

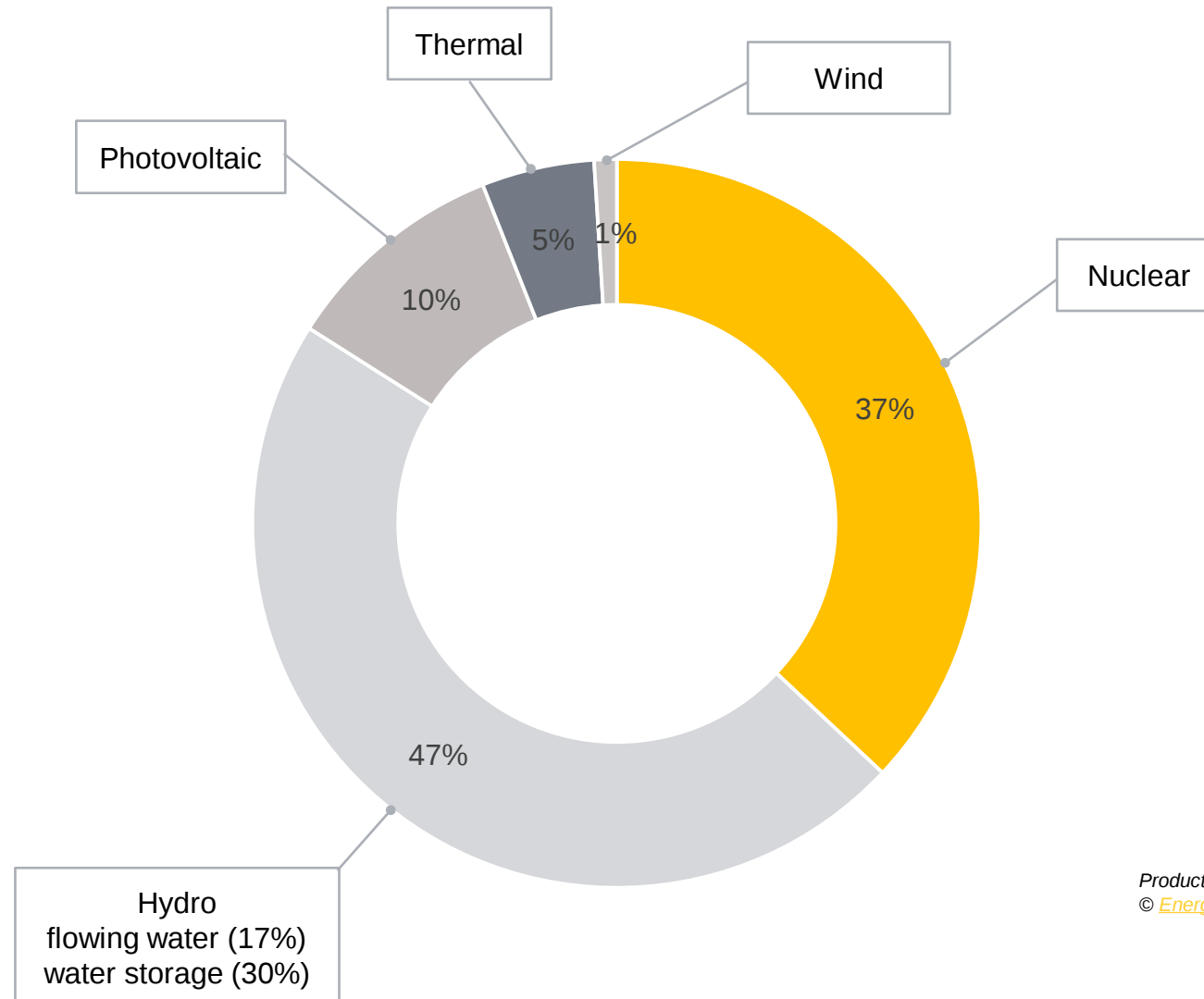
Nuclear Energy in Switzerland

SELA Annual Conference

Dr. Pascal Hachem

28 August 2026

1. Switzerland's Energy Mix



Production by energy type per year, Jan – May 2025
© [Energie-Dashboard Bundesamt für Energie](#)

1. Legal basis of Switzerland's use of Nuclear Energy

732.1

English is not an official language of the Swiss Confederation. This translation is provided for information purposes only and has no legal force.

