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Supplement to Switzerland's Long-Term Climate Strategy – NDC 2031-2035

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1 Introduction

Switzerland signed the Paris Agreement in 2015 and ratified it in 2017.¹ The Paris Agreement obliges all states to cut their greenhouse gas emissions. Its main general goals are limiting global warming to well below 2 °C compared to the pre-industrial period – while aiming to ensure the rise in temperature does not exceed 1.5 °C – improving adaptability to climate change and making financial flows consistent with low-emission development.

Switzerland wishes to contribute towards attaining these goals. It aims to cut its greenhouse gas emissions to the net-zero target by 2050. This means Switzerland must reduce consumption of fossil energies to a minimum, cut its greenhouse gas emissions to the greatest extent possible and offset the remaining emissions through negative emissions. The amount of CO₂ permanently removed from the atmosphere is to exceed the remaining emissions by 2050, achieving a net-negative emissions balance. Switzerland is also taking the measures required to adapt to climate change and is committed to making financial flows consistent with climate goals at national and international level. It helps developing countries to cut emissions and adapt to climate change through its international cooperation activities.

Switzerland defined a Long-Term Climate Strategy in 2021 which has been submitted to the UNFCCC secretariat.² This strategy remains valid. When closing the first global stocktake³ in December 2023, the parties to the Paris Agreement adopted further provisions on the long-term climate strategies.⁴ Paragraph 40 underlines the importance of aligning nationally determined contributions (NDC) with the long-term climate strategies and encourages the parties to do so.

Switzerland hereby submits an amendment to its Long-Term Climate Strategy together with its NDC for the period 2031–35. This amendment is based on Switzerland's existing Long-Term Climate Strategy. In particular, it outlines the key elements of the NDC and their goals. It also contains updates on the scientific basis, climate and emissions development in Switzerland and the legal framework at national level. Detailed information on all of these points can be found in the first *Biennial Transparency Report (BTR)* which Switzerland submitted to the UNFCCC secretariat on time.⁵

2 Amendment to Switzerland's existing Long-Term Climate Strategy

The requirement to formulate long-term climate strategies is enshrined in article 4.19 of the Paris Agreement. In August 2019, the Federal Council tasked the relevant departments with drawing up a long-term climate strategy for Switzerland. On 27 January 2021, it adopted Switzerland's Long-Term Climate Strategy and approved its submission to the UNFCCC secretariat.⁶

The key elements of the Long-Term Climate Strategy remain valid. In particular, this includes the strategic principles and goals for the various sectors. These elements have played a major role in climate policy activities in Switzerland in recent years and continue to act as guidelines for Switzerland's future work on climate policy. In particular, they provided the basis for the goals of the Federal Act on Climate Protection Goals, Innovation and Strengthening Energy Security (Climate and Innovation Act (CIA) → see Section 5.1) as well as for work on CO₂ removal and storage (→ see Section 5.4).

3 New scientific basis

The IPCC's Sixth Assessment Report, published in 2023, confirmed the findings of the IPCC's Special Report on Global Warming of 1.5 °C published in 2018.^{7,8} In particular, it underlined that global greenhouse gas emissions will peak during the decade 2021–30 and must then be reduced rapidly and sharply. Scenarios based on a 50 percent chance of not exceeding global warming of 1.5 °C achieve the

¹ SR 0.814.012

² See [Climate protection: Federal Council adopts Switzerland's Long-Term Climate Strategy \(admin.ch\)](#)

³ See [Global stocktake | UNFCCC](#)

⁴ See [Outcome of the first global stocktake. Draft decision -/CMA.5. Proposal by the President \(unfccc.int\)](#)

⁵ See [Switzerland's National Communications and Biennial Transparency Reports](#)

⁶ See [Climate protection: Federal Council adopts Switzerland's Long-Term Climate Strategy \(admin.ch\)](#)

⁷ See [Global Warming of 1.5 °C — \(ipcc.ch\)](#)

⁸ See [Sixth Assessment Report — IPCC](#)

net-zero target for CO₂ emissions in the early 2050s and for all greenhouse gases in the 2070s. In these scenarios, global greenhouse gases must fall by 60 percent by 2035 compared with 2019 and by 84 percent by 2050. According to the IPCC, a global CO₂ budget of 500 gigatonnes of CO₂ will be left remaining from 2020. The other greenhouse gases must also be reduced sharply, especially methane. This budget has decreased again in the meantime. The UNEP Emissions Gap Report 2024 indicates that after 2025 just 200 gigatonnes of CO₂ will remain for a 50 percent chance of limiting global warming to 1.5 °C.⁹

A report jointly adopted by the IPCC and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) concludes that climate change and the loss of biodiversity are closely linked.¹⁰ Climate change increases the risks for biodiversity as well as for natural and managed habitats. Natural and managed ecosystems and their biodiversity also play a key role in the release and capture of greenhouse gases and climate adaptation. Implementing ambitious measures aimed at protecting, restoring or making sustainable use of land and maritime ecosystems is beneficial in terms of climate protection, adaptation to climate impact and species conservation.

These findings clearly indicate the need for global action has grown. Unless effective measures are taken by all countries – but in particular the large emitters and those with great capacity – the remaining budget will be used up within a few years. Natural and managed ecosystems cannot suffer further damage or destruction and already degraded ecosystems must be restored. The NDCs announced so far are not sufficient to limit global warming to 1.5 °C. The UNEP Emissions Gap Report indicates that the existing political measures would result in a global temperature increase of more than 3 °C over the course of the century. This means all countries must step up their efforts rapidly and substantially over the coming years.

