Basel (iwb). Swissgrid and the other members of the support group appointed by the Swiss Federal Office of Energy (SFOE) examined various routes and technical options for the new line. In spring 2025, the support group issued a recommendation for the line corridor, and the public consultation phase took place in May 2025.



Bickigen – Mettlen grid project: the sectoral plan procedure is underway

Swissgrid is upgrading the existing 220 kV line between the Bickigen and Mettlen substations in order to ensure long-term security of supply in the Bern and Lucerne regions. The current line is over 90 years old and will initially be renovated before being replaced by a new one. Swissgrid submitted an application in spring 2025 to initiate the associated sectoral plan procedure and informed the public about the project and the proposed working corridors, which are now being reviewed by the SFOE's support group. The support group is expected to present its corridor recommendation in spring 2026, followed by a public consultation.

Innertkirchen – Mettlen grid project: renewable energy from the Alps to Central Switzerland

Swissgrid is replacing the line between Innertkirchen (BE) and Mettlen (municipality of Eschenbach, LU) to ensure that energy from the hydroelectric power stations in the Alps can continue to be reliably transported to Central Switzerland in the future. The existing 220 kV line is a point of congestion in the Swiss transmission grid and has reached the end of its technical service life. It is therefore being replaced by a more efficient line. Swissgrid and the support group appointed by the Swiss Federal Office of Energy (SFOE) examined various regional planning and technological options in 2025. The support group's corridor recommendation was presented to the public at information events in autumn 2025, and the public consultation stage began at the end of November 2025. The Federal Council is expected to finalise the route for the new line in mid-2026, after which Swissgrid will draw up the construction plans on this basis.

Further information:
www.swissgrid.ch

Company

GRI 2-6

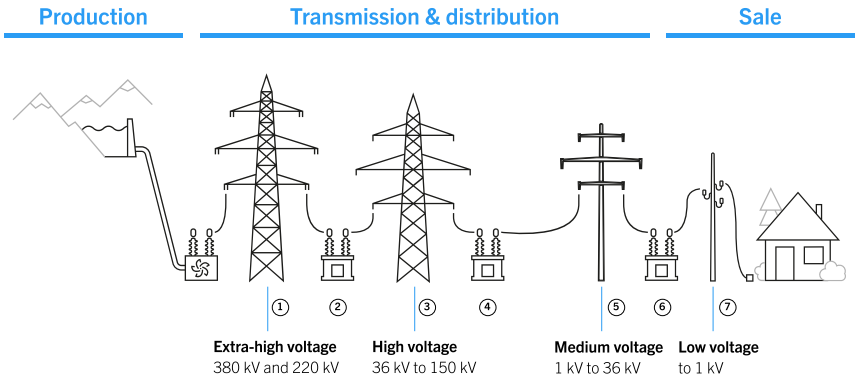
Swissgrid is the national grid company and owner of the Swiss extra-high-voltage grid. Its mandate is governed by the Electricity Supply Act (ESA, SR 734.7) and the Electricity Supply Ordinance (ESO, SR 734.71) . The Federal Electricity Commission (ElCom) monitors compliance with these regulations. Swissgrid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

