



Factsheet

Date: 17 March 2023

Energy: Overview of the measures to strengthen security of supply

Current situation

Switzerland's supply of energy is currently secure. However, because of the war in Ukraine and the associated disruptions to gas supplies in Europe, as well as other uncertainties, there may be energy supply issues.

The current situation is as follows:

Electricity: The water levels in Swiss reservoirs are currently just above the long-term average. The French nuclear power plants with limited availability at present should go online again in the coming months. However, there is some uncertainty regarding the rate at which this will happen.

Gas: The gas storage facilities in Europe have been well filled after the loss of Russian supplies thanks to new sources of supply. However, ENTSO-G, the European gas pipeline operators' association, is not giving the all-clear. Gas flows to Switzerland are normal.

Since the gas market is closely linked to the electricity market, an escalation in the situation could also cause difficulties for large electricity companies. In order to avert a threat to Switzerland's electricity supply, the Federal Council submitted an emergency federal act to Parliament in May for subsidiary financial aid to shore up systemically critical electricity companies (**financial backstop**). The Council of States approved the measures in June, but the National Council decided against an emergency debate at that time. In response to a request from Axpo, the Federal Council activated the financial backstop on 6 September 2022 under an emergency ordinance and decided to grant **Axpo** a credit line of CHF 4 billion to consolidate its liquidity. On 30 September 2022, Parliament passed the law.

Furthermore, on 16 December 2022 the Federal Council submitted a bill for consultation aimed at improving transparency and oversight in the wholesale energy market.

More information on the situation: [Energy: Current situation \(admin.ch\)](#)

The federal government is continuously monitoring developments very closely, coordinating the work to strengthen security of supply and drawing up the required measures.

Measures to strengthen security of supply

Short-term measures

- On 16 February 2022, the Federal Council decided to establish a **hydropower reserve** as early as the coming winter. The operators of reservoirs will be paid to store energy, which can be called up when needed. By issuing an ordinance, which comes into force on 1 October 2022, the Federal Council has brought forward the related measure in the Federal Act on a Secure Electricity Supply from Renewable Energy Sources. Elcom has decided on relevant thresholds and Swissgrid has run the tender for the reserve, in which contracts for the supply of 400GWh have been awarded. This reserve will be used to cover critical shortages towards the end of winter that the market cannot meet.
- On 16 February 2022, the Federal Council also decided to prepare a legal provision that is required to support **reserve power plants** as additional insurance against extraordinary shortages. In August 2022, the Federal Council decided that the timeframe for such plants should be brought forward so that they would be available by the end of winter 22/23 (operating on gas, oil or hydrogen) and issued an ordinance to that effect. The Federal Council approved that ordinance on 21 December 2022. It regulates the operation of reserve power plants and emergency power groups until 31 May. At the beginning of September 2022, the first contract was signed with GE Gas Power for a temporary reserve power plant in Birr (AG). In December 2022, the Confederation signed a contract for the existing Cornaux 1 thermal power plant in Cornaux (NE) and in February 2023 for the Thermatel gas-fired combined cycle power plant operated by Compagnie industrielle de Monthey SA in Monthey (VS). These three reserve power plants have a total capacity of 326 MW.
- In addition, the Federal Council wants to use **emergency generators**, as these provide a valuable reserve. Their operators should therefore also be able to participate in the tendering procedures. The basis for this is the Winter Reserve Ordinance, which brings together all three reserves already mentioned.
- On 30 September 2022, the Federal Council further decided that certain hydropower plants would be temporarily permitted to use more water for electricity production. It has been possible to prematurely lift the temporary reduction in the amount of residual water they discharge. In order to deal with shortages on the transmission grid, the Federal Council has also decided to **temporarily increase the voltage** from 220 kV to 380 kV on the two major power lines Bickingen-Chippis (Gemmi line) and Bassecourt-Mühleberg. Increasing transmission capacity to Valais, where large storage power plants such as Nant de Drance are situated, boosts security of supply.
- At its meeting on 17 March, the Federal Council adopted amendments to the Energy Ordinance, Energy Promotion Ordinance and the Electricity Supply Ordinance. This enables the implementation of the amendments to the Energy Act passed by Parliament, which have been in force since 1 October 2022 (emergency measures for the short-term provision of a secure electricity supply in winter, **solar offensive**).
- As Switzerland is completely dependent on imports for gas, the Federal Council decided on 18 May 2022 to strengthen the **gas supply for the winter**. It has required the gas industry to ensure that it has storage capacities in neighbouring countries and options for additional gas supplies. In addition to the regular procurement process, the following measures have been specifically considered:
 - **Physical reserve:** Part of the volume normally purchased is stored, primarily in neighbouring countries. This reserve is intended to cover 15% (around 6TWh) of Switzerland's annual gas consumption (around 35TWh).