4 Climate and emissions development in Switzerland

4.1 Climate development in Switzerland

Systematic observations of the climate system over many years show that Switzerland is severely affected by climate change.¹¹ The near-ground air temperature has risen by around 2 °C between the pre-industrial reference period of 1871 to 1900 and the last 10 years between 2014 and 2023 – which is significantly higher than the global average of around 1.3 °C. The eight warmest years in Switzerland were all recorded during the period after 2010. 2022, 2023 and 2024 were the warmest years, with a deviation of 3.5, 3.4 and 3.3 °C respectively from the pre-industrial average, followed by 2018 and 2020.¹² Besides warming, other significant changes have also been observed in Switzerland's climate.

The impact of climate change will continue to intensify in future. MeteoSwiss and ETH Zurich have outlined how the climate in Switzerland could develop by the end of this century in the Swiss Climate Scenarios CH2018. Unless effective climate protection measures are taken, summers will become drier and heavy rainfall more intensive, the average and highest temperatures will increase, and snowfall and snow cover will continue to decrease.¹³

4.2 Emissions development in Switzerland

In 2022, the greenhouse gas inventory indicated that Switzerland's greenhouse gas emissions totalled 41.6 million tonnes of CO₂eq (excluding international aviation and shipping and land use changes/forestry).¹⁴ Compared to the base year of 1990, this represents a decline of around 24 percent. The orange line in Figure 2 shows the development of greenhouse gas emissions per capita. They have continually decreased since 1990 and stood at 4.7 tonnes of CO₂eq. in 2022, putting Switzerland below the global average. Both total greenhouse gas emissions and greenhouse gas emissions per capita peaked during

⁹ See [Emissions Gap Report 2024 | UNEP - UN Environment Programme](#)

¹⁰ See [IPBES-IPCC co-sponsored workshop report on biodiversity and climate change 2021](#)

¹¹ See [Programmes: GAW-CH and GCOS-CH - MeteoSwiss \(admin.ch\)](#).

¹² See [Climate change – MeteoSwiss](#)

¹³ See [Swiss Climate Scenarios CH2018 \(admin.ch\)](#)

¹⁴ See [Switzerland's greenhouse gas inventory \(admin.ch\)](#)

the 1990s and have been declining continuously for several years. Switzerland is responsible for around 0.1 percent of global greenhouse gas emissions.

Including international aviation and shipping, greenhouse gas emissions in 2022 stood at 45.9 million tonnes of CO₂eq which is around 21 percent below the 1990 level. Emissions from international aviation fell sharply during the COVID-19 pandemic. However, they have been moving towards pre-pandemic levels again since 2022.

Emissions from land use changes and forestry (LULUCF) are shown separately in Figure 2. Apart from a few exceptions, vegetation and soils have absorbed more CO₂ equivalents from the atmosphere than they have released since 1990. This means Switzerland has reduced its annual net greenhouse gas emissions. Switzerland will continue to include these emissions in future when assessing target attainment (→ see Section 6.1).

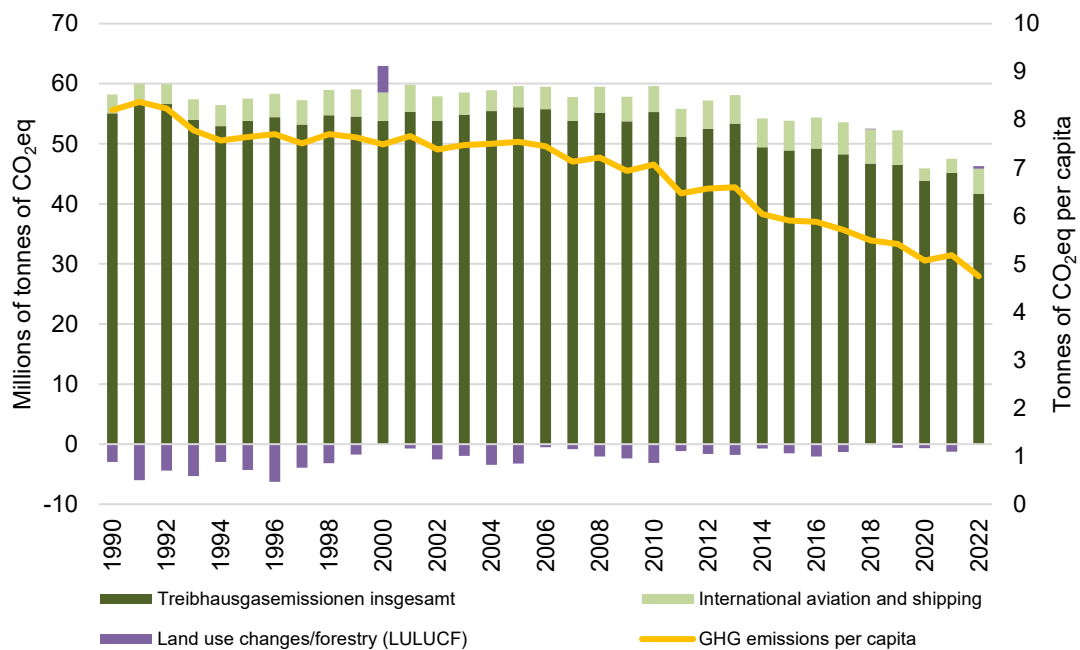


Figure 1: Switzerland's total greenhouse gas emissions (left-hand axis) and per capita (right-hand axis; excluding international aviation and shipping). Source: Switzerland's greenhouse gas inventory (FOEN 2024)

The breakdown by sectors in Figure 2 clearly shows that emissions have fallen, especially in the buildings sector. They were 44 percent lower in 2022 than in 1990. The annual fluctuations are weather-related and show the continued high level of dependence on fossil heating systems. Emissions in industry have also fallen, dropping by 27 percent compared to 1990. The transport sector (excluding international aviation) has been responsible for the largest share of emissions for some years now. Here the trend has been on a slightly downward trajectory since around 2012. Emissions from transport decreased sharply during the COVID-19 pandemic. However, emissions in 2022 were only 8 percent lower than in 1990. Emissions from international aviation showed a clear upward trend until 2019 and now account for around 10 percent of Switzerland's total emissions.¹⁵

