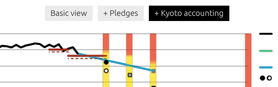
# CLIMATE ACTION TRACKER

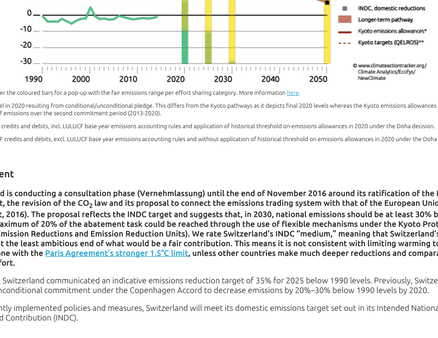
## Switzerland

History: 2017 2016 2015 2014 2013 2012 2011

Page last updated: 2nd November 2016

### Rating




Note: Hover over the coloured bars for a pop-up with the fair emissions range per effort sharing category. More information here.

* Emissions level in 2020 resulting from conditional/unconditional pledge. This differs from the Kyoto pathways as it depicts final 2020 levels whereas the Kyoto emissions allowances consider the average level of emissions over the second commitment period (2013-2020).

** Incl. LULUCF credits and debits, incl. LULUCF base year emissions accounting rules and application of historical threshold on emissions allowances in 2020 under the Doha decision.

***Excl. LULUCF credits and debits, excl. LULUCF base year emissions accounting rules and without application of historical threshold on emissions allowances in 2020 under the Doha decision.

### Assessment

**Switzerland is conducting a consultation phase (Vernehmlassung) until the end of November 2016 around its ratification of the Paris Agreement, the revision of the $CO_2$ law and its proposal to connect the emissions trading system with that of the European Union (Bundesrat, 2016). The proposal reflects the INDC target and suggests that, in 2030, national emissions should be at least 30% below 1990 levels; a maximum of 20% of the abatement task could be reached through the use of flexible mechanisms under the Kyoto Protocol (e.g. Certified Emission Reductions and Emission Reduction Units). We rate Switzerland's INDC "medium," meaning that Switzerland's climate plans are at the least ambitious end of what would be a fair contribution. This means it is not consistent with limiting warming to below 2°C, let alone with the Paris Agreement's stronger 1.5°C limit, unless other countries make much deeper reductions and comparably greater effort.**

In addition, Switzerland communicated an indicative emissions reduction target of 35% for 2025 below 1990 levels. Previously, Switzerland had made an unconditional commitment under the Copenhagen Accord to decrease emissions by 20%–30% below 1990 levels by 2020.

With currently implemented policies and measures, Switzerland will meet its domestic emissions target set out in its Intended Nationally Determined Contribution (INDC).

### Pledges and targets

#### Paris Agreement targets

Switzerland has not yet ratified the Paris Agreement. A national consultation phase on the ratification of the Paris Agreement ran between August and November 2016. Almost 95% of the participants were in favour of Switzerland ratifying the Agreement, stating reasons such as the position and role of Switzerland, the effectiveness of the Agreement in the fight against climate change, as well as positive effects for the Swiss economy (Schweizerische Eidgenossenschaft, 2016).

In March 2017 the Nationalrat voted to ratify the Agreement, A decision by the Ständerat is still pending before Switzerland can ratify the agreement.

Switzerland was the first country to submit an INDC to the UNFCCC (on 27th February 2015), announcing an emissions reduction of 50% by 2030 (excluding LULUCF) with at least 30% to be achieved domestically and the rest through emissions reductions abroad. The INDC further commits Switzerland to an emissions reduction of 35% below 1990 levels by 2025.

Switzerland intends to use carbon credits from international mechanisms (Clean Development Mechanism, as well as new market mechanisms under the Convention, such as NMM and activities under the FVA) and states it will apply quality criteria that are at least in line with those of Switzerland's current national legislation.

To nationally implement its INDC, Switzerland drew up a draft for consultation at national level, which is currently underway.

#### 2020 pledge and Kyoto target

Switzerland agreed to sign up to the Kyoto Protocol for a second commitment period (2013–2020), as proposed at the COP 18 in Doha. Switzerland submitted a QELRO [1] level of 84.2, meaning that it proposes that its average yearly emissions for the period 2013–2020 will be 84.2% of 1990 levels.