Nuclear Energy Act

(NEA)

of 21 March 2003 (Status as of 1 April 2025)

The Federal Assembly of the Swiss Confederation

on the basis of Article 90 of the Federal Constitution¹,
and having considered the Federal Council dispatch of 28 February 2001²,

decrees:

¹ SR 101

² BBl 2001 2665

- Chapter 1 General Provisions

- Art. 1 Subject matter and purpose

This Act regulates the **peaceful use of nuclear energy**. Its main purpose is to protect humans and the environment against the risks of nuclear energy.

2. Federal popular initiative "*For a Planned Phase-Out of Nuclear Energy*" (1/2)

Sonntag, 29 Oktober 2018

Abstimmung 3

«Versorgungssicherheit wäre gefährdet»

Atomausstieg Nur weil sie alt sind, seien die Schweizer AKW nicht unsicher, sagt Doris Leuthard. Einen vorzeitigen Ausstieg aus der Atomenergie findet sie überstürzt. Weder das Stromnetz noch die saubere Alternativen seien bereit.

Aargauer Zeitung

ENERGIESTRATEGIE

Bundesrätin Leuthard: «Das ist kein Etikettenschwindel – der Atomausstieg ist beschlossen»

NZZ

Leuthard warnt vor hohen Kosten und Stromausfällen

Confessione del Peccato
MERCOLEDÌ 16 NOVEMBRE 2016

CONFEDERAZIONE

9

L'INTERVISTA ■■ DORIS LEUTHARD

«Uscire adesso dall'atomo è prematuro»

Secondo la consigliera federale la via più sicura è l'abbandono graduale del nucleare

LE TEMPS

ÉCONOMIE OPINIONS CULTURE SOCIÉTÉ SCIENCES SPORT CYBER VIDÉOS PODCASTS ARTIC

ACCUEIL » SUISSE

Doris Leuthard milite contre l'initiative «Sortir du nucléaire»

«Initiative schafft grosse Probleme»

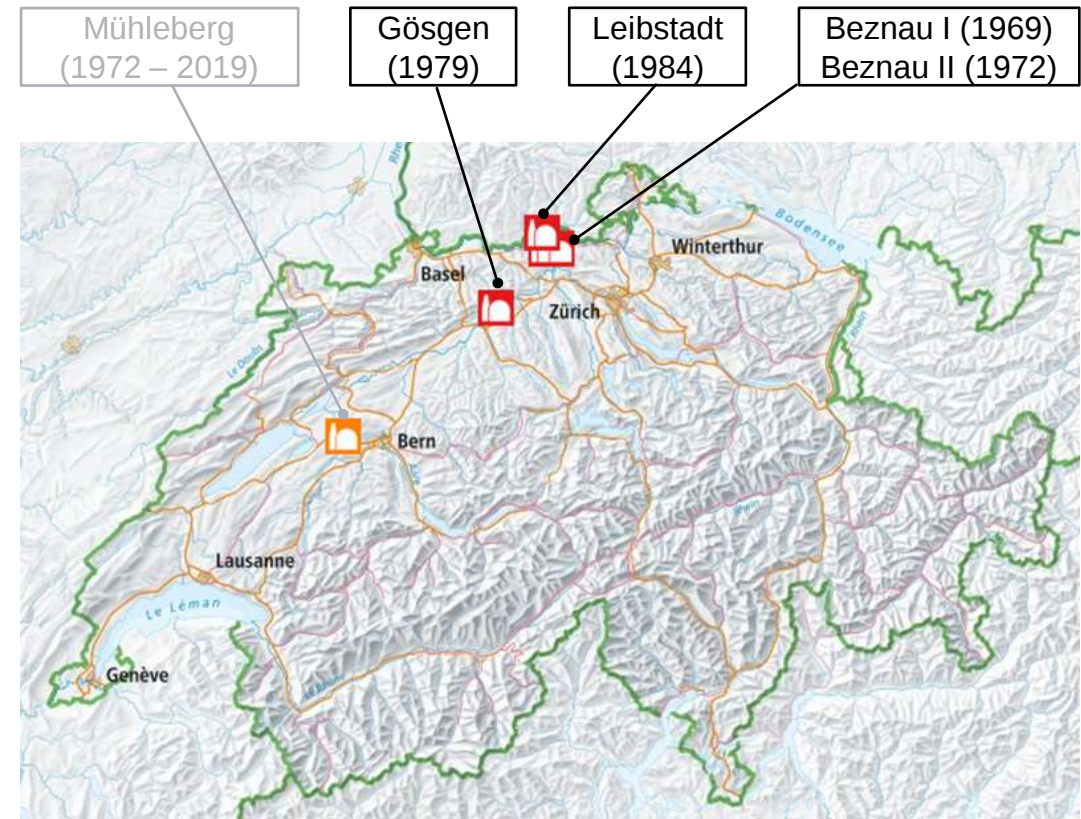
© [Leuthard warnt vor hohen Kosten und Stromausfällen | NZZ](#)
© [Energiesstrategie - Bundesrätin Leuthard: «Das ist kein Etikettenschwindel – der Atomausstieg ist beschlossen»](#)
© [Doris Leuthard milite contre l'initiative «Sortir du nucléaire» - Le Temps](#)
© [Interviews und Medienbeiträge - UVEK](#)

