Factsheet

Long-term climate strategy

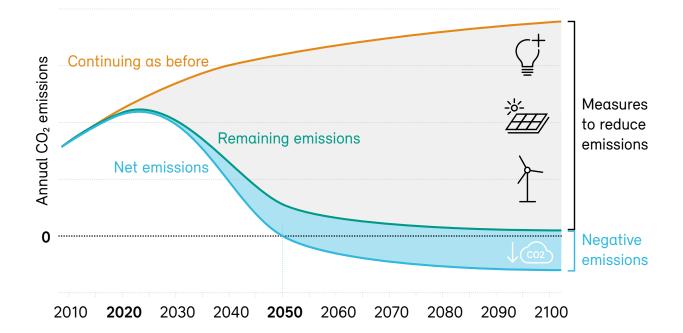
- > On 28 August 2019, the Federal Council adopted a net-zero target. Switzerland aims to reduce its net greenhouse gas emissions to zero by the year 2050.
- > On 27 January 2021, the Federal Council adopted its Long-Term Climate Strategy. In ten strategic principles, it sets the guidelines for Switzerland's long-term climate policy. The Long-Term Climate Strategy also sets targets for each sector and shows possible developments up to the year 2050.
- > Remaining emissions that are difficult to avoid must be offset by so-called negative emission technologies. The Long-Term Climate Strategy shows needs that may arise in this area.

Switzerland is already seriously affected by climate change. The average temperature in Switzerland has risen by around 2 degrees Celsius since 1864 — twice the global average. It is therefore in Switzerland's interests to have effective climate protection. The aim is to reduce greenhouse gas emissions to net zero by 2050. Switzerland has also announced this goal internationally and submitted its long-term climate strategy to the UN Climate Secretariat. The Federal Council's strategy shows

that Switzerland can almost completely phase out fossil fuels by 2050. As a financially strong country with near- $\mathrm{CO_2}$ -free domestic electricity production, it is well positioned to achieve the net zero target by 2050. If it consistently pursues the path towards this goal, it can further expand its already leading role as a location for innovation. By moving away from fossil fuels, it will also reduce its dependence on foreign countries.

Achieving the net zero target by 2050

To achieve net zero, avoidable emissions must be eliminated and emissions that are difficult to avoid must be offset by negative emission technologies (NET) that permanently remove CO_2 from the air. Net zero is only an interim target.



The 10 principles of the Long-Term Climate Strategy

The Federal Council has set out the ten principles below in its long-term climate strategy. Among other things, they form the basis for concrete measures on the path to net-zero emissions.

Seize opportunities	Reduce emissions across entire value chains	Socially acceptable
оррогипписэ	chine value chams	Economically viable
Assume	Use all energy	
responsibility	sources efficiently	Improve environmental quality
Reduce domestic emissions	Confederation and cantons gear activities to achieving net zero	Openness to technology

With its net-zero target, Switzerland is implementing the requirements of the Paris Agreement. It also follows the scientific findings of the Intergovernmental Panel on Climate Change (IPCC) special report on global warming of 1.5°C. According to this report, global warming can only be limited to 1.5°C if global CO₂ emissions fall to net zero around the year 2050. As a financially strong country with a very large carbon footprint, Switzerland has a special responsibility to make its contribution.

The long-term climate strategy is an important milestone on the way to achieving net-zero emissions by 2050. It sets out emission developments, targets and challenges for the various sectors, providing a basis for the future legislative framework. An important intermediate target is to halve greenhouse gas emissions by 2030. Parliament adopted this target and submitted it to the international community when it ratified the Paris Agreement in 2017. It still applies.

The long-term climate strategy formulates ten strategic principles that will shape Swiss climate policy in the coming years. These principles are intended to provide guidance for climate policy, but also for other related policy areas. They are seen as milestones on the path towards net zero. However, the scope of design and action has been kept as broad as possible.