Switzerland's commitment under the Convention (Copenhagen Pledge) for 2020 is to reduce emissions in the range of 20% to 30% below 1990 emissions (excluding LULUCF). While the 20% reduction commitment is unconditional, the 30% is conditional on a global and comprehensive climate agreement. According to Switzerland's submission, such an agreement would include other developed countries pledging comparable emissions reductions, and developing countries contributing according to their capabilities.

| **Kyoto Protocol (KP)** | |
|---|---|
| Member of KP CP1 | yes |
| Member of KP CP2 | yes |
| KP CP1 target (below 1990) | -8% |
| KP CP2 target (below 1990) | -15.8% |
| **Copenhagen pledge** | |
| 2020 target | -20%/-30% |
| Reference for pledge | 1990 emissions |
| Conditions (for higher pledge level) | Global and comprehensive agreement, other developed countries take comparable emission reductions, developing countries contribute according to their capabilities, bunker fuels form part of global reduction objectives covered under a sectoral approach |
| **Paris Agreement target** | |
| **Ratified** | **No** |
| Reference for pledge | 1990 emissions |
| 2030 target: | -50% by 2030 |
| Long term goal(s) | |
| Long term goal(s) | -70-85% below 1990 by 2050 |

#### Long-term goal

Switzerland's INDC contains an indicative long-term goal to reduce emissions by 2050 to 70%–85% below 1990 levels by 2050, including use of international credits.

#### Footnotes

[1] The quantified emission limitation and reduction objectives (QELRO), expressed as a percentage in relation to a base year, denotes the average level of emissions that an Annex B Party could emit on an annual basis during a given commitment period.

### Fair share

We rate Switzerland's INDC "medium." The "medium" rating indicates that Switzerland's climate plans are at the least ambitious end of what would be a fair contribution. This means it is not consistent with limiting warming to below 2°C, let alone with the Paris Agreement's stronger 1.5°C limit, unless other countries make much deeper reductions and comparably greater effort.

We evaluate Switzerland's 2025 emissions level according to different effort sharing principles. It is consistent with a global 2°C pathway only under the "equality" proposals. The most stringent approaches for Switzerland focus on capability.

### Current policy projections

With currently implemented policies (based on the "with existing measures" scenario of the 2nd Biennial Report), Switzerland is expected to reach an emissions level of 44 $MtCO_2e$ by 2020 and 37 $MtCO_2e$ by 2030 (excluding LULUCF).

With currently implemented policies and measures Switzerland will meet its domestic target of a 30% reduction below 1990 levels. In order to further decrease national emissions, Switzerland is in the process of designing new climate policies. A national consultation phase - on the ratification of the Paris Agreement, the revision of the $CO_2$ law, and the proposal to connect the emissions trading system with that of the European Union (Bundesrat, 2016) – was conducted between August and November 2016.

The Energy Strategy 2050 was developed as a reaction to the Fukushima nuclear reactor disaster in 2011, after which the Federal Council and Parliament decided on a "progressive withdrawal from nuclear energy production." The government further anticipates "far-reaching changes in the international energy environment" which requires upgrading the Swiss energy system. With this in mind, the Federal Council developed the Energy Strategy 2050, which is based on four pillars: energy efficiency, renewable energy, replacement, and new construction of large power plants for electricity production (Schweizerische Eidgenossenschaft, 2017).

For the implementation of the Energy Strategy 2050, the Swiss Parliament revised the energy law (Energiegesetz), which entails measures up to 2035 – and which will be voted on in a public referendum on 21 May 2017.. It aims to reduce energy consumption, increase energy efficiency and the production of renewable energy, and prohibits the construction of new nuclear power plants. It includes a continuation of the Swiss building programme, which was due to finish at the end of 2019. The programme supports renovating buildings through financial incentives (financial support, tax incentives) and is financed through contributions by the Cantons and a $CO_2$ tax.

Switzerland already has policies in place on transport, e.g. tightened regulations on $CO_2$ emissions for new cars. On average, from 2021, new passenger cars are allowed to emit only 95 g $CO_2$ / km, which is about a quarter less than today and in line with the EU target. In 2016, 2% of new passenger cars in Switzerland were electrically charged vehicles, significantly above the 1.5% average among Western European new cars (ACEA, 2017). This was despite the comparatively sparse incentives in Switzerland compared to frontrunner countries such as Norway or the Netherlands (with 29% and 6% new electric cars in 2015). Buyers do not receive a premium, like in Germany, for example, but don't have to pay the annual motor vehicle tax (kfz-Steuer).

Similarly to the EU, Switzerland is also using an emissions trading scheme (ETS) to lower emissions from large, energy-intensive entities. However, the Swiss ETS is much smaller than the European ETS, not only because of the smaller market, but also due to the fact that it only covers 10% of overall emissions.