Figure 1 and Figure 2 show the greenhouse gas emissions generated in Switzerland in accordance with the international guidelines (territorial or point of sale principle). Food and other goods imported into Switzerland and the associated emissions abroad are not included here in line with the international guidelines. The greenhouse gas footprint extends the system boundaries and shows the emissions produced by residents at home and abroad (residence principle). This enables analysis of the emissions

¹⁵ Emissions from international shipping stand at just over 20,000 tonnes of CO₂eq which means they are negligible.

based on final demand.¹⁶ Domestic emissions for the production of exports are excluded. The greenhouse gas emissions are more than twice as high as under the territorial principle if the share generated abroad is also included. The share generated abroad has risen from around 60 to 67 percent since 2000 and has almost completely offset the reduction in domestic emissions.¹⁷

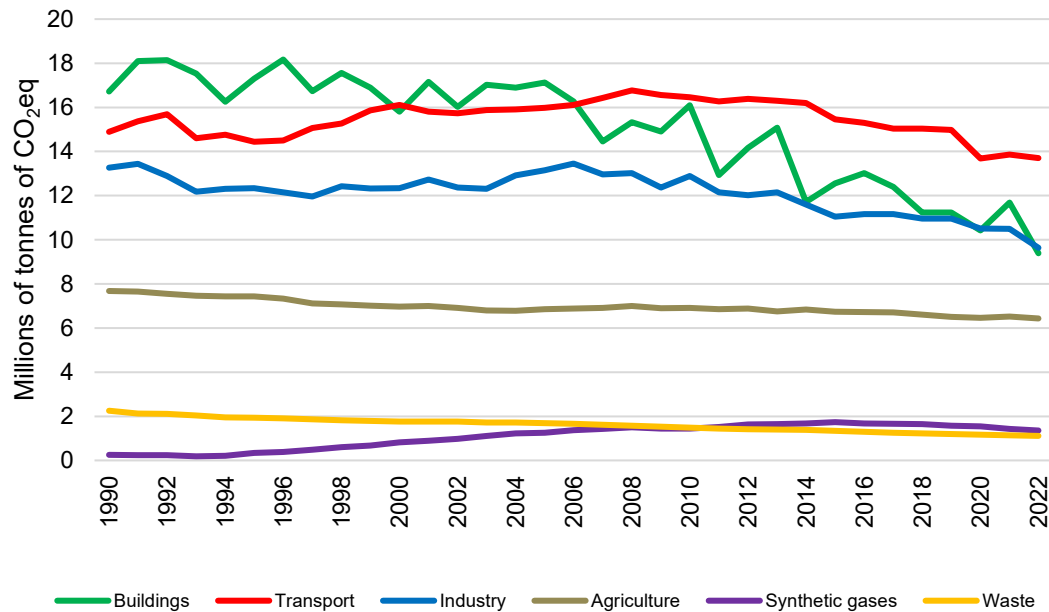


Figure 2: Switzerland's territorial greenhouse gas emissions by sector in accordance with the CO₂ Ordinance, supplemented by figures on international aviation and shipping. Source: Switzerland's greenhouse gas inventory (FOEN 2024)

Measures to conserve resources in Switzerland and abroad, for example through sustainable consumption, resource-efficient production processes, sustainable supply chains and circular economy policies, can help to reduce environmental impact abroad.

5 Legal environment and framework in Switzerland

The Climate and Innovation Act (CIA, SR 814.310) and the CO₂ Act (SR 641.71), both of which entered into force on 1 January 2025, and their ordinances establish the legal basis for Switzerland's climate policy. They define the goals, instruments and responsibilities for implementation and enforcement. In addition to the Climate and Innovation Act and the CO₂ Act, measures from other policy areas and legislation also contribute towards cutting emissions. They include the areas of energy, circular economy, agriculture and forestry/timber industry.

5.1 Climate and Innovation Act

The Climate and Innovation Act creates the framework for Switzerland's medium to long-term climate policy.¹⁸ In particular, it sets targets for reducing greenhouse gas emissions and includes benchmarks for the key sectors. The CIA's key element is requiring Switzerland to achieve net zero greenhouse gas emissions by 2050. The Federal Council adopted this goal in 2019, and it was at the core of Switzerland's Long-Term Climate Strategy submitted in 2021. It is now also enshrined in law in the CIA.

The Swiss people voted on the bill in June 2023 after a referendum was called against it. Almost 60 percent of the electorate voted in favour of the proposal.

¹⁶ Switzerland's greenhouse gas footprint is calculated by the Federal Statistical Office (FSO). International organisations, such as the OECD, are working on the production of annual data on the greenhouse gas footprint to enable international comparison. See [Greenhouse gas footprint indicators | OECD](#).

¹⁷ See [Air emissions](#) → Greenhouse gas footprint

¹⁸ [Federal Act on Climate Protection Goals, Innovation and Strengthening Energy Security \(CIA\)](#) of 30 September 2022, BBl 2022 2403.