Value chain of the Swiss electricity industry

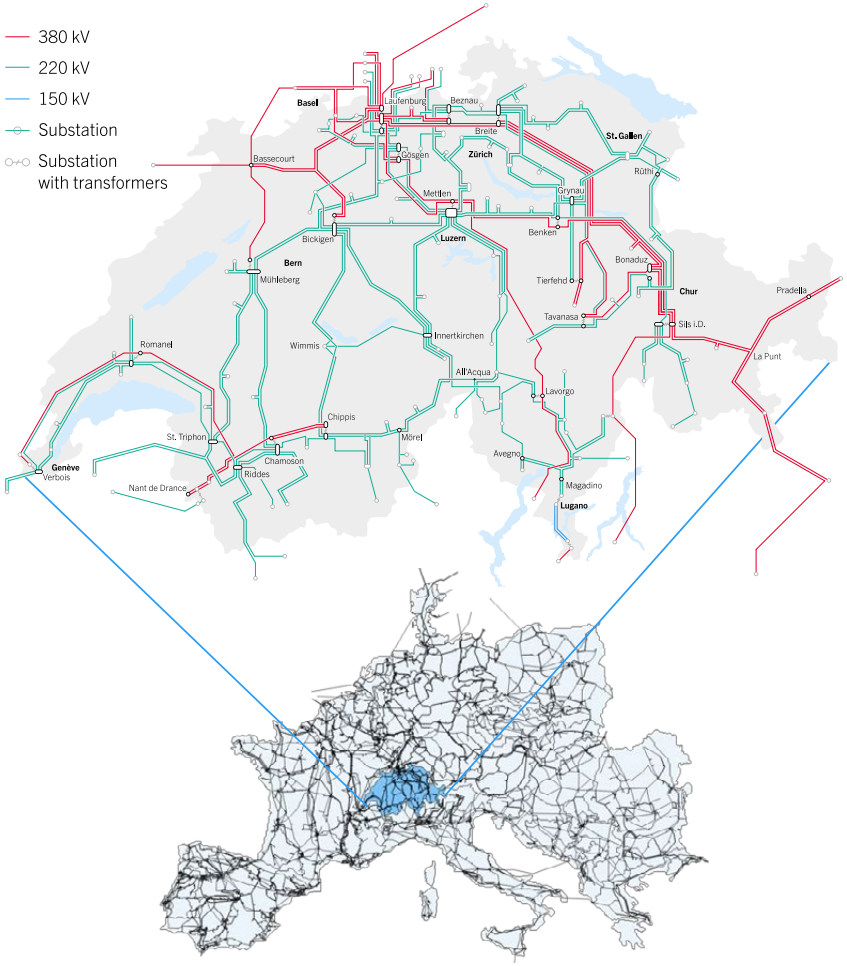
The Swiss transmission grid is a relevant part of the supply chain for the Swiss electricity system. This system comprises four areas: electricity generation, transmission, distribution and sale. Electrical energy is transmitted and distributed via a total of seven grid levels. These are the extra-high, high, medium (1, 3 and 5) and low-voltage levels (7), as well as 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 subsequent grid levels take care of the national, regional and local distribution of electricity as far as the power outlet, and transform it as required. Given the increase in decentralised energy production, the feed-in to the grid, for example of energy from photovoltaic plants, is increasingly taking place via the distribution grids.

Swissgrid is responsible for grid level 1 and therefore for the secure transmission of large volumes of electrical energy over long distances. The Swiss transmission grid consists of 380 and 220 kV 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, 126 substations with a total of 148 switchgears and 32 transformers, as well as protection and substation 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 international interconnection lines, it is closely integrated into the European interconnected grid. The Swiss transmission grid plays an important role in the cross-border transport of electrical energy throughout Europe. Today, the European interconnected grid guarantees a secure supply of electricity for more than 530 million consumers in over 30 countries.



The transmission system in 2025



GRI 2-1

The missions of the national grid company

In accordance with the Electricity Supply Act, Swissgrid ensures the non-discriminatory, reliable and efficient operation of the transmission system at all times as an essential basis for the secure supply of electricity in Switzerland. At the grid control rooms in Aarau and Prilly, the company ensures that the system frequency of 50 hertz is constantly maintained and that electrical energy is transported safely. As part of its balancing group management activities, Swissgrid also coordinates the schedules of Swiss power plant operators and electricity traders, and uses ancillary services to eliminate and minimise congestion.

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

Due to the close integration of the Swiss transmission grid with the European interconnected grid, Swissgrid has important roles to play in Europe. Swissgrid works with European transmission system operators to ensure smooth system management. As Coordination Centre South, Swissgrid monitors the frequency of the European extra-high-voltage grid in cooperation 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.

Further information can be found in the «Mission» section.

Establishment as the Swiss transmission system owner

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

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

Business activities in a strictly regulated environment

Swissgrid operates in a strictly regulated environment (see the «Management Report» section). Providing consumers with a secure supply of electricity is in the public interest and requires a reliable and efficient infrastructure. On account of its economic characteristics, the grid also represents a natural monopoly, which is recognised as a legal monopoly under the ESA and ESO. Consequently, there is an undisputed need for regulation to ensure that grid infrastructure and grid management are as efficient as possible. This task is performed by the Swiss Federal Office of Energy (SFOE) and – as the supervisory authority for the implementation of the ESA and ESO – the Federal Electricity Commission (ElCom).