To achieve the net zero target, efforts must increase compared to today. The long-term climate strategy does not specify any measures at this stage. This must be done by revising existing legislation. The long-term climate strategy marks the beginning of this process.

Targets for the sectors

The long-term climate strategy shows how greenhouse gas emissions in Switzerland can develop in order to achieve the net-zero target. Strategic goals for the individual sectors are set out on this basis. The emission paths are based on the Swiss Federal Office of Energy's Energy Perspectives 2050+.

The strategy sets the following targets for individual sectors, to be achieved by 2050:

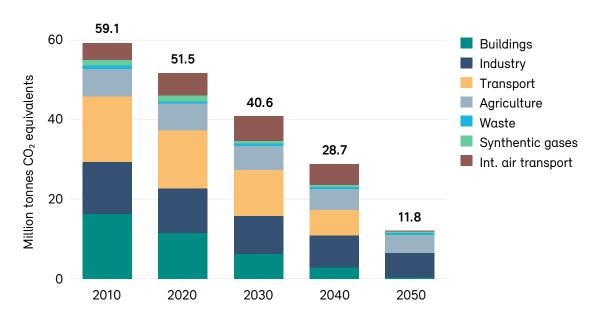
- Buildings: The building stock no longer generates greenhouse gas emissions.
- Industry: Greenhouse gas emissions from the industrial sector are reduced by at least 90 percent compared to 1990 levels.
- Transport: With few exceptions, land transport no longer generates greenhouse gas emissions.
- Air transport: International air transport from Switzerland, as far as possible, no longer causes any net climate-impacting emissions. This means: fossil CO₂ emissions are net zero, and the remaining climate impacts continue to decrease or are offset by other measures.

- Agriculture: Thanks to the promotion of sustainable food systems, the greenhouse gas footprint of food decreases in line with the net-zero target without shifting greenhouse gas emissions abroad. Greenhouse gas emissions from domestic agricultural production are reduced by at least 40 percent compared to 1990. At least 50 percent of Switzerland's food needs are met by domestic production.
- Financial market: In line with the target in the Paris Agreement, Switzerland's financial flows follow a pathway towards low greenhouse gas emissions and climate-resilient development.

Emissions from non-energy waste treatment in landfills and wastewater treatment plants as well as from synthetic gases are still expected to total around 800,000 tonnes of CO_2 eq in 2050. Overall, we will still have 11.8 million tonnes of CO_2 eq of emissions that are difficult to avoid. These can be further reduced by means of carbon capture and storage (CCS). The remainder must be offset by permanently removing CO_2 from the atmosphere using negative emission technologies (NET). Due to the limited capacity for storing CO_2 , these

Remaining emissions

In 2050, greenhouse gas emissions of around 11.8 million tonnes of CO₂eq remain. These come largely from agriculture, industry and waste recycling.



approaches must be reserved for emissions that are difficult to avoid. Moreover, domestic storage capacities are unlikely to be sufficient. Switzerland will therefore probably also have to make use of negative emissions abroad. It is also important and urgent to establish the necessary legal framework, especially for the transport and storage of CO_2 .

Further links

- · Long-term climate strategy 2050 (admin.ch)
- · Negative emission technologies (admin.ch)
- Energy perspectives 2050+ (admin.ch)

Climate protection: Benefits exceed costs in the long term

The costs of unchecked climate change far exceed the costs of climate protection measures. The net-zero target is therefore of great economic interest to Switzerland. In addition, what is now spent on importing fossil fuels (around CHF 80 billion in the last 10 years) can be invested in Switzerland going forward.

Most of the investments to reduce greenhouse gas emissions will be made over the next three decades. The additional costs to 2050 amount to around CHF 73 billion. Reducing emissions to net zero will bring returns in the long term. It also offers the opportunity to adopt a pioneering role in the market for climate-friendly technologies.

Remaining emissions

The remaining emissions that are difficult to avoid can be offset with CCS and NET. NET can be applied both domestically and abroad.