The key elements of the Climate and Innovation Act are:

- *Article 1* sets out the Act's general objectives which are outlined below. They are in line with the goals of the Paris Agreement and are as follows:
 - Cutting greenhouse gas emissions and using negative emissions technologies.
 - Adapting to and protecting against the impact of climate change.
 - Making financial flows consistent with low-emission and climate-resilient development.
- *Article 3 para. 1* enshrines the 2050 net-zero target for all greenhouse gases. Greenhouse gas emissions must be reduced as far as possible to attain this target. The remaining greenhouse gas emissions will be offset by using negative emission technologies in Switzerland and abroad.
- *Article 3 para. 2* requires Switzerland to achieve a net-negative emissions balance after 2050.
- *Article 3 para. 3* sets intermediate targets for the reduction of greenhouse gas emissions (excluding international aviation and shipping). On average, emissions must be cut by 64 percent compared to 1990 in the period 2031–40, by 75 percent by 2040, and by 89 percent on average in the period 2041–50. Negative emissions may be counted towards these targets.
- *Article 3 para. 4* stipulates that emission reductions must be achieved in Switzerland as far as possible. Switzerland is therefore focusing on domestic measures but retains the option of continuing to include reductions and negative emissions abroad in the future.
- *Article 3 para. 6* also includes emissions from international aviation and shipping in the reduction targets set out in paragraphs 1 and 2. This extends the system boundaries. These emissions were not previously part of Switzerland's climate targets.
- *Article 4 para. 1* sets targets for the buildings, transport (excluding international aviation and shipping) and industry sectors. In the buildings sector, greenhouse gas emissions are to be reduced by 82 percent by 2040 compared to 1990, and by 100 percent by 2050. The target for transport is a reduction of 57 percent by 2040 and of 100 percent by 2050, and for industry of 50 percent by 2040 and of 90 percent by 2050. These reduction targets are to be achieved without the inclusion of negative emissions. This means the buildings sector and transport are to become completely emission-free by 2050.
- *Article 5 para. 1* establishes the principle requiring all companies to achieve net-zero emissions by 2050 at the latest. At the minimum, they must include direct emissions (*scope 1*) and indirect emissions (*scope 2*). Companies can produce roadmaps for implementation (*Article 5 para. 2*).
- *Article 6* provides for promotion of the use of innovative technologies and processes. The Confederation will provide a total of CHF 1.2 billion for this purpose over the period 2025 to 2030. Companies wishing to benefit from funding must draw up a roadmap in accordance with *article 5 para. 2*. The Climate Protection Ordinance (CPO, SR 814.310.1) governs the details. In particular, it also determines which technologies and processes are eligible for funding.
- *Article 8* tasks the Confederation and the cantons with taking the measures required for adaptation to and protection against the adverse impact of climate change.
- *Article 9* requires the Confederation to ensure the Swiss financial industry makes an effective contribution to low-emission development that is resilient to climate change.
- *Article 10* calls on the Confederation and cantons to lead by example. The central federal administration is to achieve net zero emissions by 2040. In addition to direct and indirect emissions, this target also includes upstream and downstream emissions caused by third parties (*Scope 3*). Cantonal administrations and federal enterprises (e.g. Swiss Post and SBB) must aim to achieve net zero by 2040. The Confederation will support them by establishing the conditions required.
- *Article 12* stipulates that legislation from other policy areas must also contribute towards achieving net zero by 2050. They include, for example, spatial planning, environmental and energy policy as well as finance, agriculture, forestry and the timber industry.

- *Article 50a* of the Energy Act provides for a stimulus programme for the buildings sector. Over a ten-year period, the Confederation will provide CHF 200 million a year for the replacement of fossil and electric resistance heating systems as well as for energy efficiency measures.

By defining these targets and creating the two limited-term funding programmes, the Climate and Innovation Act is putting Switzerland on track to achieve the goal of net zero greenhouse gas emissions by 2050. The CO₂ Act will govern specific implementation. *Article 11* of the Climate and Innovation Act provides for the relevant steps. The first step towards implementation has now been taken. On 15 March 2024, Parliament adopted a revision of the CO₂ Act. This covers the period up to 2030 (→ see Section 5.2). A further revision of the CO₂ Act is required for the period 2031–40. This revision will span the period covered by the NDC (2031–35) and will be aligned with the targets set out in *article 3 para. 3* of the Climate and Innovation Act and the strategic directions defined in the NDC.

5.2 CO₂ Act from 2025

The CO₂ Act has formed the legal basis for Switzerland's climate policy since 2000.¹⁹ In autumn 2020, Parliament adopted a total revision of the CO₂ Act.²⁰ This enshrined the goal of halving greenhouse gas emissions by 2030 compared to 1990 levels in national law. Switzerland submitted this target at international level in its first NDC in 2017. The Swiss people voted on the bill in June 2021 after a referendum was called against it. Just under 52 percent of the electorate rejected the proposal.

To prevent a regulatory loophole, Parliament extended the current CO₂ Act until the end of 2024. The Federal Council also drew up a new bill for a revision of the CO₂ Act in order to incorporate the 2030 reduction target into national law. In September 2022, it submitted its proposals to Parliament,²¹ which adopted the bill on 15 March 2024. The new act takes account of criticism of the total revision of the CO₂ Act and represents the first stage in the implementation of the CIA's goals.

The key elements of the revised CO₂ Act are:

- The CO₂ Act's two goals are halving greenhouse gas emissions by 2030 compared to 1990 levels and reducing greenhouse gas emissions by an average of 35 percent over the period 2021–30 compared to 1990. The reductions required to achieve these targets should be made in Switzerland as far as possible. However, Switzerland also wishes to use reductions abroad. The domestic share of the reduction must be at least two-thirds by 2030.
- The CO₂ levy on fossil fuels will remain at CHF 120 per tonne of CO₂.²² A third of the revenue generated will continue to be earmarked for specific purposes. Much of this revenue goes towards the federal and cantonal buildings programme which funds energy-efficient renovations and improvements to buildings' energy performance.²³ Funding can also be provided for projects concerning geothermal energy, plants for the production of renewable gases and systems using solar thermal energy for process heat. Finally, the technology fund will also be maintained. It will continue to receive CHF 25 million per year to promote innovations that reduce greenhouse gases or promote the use of renewable energies.²⁴
- All companies can now be exempted from the CO₂ levy if they commit to mandatory reductions with the Confederation.²⁵ This option was previously only open to a specific group of companies defined by the CO₂ Ordinance (SR 641.711). The revised CO₂ Act limits the reduction obligations to 2040.
- The emissions trading system (ETS) for installations and aviation will be continued. It will remain linked to the EU's ETS. The agreement on the linking of the two ETSS requires maximum compatibility in terms of their scope and design. Switzerland will continue monitoring changes in the EU