- **Options for further gas supplies:** In addition, 6TWh is to be purchased in France, Germany, Italy and the Netherlands in the form of options for non-Russian gas, which can be called up on demand and at short notice for a fixed charge. This amount corresponds to around 20% of Switzerland's winter consumption. This measure also provides supply route diversification.

To this end, the Federal Council has enacted an emergency ordinance and taken note of a plan for the creation of a winter gas reserve drawn up by the industry and the Federal Administration. The procurements have in the meantime been made.

- At the WEF Annual Meeting in Davos on 22 May 2022, Energy Minister Simonetta Sommaruga and Economic Affairs Minister Guy Parmelin agreed with German Vice-Chancellor Robert Habeck to make a prompt start to negotiations on a **solidarity agreement between Germany and Switzerland**. Negotiations with Germany are ongoing, as are talks with France and Italy.
- On 24 August 2022, the Federal Council adopted a **voluntary savings target** of 15% for gas for the winter months (beginning of October 2022 to end of March 2023). Switzerland is completely dependent on imports from abroad for its gas. A shortage in Europe would therefore have a direct impact on Switzerland and make it more difficult for Switzerland to obtain the gas supplies that it has purchased abroad. Switzerland, like other countries, will therefore help to prevent a shortage by taking voluntary measures. The EU states have set themselves the goal of collectively consuming 15% less gas between August 2022 and March 2023.
- Working with the business community, the federal government has developed an **energy saving campaign** with simple measures for the efficient and economical use of electricity and gas that members of the public and businesses can easily put into practice; this campaign was launched at the end of August. In addition, the Energy Saving Alliance was set up in October, bringing together more than 180 partners from business, civil society and the public sector.

Links: www.nicht-verschwenden.ch / www.alliance2022-23.ch

Medium and longer-term measures

- On 18 June 2021, the Federal Council adopted the **Federal Act on a Secure Electricity Supply from Renewable Energy Sources**. It aims to ensure that more renewable energy is produced domestically, that a hydropower reserve is available for emergency situations and that there is more funding for storage power plants (winter electricity surcharge) so that they can expand and ensure sufficient capacity in winter. The Council of States debated the bill in the autumn session of this year. In the spring session of 2023, the National Council followed the Council of States on the main points – but made certain amendments. The Council of States is expected to take up the matter again in the summer session.
- The Federal Council also wants to **speed up** the procedures. Currently, it can often take up to 20 years for a wind or hydropower project to come to fruition. There are various **authorisation procedures**, and in each procedure, there is a right of appeal as far as the Federal Supreme Court. This delays the implementation of projects. The Federal Council is proposing to consolidate the procedures so that there is only one appeal procedure in order to speed up the process for large wind and hydropower plants. This would also benefit the 15 projects that representatives of the power industry and environmental organisations agreed on at the Hydropower Round Table.

Key figures for electricity and gas

In 2021, Switzerland's final energy consumption was around 221 terawatt hours (TWh). Of this consumption, 15.4% was fuelled by natural gas, 26.3% by electricity, 14% by heating oil, 29.3% by fossil fuels, 0.5% by coal and 14.4% by other energies such as wood, district heating, environmental heat and biogas. In 2021, the domestic electricity generation mix was 61.5% hydropower, 28.9% nuclear energy and 9.6% electricity from conventional thermal plants (such as combined heat and power) and renewable energy sources (such as photovoltaics and wind energy).