In accordance with the law, Swissgrid is established as a public limited company under private law with its registered office in Switzerland. The grid company must also ensure that the majority of its capital and the associated voting rights belong directly or indirectly to the cantons and municipalities (see the «Corporate Governance» section).

Mission

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

For more information on the transformation of the energy system, see the «Energy transition» section. Details of the sustainable development of the transmission grid are set out in the «Climate protection», «Environmental protection», «Biodiversity» and «Circular economy» sections.

GRI 203-1, 203-2

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

As a transmission system operator, Swissgrid is responsible for a critical infrastructure. Secure and efficient grids are of vital importance guaranteeing the supply of electricity. The Federal Office for Civil Protection (FOCP) considers an electricity shortage to be among the events posing the greatest financial risk to Switzerland. A nationwide power failure also ranks in the top ten in terms of expected damage category[1].

In order to guarantee grid-related security of supply and to protect the grid from outages, Swissgrid takes action at various points.

[1] Federal Office for Civil Protection, report on the national risk analysis (KATARISK – Disasters and Emergencies in Switzerland)

Ensuring grid operations – around the clock

In Swissgrid's capacity as Coordination Centre South, its grid control rooms are responsible for maintaining the continuous balance between electricity generation and consumption in order to ensure a constant system frequency of 50 hertz – not only for Switzerland, but also for Europe. The grid control rooms also monitor the capacity utilisation of the transmission system and intervene in the event of congestion, impending line overloads or failures of grid elements. When operating its grid, Swissgrid follows the n-1 principle, which is an essential rule for ensuring secure transmission system operation. This principle states that if any one grid element fails, no other element may be overloaded.

Careful 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 station operators and electricity traders, which include all electricity trading 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 continuously optimises the Swiss market for control power and cooperates with European transmission system operators.

Transmission system operators are also tasked with providing sufficient capacity on international interconnection lines for international electricity trading. In order to

avoid grid congestion and to ensure non-discriminatory access, Swissgrid allocates capacity at the Swiss border by means of auctions. These processes are carried out in close coordination with neighbouring transmission system operators.

Cooperation with Europe – in all areas

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

Due to the lack of an electricity agreement between Switzerland and the EU, it is becoming increasingly difficult for Swissgrid to help shape these pan-European developments. This has a negative impact on grid security, and hence on Switzerland's security of supply. The exclusion of Swissgrid from European platforms and coordination processes increases the risk of unplanned load flows in the Swiss transmission grid. Swissgrid is therefore taking various measures to counteract Switzerland's growing isolation. An electricity agreement would fully integrate Switzerland into the European internal electricity market, which would significantly strengthen Switzerland's security of supply and grid operations.

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 integrated safety policy. This defines the objectives and framework for action for implementing precautions in a consistent and coordinated manner in accordance with standardised rules.

The purpose of integrated safety management is, on the one hand, to protect people and the environment from negative influences arising from Swissgrid's activities and, on the other hand, to protect Swissgrid's employees, installations, systems and information from adverse effects.

Swissgrid's integrated safety policy

Swissgrid's integrated approach to safety management comprises seven security domains: operational security, physical security, information security, integrated risk management (see the «Management Report»), crisis management, business continuity management and finally, health, safety and the environment (see the «Sustainability Report»). The integrated safety policy sets out Swissgrid's safety objectives and regulates the essential aspects required for the effective implementation of company-wide integrated safety management. These include the principles, the overarching framework conditions, domain-specific requirements and the 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.

Physical security

The aim of this security domain is to ensure the physical security of employees, 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, established and certified in accordance with the international standard ISO/IEC 27001, defines the applicable regulations and measures. This management system supports the entire implementation process, from implementation through to review and further development.

The basic measures to be applied, along with measures specific to the energy sector, are derived from the same family of standards and from the federal government's ICT minimum standards to improve ICT resilience.

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 and subject to certain restrictions, in the event of deviations from the normal situation.

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 power system failure 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.