¹⁹ [SR 641.71 - Federal Act of 23 December 2011 ... | Fedlex](#)

²⁰ [17.071 | Total revision of the CO2 Act after 2020 | Parliamentary business | The Swiss Parliament](#)

²¹ [BBl 2022 2651 - Dispatch on the revision of the CO2 Act... | Fedlex \(admin.ch\)](#)

²² See [CO₂ levy \(admin.ch\)](#)

²³ See [The federal and cantonal buildings programme \(admin.ch\)](#)

²⁴ See [Technology fund \(admin.ch\)](#)

²⁵ See [Exemption from the CO2 levy \(admin.ch\)](#)

when developing its ETS. This applies in particular to the faster reduction of the available emission allowances and the gradual reduction in the free allocation of emission allowances.

- In the transport sector, there will be a further reduction in the CO₂ regulations governing new passenger cars and light commercial vehicles²⁶. Switzerland is following the EU's lead. Targets for heavy commercial vehicles have now been introduced, again in line with EU targets.
- The compensation obligation will also continue to apply to fuel importers.²⁷ Importers of fossil fuels are still obliged to offset some of the CO₂ emissions from transport through projects in Switzerland and abroad. Switzerland counts the emission reductions achieved through projects abroad towards its reduction targets.
- The revised CO₂ Act now includes various support measures. The proceeds from the auctions of emission rights no longer flow into the federal coffers, but are instead used to support measures. Proceeds from the emission rights for installations will be used to support measures for adaptation to climate change and the decarbonisation of installations in the ETS. Proceeds from emission rights for aircraft will be used to fund international night train connections and to develop and produce renewable synthetic aviation fuels (SAF). The Confederation is also participating in measures to cut greenhouse gas emissions from aviation, in particular the promotion of SAF. The Confederation is now also supporting public transport companies with the procurement of transport systems that use electric drives.
- In international aviation, there will be an obligation to blend low-emission, renewable and renewable synthetic aviation fuels in future. Switzerland is following the EU's *ReFuelEU Aviation* regulation in this respect. Aircraft operators are also now obliged to disclose climate-impacting emissions from flights in information on their flight services.
- On the financial markets, the Swiss Financial Market Supervisory Authority (FINMA) and the Swiss National Bank (SNB) are now obliged to regularly review climate-related risks. They must set out the results of these assessments and any measures taken in a report.

These measures aim to help ensure Switzerland can achieve its reduction targets by 2030.

5.3 Adaptation to climate change

In addition to reducing emissions, adaptation to climate change is the second pillar of Switzerland's climate policy. The existing CO₂ Act tasks the Confederation with coordinating activities to adapt to climate change and establishing the conditions required. The Climate and Innovation Act and the Climate Protection Ordinance specify the tasks and approaches to be adopted in detail. The Federal Council's 'Adaptation to Climate Change in Switzerland' strategy of 2 March 2012 establishes the framework for a coordinated approach at federal level.

The Federal Council will put an updated adaptation strategy into force in early 2026 and develop its next action plan for implementing the adaptation strategy based upon it. As a basis for the further development of the adaptation strategy, the FOEN updated its climate risk analysis (June 2025). To improve dialogue between the various stakeholders, a new 'Adaptation to Climate Change' network will be created from 2025. This network will bring together actors from the various federal offices, cantons, cities and communes, industry, science/research and civil society and ensure better exchange of knowledge. It will also formulate recommendations for the FOEN on developing the adaptation strategy and help to firmly establish the relevant principles and requirements.

Based on the new CO₂ Act, a new funding programme for adaptation measures will also come into force from 2025. This will provide funding for certain projects.

²⁶ See [CO₂ emission regulations for new cars and light commercial vehicles \(admin.ch\)](#)

²⁷ See [CO₂ compensation \(admin.ch\)](#)

5.4 CO₂ removal and storage

CO₂ removal and storage is another field of action in Switzerland's climate policy. It comprises two categories: on one hand, technologies that capture and store fossil and process-related CO₂ at plants, thereby reducing emissions (*carbon capture and storage*, CCS). On the other hand, negative emission technologies (NET; also *carbon dioxide removal*, CDR; this includes both purely technical and nature-based approaches) that permanently remove CO₂ from the atmosphere. These two technologies are required for emissions that are difficult to avoid, such as those from cement production, waste incineration, agriculture or aviation. Only by using CCS and NET can Switzerland achieve its net-zero target by 2050 and ensure a net-negative emissions balance after 2050. As domestic potential for storing CO₂ is currently unclear, cooperation with countries abroad is vitally important, especially through CO₂ exports and negative emissions trading. The expansion of CCS and NET provides Switzerland with the opportunity to firmly establish its pioneering role as a location for innovative research and industry.