2. Federal popular initiative "*For a Planned Phase-Out of Nuclear Energy*" (2/2)

- On 27 November 2016, the Swiss voters rejected the nuclear phase-out initiative, with 54.2% voting "No".
- Aim was to:
 - Ban the construction of new nuclear power plants in Switzerland;
 - Limit the operating lifespans of the five existing nuclear plants (the last one would have been shut down in 2029).
- The Federal Council and Parliament recommended rejecting the initiative as it would have led to a premature shutdown of existing plants.
- Instead, under the Energy Strategy 2050, the government plans a gradual phase-out of nuclear energy.

3. Nuclear Power Plants in operation in Switzerland

- 5 Nuclear Power Plants began operation in Switzerland between 1969 and 1984, spread across four sites.
- Permanent shutdown of Mühleberg in 2019, 4 plants at 3 sites remain in operation.
- 3 of these Plants have been running for over 40 years, and the newest has crossed the 40-year mark in 2024.
- The "*Nationale Genossenschaft für die Lagerung radioaktiver Abfälle*" ("Nagra") handles all matters related to nuclear waste.
 - Following long-term evaluation, Nagra has proposed the region "*Nördlich Lägern*" (cantons of Zurich and Aargau, close to German border) as the final site for underground disposal of nuclear waste.
 - Construction of the deep underground disposal site currently expected to commence in 2045.



Switzerland's 5 Nuclear Energy Plants
© [Maps of Switzerland - Swiss Confederation - map.geo.admin.ch](https://maps.admin.ch)

4. Ownership structures of the Nuclear Power Plants

- Ownership structures vary significantly.
- They are to 82% publicly owned.
- The newer plants operate as “partner plants,” highlighting deep interconnections within the Swiss electricity industry.

- Partner plant shareholders assume total energy production and cover annual costs according to their shareholdings.

Beznau I & II 100% owned by Axpo Power AG (fully held by Axpo Holding AG)

Gösgen

- Alpiq AG (40%)
- Axpo Power AG (25%)
- Centralschweizerische Kraftwerke AG (12.5%)
- the City of Zurich (15%)
- Energie Wasser Bern (7.5%)

Leibstadt

- Axpo Power AG (22.8%)
- Axpo Solutions AG (16.3%)
- Centralschweizerische Kraftwerke AG (13.6%)
- Alpiq AG (27.4%)
- BKW Energie AG (14.5%)
- AEW Energie AG (5.4%)

Mühleberg

100% owned by BKW Energie AG (fully held by BKW AG)