Key figures for grid-related security of supply

	2025	2024
Number of supply failures in the meshed grid	0	1
Average duration of interruption	0 minutes	94 minutes
«Energy not supplied» in the meshed grid	0 MWh	2 MWh

«Energy not supplied»: in the reporting year, Swissgrid ensured 100% grid-related security of supply; consequently, the volume of «Energy not supplied» is zero.

in GWh	2025	2024
Transported energy	70,537	69,609
Imported energy	30,150	25,262
Exported energy	29,743	39,175
Transit energy	22,210	22,155
Active power losses absolute	864	985
Positive control energy	915	963
Negative control energy	506	556

Active power losses	2025	2025
Active power losses of transported energy	1,22%	1,41%
Ratio of «energy not supplied» to transported energy	0.000000000	0.000000029

GRI 203-1, 203-2

Grid transfer capacity

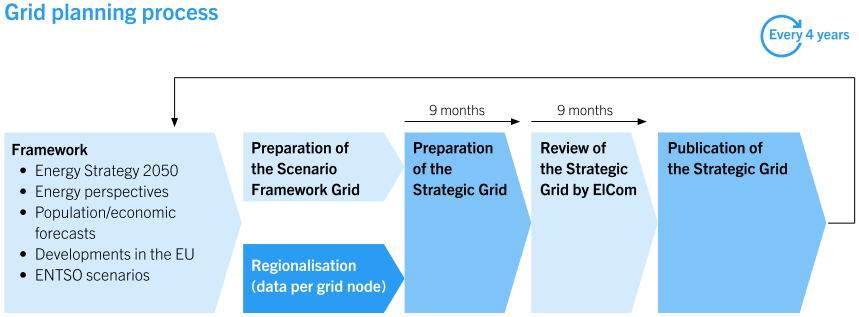
Swissgrid's aim is to provide a grid infrastructure that offers high availability and capacities, and that meets the requirements of the future energy system. This requires long-term planning, modernisation and optimisation of the grid, as well as ongoing inspection, maintenance and servicing.

Planning the grid – the Strategic Grid

The requirements placed on the grid have changed significantly in recent years. This trend will intensify in the coming decades as part of the transformation of the energy system. 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.

On the basis of this scenario framework, Swissgrid has developed the Strategic Grid 2040, which is currently being implemented. 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.

Grid planning process



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 2040 and represent an investment volume of around CHF 5.5 billion. The grid projects included in the Strategic Grid 2040 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.

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 and maintained. Systems must be repaired quickly in the event of damage caused by storms or avalanches. Swissgrid also carries out scheduled maintenance work. Two-thirds of the Swiss transmission grid, which is over 6,700 kilometres long, 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 generation. 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 (see the «Grid express» section on the Swissgrid website). In the «Grid Transfer Capacity» priority of its «Strategy 2027», Swissgrid also defines measures to increase the capacity of the grid in line with demand and to implement and operate the grid even more efficiently in the future. Digital solutions play a key role in addition to the Strategic Grid 2040.