In this context, the Federal Council set out how these technologies can be gradually expanded in a report published in May 2022.²⁸ The report envisages an expansion in two phases: a 'pioneering phase' until 2030 and a phase of 'targeted scaling-up' until 2050. The current legal framework essentially provides a suitable environment for the first CCS/NET applications as part of the pioneering phase until 2030. A strategic direction must be defined for the scaling-up phase after 2030, e.g. for CO₂ transport and storage infrastructure. Parliament therefore intends to give the Federal Council a mandate to draw up a framework act on the capture, transport and storage of CO₂.²⁹

In addition to estimated demand of around 12 million tonnes of CO₂ storage in 2050 – resulting from CCS and NET applications for domestic greenhouse gas emissions (see Long-Term Climate Strategy of 2021) – the Federal Council estimated in a report published in February 2024 that *additional* negative emissions of around 1 to 2 million tonnes a year will be required in 2050 for CO₂ emissions from international aviation.³⁰

The following measures have already been implemented or adopted for the pioneering phase until 2030:

- The certification (i.e. the issuance of certificates) of projects for the storage of CO₂ under the CO₂ Act was introduced in 2022.
- Under an agreement with the Confederation, the waste industry has committed to commissioning a CO₂ capture system at waste incineration plants by 2030. This capture plant must have a nominal capacity of 100,000 tonnes of CO₂ a year.³¹
- CCS will be allowable in the ETS from 2025 in the same way as under the EU's ETS regulations.
- The Federal Council established the legal basis for the export of captured CO₂ for storage in the seabed in accordance with the London Protocol.³² Bilateral agreements with partner countries in line with the Paris Agreement are required to purchase negative emissions from abroad and include them towards climate protection targets.³³ Switzerland has concluded initial agreements on CCS/NET cooperation, including with Iceland, the Netherlands, Sweden and Norway.

During the phase of targeted scaling-up after 2030, CCS process chains will be set up in a coordinated way and polluter-pays models for financing CCS and negative emissions will be established. A suitable legal framework will help to resolve any outstanding matters. In this respect, the Federal Council will assess options during the first quarter of 2025 regarding the future development of Swiss climate policy after 2030.

²⁸ See [Climate change: The Federal Council approves the report on the expansion of negative emissions technologies \(admin.ch\)](#)

²⁹ See [24.4256 | National regulations on the capture, transport and storage of CO₂ | Parliamentary business | The Swiss Parliament](#)

³⁰ See [CO₂-neutral aviation: Federal Council adopts report \(admin.ch\)](#)

³¹ See [CO₂ emissions: Agreement between the Confederation and waste incineration plants \(admin.ch\)](#)

³² See [Federal Council lays groundwork for export of CO₂ for sub-seabed storage \(admin.ch\)](#)

³³ See [Bilateral climate agreements \(admin.ch\)](#)

5.5 Further measures in other policy areas

In addition to the Climate and Innovation Act and CO₂ Act, other legislation, strategies and measures in additional policy areas will also contribute towards cutting greenhouse gas emissions. The following, non-exhaustive list outlines the key fundamental elements and developments since January 2021.

- On 23 June 2021, the Federal Council adopted the 2030 Sustainable Development Strategy.³⁴ In the three priority topics of 'sustainable consumption and production', 'climate, energy and biodiversity' and 'equal opportunities and social cohesion', it sets out goals as well as national and international strategic directions for federal policy. The Federal Council identifies particular need for action and coordination in these three areas. The strategy is defined in detail in action plans – the Federal Council adopted the one for the period 2024–27 in January 2024.³⁵
- On 20 December 2021, the Federal Office for the Environment (FOEN) published 'Forest Policy: objectives and measures 2021–24' as a continuation of 'Forest Policy 2020'.³⁶ The Forest Policy's goals include ensuring that forests and wood use contribute towards climate change mitigation and minimising the impact of climate change on forest services. The Wood Resource Policy also makes significant contributions to forest, climate, energy and regional policy and to other sectoral policies as well as to the UN's Sustainable Development Goals. The fourth phase of the wood action plan is currently being implemented.³⁷ This phase runs until 2026. From 2025, the 'Forest Policy' and the 'Wood Resource Policy' will be combined and developed into an 'Integrated Forest and Timber Strategy 2050'. Other relevant Federal Council reports in this area are the 'Anpassung des Waldes an den Klimawandel' (Adjustment of forestry to climate change) published in 2022³⁸ and 'Umsetzungs- und Forschungsstrategie zur Dekarbonisierung des Infrastrukturbaus mit Fokus auf Holz' (Implementation and research strategy on the decarbonisation of infrastructure construction with the focus on timber) published in 2024³⁹.
- On 5 September 2023, the Federal Office for Agriculture (FOAG), the Federal Office for the Environment (FOEN) and the Federal Food Safety and Veterinary Office (FSVO) jointly published the '2050 Climate Strategy for Agriculture and Food'. It aims to support agriculture in adapting to climate change and reduce its greenhouse gas emissions by 20 percent by 2030, by 30 percent by 2040 and by at least 40 percent by 2050 compared to 1990 levels. An action plan supports the strategy. It contains measures that aim to contribute towards achieving the goals of the Climate Strategy for Agriculture and Food. Mandatory measures for agriculture are to be adopted by Parliament as part of the future development of agricultural policy.
- In autumn 2023, Parliament adopted the Federal Act on a Secure Electricity Supply from Renewable Energy Sources.⁴⁰ This Act establishes the basis for producing more electricity from renewable energy sources in Switzerland. It contains goals on expanding renewable energies, funding measures and new regulations on the production, transport, storage and consumption of electricity. The Swiss people adopted the bill in the referendum held on 9 June 2024 with just under 69 percent voting in favour. The Act will enter into force gradually from 1 January 2025.
- On 1 January 2024, the Federal Council brought the Ordinance on Climate Disclosures into force (SR 221.434).⁴¹ Large companies and financial institutions are obliged to report publicly on climate issues. In particular, they must publish a transition plan that is comparable with Switzerland's climate targets.