5. Memorandum on the long-term operation of Nuclear Power Plants

- On 9 July 2024 the Swiss Federal Office for Energy ("SFOE") published a memorandum on the long-term operation of nuclear power plants:
 - All currently operating plants have open-ended licenses, allowing operation as long as they remain safe.
 - The SFOE asked Axpo and Alpiq to comment on the long-term operation of the existing Nuclear Power Plants.
 - Primary objective: understand the operators' planning assumptions regarding the remaining operational lifespan of their facilities.
 - Investments are continuously necessary and must be profitable, otherwise they cannot be economically justified.
 - The planned operating time depends particularly on economic considerations.
 - SFOE concludes that both operators have demonstrated robust planning and measures for 60 year long term operation of the nuclear power plants, further supportive measures of the Swiss Confederation are not needed.
 - Both operators are preparing for operating the nuclear power plants beyond 60 years. The SFOE voices understanding for the operator's petition that the regulatory environment needs to be stable. The SFOE believes that it would be premature to take legislative measures with respect to enabling long-term operation beyond 60 years, given that operators will first want to analyze costs.

a. Current Status of operating Nuclear Power Plants

- Periodic Safety Reviews (PSR), Art. 34 Nuclear Energy Ordinance (NEO)

- **Art. 34¹** Comprehensive safety reviews for nuclear power plants

¹ The holder of an operating licence for a nuclear power plant must carry out a comprehensive safety review every 10 years (Periodic Safety Review, PSR).

- Required retrofitting (Art. 22 (2) (g) NEO)

g. backfit the installation to the necessary extent that it is in keeping with operational experience and the current state of backfitting technology, and beyond insofar as further upgrading is appropriate and results in a further reduction of risk to humans and the environment;

- Monitoring of ageing (Art. 35 NEO)

- **Art. 35** Ageing management

¹ With the aid of a programme for managing ageing, the licence holder must systematically monitor the ageing of all systems, structures and components, the functions and integrity of which are of importance with regard to safety and security.

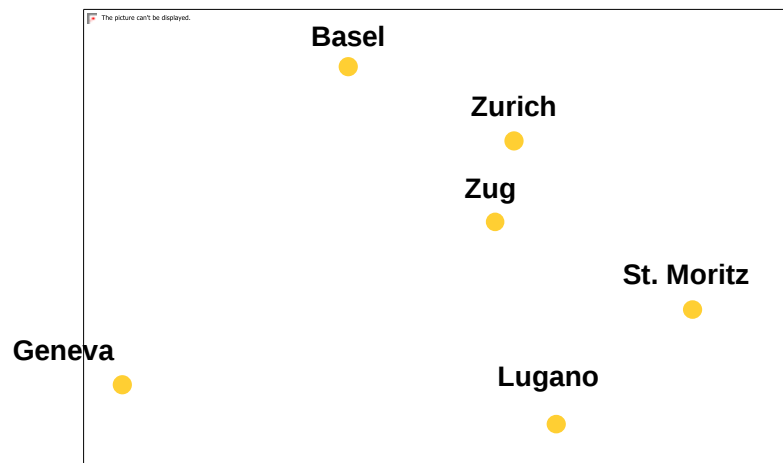
b. Long-term operation of (over) 60 years

- Axpo and Alpiq are planning for about 60 years of operation but are also examining longer operating scenarios.
- Operators deem operation beyond 60 years technically possible but face uncertain political acceptance:
 - Existing construction and prior upgrades are assumed to be amortized after 60 years, with minimal additional costs expected for waste disposal;
 - Significant investments for extended operation, including continued staffing and expertise, could nonetheless be required;
 - Operators will likely only choose such a long-term operation if higher market prices can justify these extra costs.
- Regulatory shifts or stricter rules may increase nuclear power expenses, though stable frameworks for decommissioning and waste funds could enhance predictability.
- SFOE considers reviewing existing regulations, evaluating measures to maintain competency, and keeping open communication with operators as primary steps.

6. Federal Council's Report on 80 years LTO

- On 13 May 2026 the Swiss Federal Council submitted its report stating for two nuclear power plants (Gösgen, Leibstadt) that an 80-year life span is possible.

Contact



Zurich

Brandschenkestrasse 90
CH-8002 Zurich

Basel

Lange Gasse 47
CH-4052 Basel

Geneva

12, quai de la Poste
CH-1211 Geneva 11

Lugano

Via Vegezzi 6
CH-6901 Lugano

Zug

Baarerstrasse 8
CH-6301 Zug

St. Moritz

Via Maistra 2
CH-7500 St.Moritz