Innovation and digitalisation

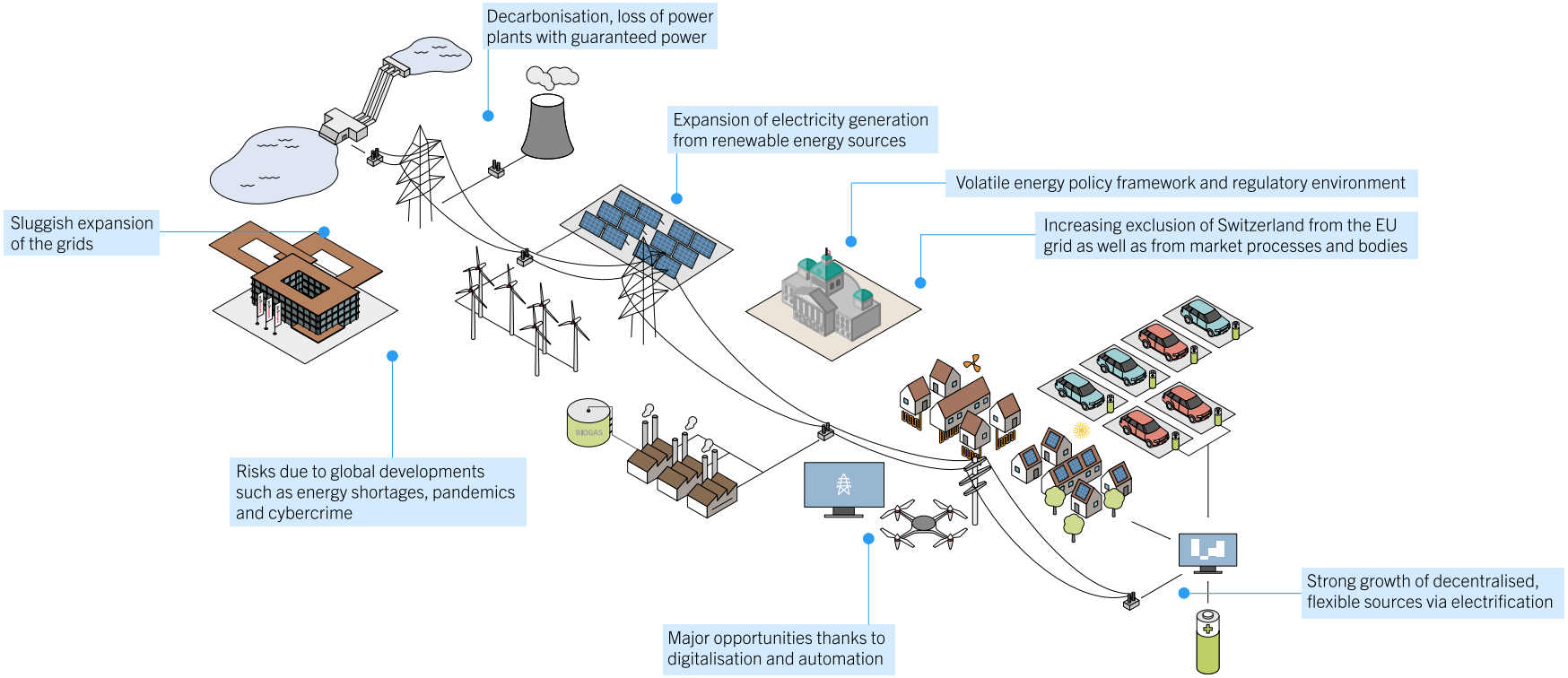
Innovation has a high priority at Swissgrid, which is reflected in its Strategy 2027. The company has set itself the goal of developing into an innovative, highly digitalised company in response to the increasing complexity and volatility of the electricity system resulting from the energy transition and the decentralisation of electricity generation.

By promoting a culture of innovation – for example by means of events such as hackathons – Swissgrid creates an environment in which employees are encouraged to develop and implement new ideas. In addition, the internal innovation initiative «Innovating Together» took place for the second time during the reporting year. Participants found solutions to help address problems in various areas of the company. Swissgrid is also harnessing potential for innovation at international level. Innovation and digitalisation make an important contribution to ensuring that Switzerland's supply of electricity remains secure and efficient in the future.

The «Year in review» section outlines the main innovation projects from the reporting year and the milestones achieved.

2027 Strategy

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



The expansion of renewable energy production is leading to rapidly changing generation patterns and volatile electricity flows. This poses major challenges for power system control, which are further 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 transformation of the energy system, but also on account of global developments. Threats such as the consequences of climate change for the grid infrastructure and 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 sources profitably into system operation. End-to-end digital processing of the value chain will also open up opportunities for efficiency gains within the company.

Five priorities for Strategy 2027

«Security of Supply»
Strategy 2027 focuses on «Security of Supply», with measures to ensure grid-related security of supply in the long term 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, adapting 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 aims to harness the potential of all the decentralised resources in the energy system more effectively in the future: it plans to create market platforms in association with the industry, to make these platforms easier to access by means of digital solutions, to better coordinate their flexibility and to use them profitably for grid operations.

«Grid transfer capacity»
The transformation of the energy system can only succeed if the grid infrastructure is adapted to the new framework conditions. To this end, Swissgrid is planning the Strategic Grid 2040, which was approved by the Federal Electricity Commission (ElCom) during the reporting year. 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 asset management. This will allow the status of assets 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 involves increasing implementation capacity, partly through 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, while 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 in accordance with the standards of the Global Reporting Initiative. This has been in place since the 2023 reporting year. The Scope 1 and 2 targets were approved by the Board of Directors in January 2025, and Scope 3 greenhouse gas targets were developed during the current reporting year.

«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 through structural and organisational measures and the installation of 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 objectives.

Publication details

The annual report is published in German, French and English and covers the annual report, financial report, corporate governance and sustainability report. The legally binding version is in German.

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