³⁴ See [2030 Sustainable Development Strategy \(admin.ch\)](#)

³⁵ See [Action plan for 2030 Sustainable Development Strategy adopted](#)

³⁶ See [Forest policy \(admin.ch\)](#)

³⁷ See [Wood Action Plan \(admin.ch\)](#)

³⁸ See [Federal Council adopts report on adjustment of forestry to climate change](#)

³⁹ See [Federal Council adopts strategy to cut CO₂ in the construction of infrastructure](#)

⁴⁰ See [Federal Act on a Secure Electricity Supply \(admin.ch\)](#)

⁴¹ See [Federal Council brings ordinance on mandatory climate disclosures for large companies into force as of 1 January 2024 \(admin.ch\)](#)

- On 21 February 2024, the Federal Council adopted the 'Carbon-Neutral Aviation' report.⁴² This Federal Council report outlines the key technical measures for cutting greenhouse gas emissions from aviation. The main measure for reducing fossil-fuel CO₂ emissions is the use of sustainable aviation fuels. In combination with efficiency improvements in flight operations and the aircraft used, the aviation sector can reduce its fossil-fuel CO₂ emissions significantly. The report estimates the remaining emissions by 2050 at 1 to 2 million tonnes, which must be offset through negative emissions.
- On 15 March 2024, Parliament adopted amendments to the Environmental Protection Act (EPA; SR 814.01)) based on the parliamentary initiative 20.433 'Strengthening the Swiss circular economy'.⁴³ Most of the new regulations will enter into force on 1 January 2025.⁴⁴ These include, for example, provisions on the recycling of waste materials. The Federal Council will also be given the authority to introduce regulations on resource-saving construction or the design of products and packaging. The cantons are required to set limits for grey energy in new developments and major renovations of existing buildings. The Confederation and the cantons will also endeavour to reduce the environmental impact of products and buildings, also taking account of environmental impact caused abroad.
- On 31 May 2024, the Federal Council adopted an amendment to the Chemical Risk Reduction Ordinance (ORRChem; SR 814.81) – (AS 2024 254).⁴⁵ This brings the ORRChem into line with the EU's regulations and the latest developments in technology in the field of refrigerants. This amendment enters into force on 1 January 2025. It restricts the placing on the market of new systems and appliances using refrigerants that are particularly harmful to the climate. This step is necessary to enable Switzerland to comply with the targets of the Montreal Protocol on Substances that Deplete the Ozone Layer, in particular with regard to the extension within the framework of the Kigali Amendment to reduce the consumption of hydrofluorocarbons.
- On 20 November 2024, the Federal Council adopted the second phase (2025–30) of Switzerland's Biodiversity Strategy Action Plan.⁴⁶ The action plan includes measures on combating insect loss, adapting biodiversity to climate change and promoting biodiversity in urban areas. It supports existing efforts to protect biodiversity in the various sectoral policies, such as agriculture or forestry. The Action Plan addresses existing gaps to strengthen the effectiveness of programme agreements and sectoral policies. The Action Plan's current 15 measures include, for example, identifying and improving areas of particular importance to insects, measures for animal/plant species and habitats to enable adaptation to climate change and greater support for cantons and communes in promoting biodiversity in developed areas.
- On 13 December 2024, the Federal Council adopted a national hydrogen strategy. This will establish the framework required for developing a hydrogen market in Switzerland. The Federal Council laid the foundations for this by adopting a report in November 2023 which outlined possible lines of action.⁴⁷

6 Goals of the NDC 2035

6.1 2035 reduction targets

By 2035, Switzerland aims to reduce its overall greenhouse gas emissions across all sectors by at least 65 percent compared to 1990 levels. On average for the period 2031–35, Switzerland aims to cut its greenhouse gas emissions by at least 59 percent compared to 1990 levels. That equates (based on the greenhouse gas inventory for 2022) to a greenhouse gas budget of 106.8 million tonnes of CO₂eq for

⁴² See [Carbon-neutral aviation: Federal Council adopts report \(admin.ch\)](#)

⁴³ See [BBI 2024 682 - Environmental Protection Act | Fedlex](#)

⁴⁴ See [Legislative amendments on strengthening Switzerland's circular economy will mainly enter into force from 2025](#)

⁴⁵ See [Federal Council amends four ordinances concerning the environment](#)

⁴⁶ See [Federal Council adopts second phase of the Action Plan](#)

⁴⁷ See [Federal Council presents report on future role of hydrogen in Switzerland \(admin.ch\)](#)

this period. Negative emissions may be counted towards these targets. These are net targets that include negative emissions achieved in both Switzerland and abroad.

The targets for 2030 and 2040 already enshrined in the CO₂ Act -and the Climate and Innovation Act establish the framework for these goals. By 2030, Switzerland aims to halve its greenhouse gas emissions compared to 1990 levels and to reduce them by three quarters by 2040. With a linear reduction between 2030 and 2040, this would result in a reduction of 62.5 percent by 2035 compared to 1990. However, Switzerland looks set to have additional potential in terms of CO₂ removal and storage available by 2035 to reduce emissions by means of CCS and to produce negative emissions, enabling a net reduction of up to 65 percent compared to 1990.⁴⁸ To achieve this goal, around 1.2 million tonnes of CO₂ of fossil, process-related or biogenic origin would have to be captured at plants in Switzerland by 2035 and then stored in Switzerland or abroad. The potential is essentially available, particularly in relation to waste incineration and cement plants. Switzerland also takes account of emissions and removals from land use changes and forestry (LULUCF).

Switzerland aims to achieve these targets as far as possible by means of reductions and negative emissions domestically. It is also retaining the option of including reductions achieved abroad. In this respect, Switzerland wishes to continue using internationally transferred mitigation outcomes (ITMO) from cooperation initiatives under article 6 of the Paris Agreement. However, it aims to reduce the share from 2030.

The Climate and Innovation Act indicates that international aviation and maritime transport will contribute towards achieving the net zero target by 2050. The internationally harmonised measures will not be able to achieve any significant reductions by 2035. For 2035, this sector is only expected to make a small contribution to reduction. These emissions will not be included for the 2035 target attainment.