The Swiss ETS is currently making headlines, after an examination by the Swiss Federal Audit Office (2017) concluded that in its current form the ETS "generates hardly any incentives for reductions." The audit office found several regulatory shortcomings, and called the impact of the ETS into question. The high market value of emissions allowances allocated free of charge decreased the willingness of the companies to invest in energy efficiency. An annual decrease of the cap by 1.74%, which was below the overall emissions reduction, led to an oversupply of allowances and consequently low prices (ICAP, 2017). The small size of the market further worsens the oversupply of allowances where there is an unexpected production closure, like the recent one at the Tamoil refinery.

Uncertainty also remains around the link-up between the Swiss and EU ETS. Integration of both markets would allow companies to trade emissions on a bigger market, though the European Union's Emissions Trading Scheme is also plagued by a significant - and growing - oversupply of emission allowances (see CAT's assessment of the EU). An agreement with the EU has been negotiated, but is on hold. The Federal Audit Office recommends the Swiss government establishes an appropriate control mechanism "at the legislative level whereby over or undersupply of the market can be responded to and unused emission allowances can be removed from the system" (Swiss Federal Audit Office, 2017).

### Assumptions

#### Pledge

We calculated targets for 2020, 2025, and 2030 from the most recent national inventory submissions (2016) and based on the latest UNFCCC information on Convention pledges and Kyoto targets.

We calculated Switzerland's LULUCF accounting quantities in 2020 for afforestation, reforestation and deforestation using the current Kyoto rules and for forest management using a net-net approach with a projected reference level for 2013–2020. Switzerland has excluded emissions from extreme events (e.g. forest fires) in calculating their reference level.

#### Current policy projections

Greenhouse gas emission inventories are available from 1990 to 2014 in the CRF 2016 submitted to UNFCCC. We use these historical values up to 2014 and then use growth rates based on the "with measures" scenario submitted to the UNFCCC in Switzerland's second biennial report (Switzerland, 2016), where currently implemented and adopted measures are encompassed.

### Sources

#### Sources


Bundesrat (2016). Bundesrat eröffnet Vernehmlassung über die zukünftige Klimapolitik der Schweiz.

CRF (2016). UNFCCC AWG-KP Submissions 2014. Common Reporting Format.

European Environmental Agency (2011). Survey of resource effiency policies in EEA member and cooperating countries. Country profile: Switzerland

Swiss Confederation 2013: Switzerland's Sixth National Communication and First Biennial Report under the UNFCCC, edited by Federal Office for the Environment, Bern.

Government of Switzerland (2012a) Information by Parties included in Annex I listed in annex 1 to decision 1/CMP.7 on their quantified emission limitation or reduction objectives for the second commitment period under the Kyoto Protocol

Government of Switzerland (2012b) Submission to the Ad-Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP): Information by Parties included in Annex I listed in annex 1 to decision 1/CMP.7 on their quantified emission limitation or reduction objectives for the second commitment period under the Kyoto Protocol, 4 May 2012

Government of Switzerland (2011) Switzerland's submission on reference levels as an accounting approach for forest management under the Kyoto Protocol

Government of Switzerland (2010a). Switzerland's pledge to the Copenhagen Accord.Compiled in: Compilation of economy-wide emission reduction targets to be implemented by Parties included in Annex I to the Convention, UNFCCC (2011).

Government of Switzerland (2010b). Forest Management reference level provided in presentation to Forest management accounting pre-sessional workshop on 30 July 2010

Swiss Confederation (2009a) Federal Act on the Reduction of CO2 Emissions (CO2 Act)

Swiss Confederation (2011): Federal Act on the Reduction of CO2 Emissions (CO2 Act), 23.12.2011

Switzerland (2016). Switzerland's Second Biennial Report under the UNFCCC.

Government of Switzerland (2009b). Submission on Possible Options for Consideration Relating to Land-Use, Land-use Change and Forestry. 16 February 2009, FCCC/KP/AWG/2009/MISC.5

Switzerland (2009c) Joint submission by Australia, Belarus, Canada, Croatia, the European Community and its Member States, Iceland, Japan, Kazakhstan, Liechtenstein, Monaco, New Zealand, Norway, Russian Federation, Switzerland, Ukraine. Information relating to possible quantified emissions limitation and reduction objectives as submitted by Parties. Submission to the AWG-LCA ,,28 September to 9 October 2009

Ministerium für Umwelt, Transport, Energie und Kommunikation(2012): "Energiestrategie 2050: Erstes Massnahmenpaket."

OECD / IEA (2012): Energy Policies of IEA Countries - Switzerland, 2012 Review. OECD/IEA, 2012 International Energy Agency 9 rue de la Fédération 75739 Paris Cedex 15, France.



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