1990 continues to be used as the base year. The greenhouse gas emissions of the base year include the following categories according to the greenhouse gas inventory (category in brackets): Energy (1), industrial processes and product use (2), agriculture (3), land use changes/forestry LULUCF (4), waste (5), other (6) According to the current greenhouse gas inventory (submitted in April 2024), the baseline value in 1990 is 52.1 million tonnes CO₂eq. The definitive value for assessing target attainment will be calculated based on the greenhouse gas inventory, which covers data up to and including 2035. Switzerland will include categories of emissions from sources and removals from sinks in its targets based on the greenhouse gas inventory.

6.2 Expected reductions in the individual sectors by 2035

The individual sectors contribute to the reduction targets in different ways. Switzerland expects to achieve the following reductions by 2035 compared to the base year of 1990⁴⁹:

- Buildings sector: -66%
- Transport (excluding international aviation and shipping): -41%
- Industry: -42.5%
- Other: -33%

These sectoral targets are also derived from the existing legal framework. The CO₂ Ordinance sets reduction targets for the sectors indicated for 2030, and the Climate and Innovation Act for 2040 and 2050. The expected reductions per sector for 2035 are based on a linear reduction between 2030 and 2040. They are absolute reduction targets, i.e. without the inclusion of negative emissions.

In addition to the sectors indicated, sectors not covered by the sectoral targets must also contribute to the reduction of greenhouse gas emissions where possible. On the one hand, this applies to international aviation and shipping, whose greenhouse gas emissions should gradually decrease, especially due to

⁴⁸ BAK/dena (2023): [Cost estimate for a CCS system for Switzerland by 2050](#), produced for the FOEN.

⁴⁹ The definition of the sectors is based on the categories in the CO₂ Statistics, see [CO₂ Statistics: Emissions from heating and transport fuel \(ad-min.ch\)](#). The only exception is agriculture which also contains categories 4B and 4C in contrast to the CO₂ Statistics. Agriculture, together with the waste sector (5) and emissions of synthetic gases (part of category 2), makes up the 'Other' sector.

the increased blending of SAF and the other international, market-based approaches (CORSIA, emissions trading system). However, aviation is unlikely to make a significant contribution to the reduction targets by 2035. The ramp-up in the blending of SAF is being coordinated internationally and will not have a significant impact on greenhouse gas emissions until after 2040. On the other hand, it applies to the LULUCF sector, which can contribute to achieving the goal by absorbing CO₂ from the atmosphere (by providing sinks).

6.3 Expansion of renewable energies and energy efficiency

The Federal Act on a Secure Electricity Supply from Renewable Energy Sources provides Switzerland with a legal basis for expanding renewable energies. This Act sets specific targets for renewable energies, energy efficiency and energy consumption.⁵⁰

The aim is to expand electricity production from renewable energies (excluding hydropower) to at least 35,000GWh by 2035 and at least 45,000GWh by 2050 (as of 2023: around 6,800GWh). Electricity production from hydropower is to increase to at least 37,900GWh by 2035 and to at least 39,200GWh by 2050 (as of 2023: around 35,000GWh). Imports of electricity during the winter half-year should not exceed the target of 5TWh.

To improve security of supply in winter, the Act requires the implementation of measures aimed at improving energy efficiency. By 2035, these measures are expected to reduce electricity consumption by a total of 2TWh. Average energy consumption per person is set to decrease by 43 percent by 2035 and by 53 percent by 2050 (both compared to 2000), average electricity consumption per person by 13 percent by 2035 and by 5 percent by 2050 (also compared to 2000).

Through these goals and the measures envisaged, Switzerland will contribute to the commitments on the energy transition set out in Decision 1/CMA.5 of the first global stocktake.⁵¹ The international community has decided to triple global renewable energy capacity by 2030 and to double the global annual rate of average improvements in energy efficiency.

6.4 Making financial flows consistent with climate sustainability

Switzerland has enshrined the goal of making financial flows consistent with low-emission, climate-resilient development in the CIA. The Confederation must ensure the financial industry makes an effective contribution to this goal. Switzerland is willing to leverage this potential.

A key instrument is the voluntary climate test to assess whether financial flows are consistent with climatic sustainability. Swiss pension funds, insurance companies, banks and asset management firms can have their financial portfolios assessed. The *PACTA climate test* assesses the climate compatibility of such portfolios.⁵² The Confederation carries out this test at regular intervals, most recently in 2024. It provides information on the progress of the financial market on the path to climate compatibility and shows the extent to which the financial market is making an effective contribution to Switzerland's climate goals. It also provides a basis for political measures.

Another key instrument is the transition plans, which will also be known as roadmaps in future, that large Swiss companies have been required to use for reporting purposes since 1 January 2025 in accordance with the Ordinance on Climate Disclosures.⁵³ In these roadmaps, companies in the real economy and the financial sector must demonstrate how they intend to align their business activities with Switzerland's climate targets. In addition to specific targets on reducing the emissions of companies in the real economy, the roadmaps will also contain measures that make a significant contribution to achieving the net zero target. Principles-based minimum requirements on roadmaps for companies in the financial sector aim to ensure they cover all climate-relevant business activities and also seek to improve comparability.

⁵⁰ [The Federal Act on a Secure Electricity Supply from Renewable Energy Sources \(admin.ch\)](#)

⁵¹ See [Decisions | UNFCCC](#)

⁵² See [Climate and financial market \(admin.ch\)](#). PACTA stands for Paris Agreement Capital Transition Assessment.

⁵³ See [Federal Council brings ordinance on mandatory climate disclosures for large companies into force as of 1 January 2024 \(admin.ch\)](#)