CLIMATE ACTION TRACKER

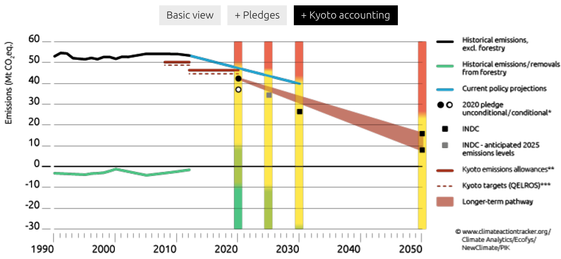
Switzerland

History: 2017 2016 2015 2014 2013 2012 2011

Page last updated: 28th October 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

We rate Switzerland "medium" throughout as it aims at reducing emissions by 50% by 2030, compared to 1990 levels. In addition, Switzerland communicated an emissions reduction target of 35% for 2025. Previously, Switzerland had made an unconditional commitment to decrease emissions by 20%-30% below 1990 levels by 2020. With currently implemented policies and measures Switzerland will neither be able to meet its pledge nor its INDC.

Pledges and post-2020 INDC

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 Switzerland proposes 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. 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.

Switzerland was the first country to submit an INDC to the UNFCCC (on 27th February 2015), announcing an emission reduction of 50% by 2030, with at least 30% to be achieved domestically and the rest through emissions reductions abroad. Despite a large use of carbon credits, under currently implemented policies Switzerland will not be able to achieve this target, leaving a gap of 3 $MTCO_2$-e in 2030 (or 14 $MTCO_2$-e without carbon credits).

For the long-term, Switzerland has put forward an indicative target of a 70%–85% emissions reduction below 1990 levels by 2050, (or 71-85% below 2010 levels), including use of international credits.

Switzerland intends to achieve these targets in the absence of new nuclear power plants. Existing plants are expected to cease operation during the period 2019-2034 (OECD/IEA 2012). Consumption of electricity is projected to reach 60-90 TWh in 2050, depending on the rate of economic growth and the success of energy efficiency measures. The contribution to GHG emissions from the electricity sector is small, due to a high reliance on nuclear- and hydropower facilities. The transport sector is currently the largest emitter (32%), and consequently mitigation actions should focus on sustainable modes of transport (i.e. railways). Also the building sector makes a large contribution to GHG emissions – this sector contributes as much as 86% to C02 emissions in the Alpine regions of the country due to harsh climate conditions (Walz et al. 2008).

Fair share

We rate Switzerland's INDC "medium". This means that Switzerland's target is only in line with the less stringent emissions reductions required from the effort-sharing approaches assessed by the CAT. If all governments were to move to the least ambitious end of the range, the aggregate of all the proposals would result in emissions well above what is required to keep warming below 2?C. Only if all governments were at the intersection of "medium" and "sufficient" or lower, global emissions would be compatible with the 2°C limit.

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 description

With currently implemented policies, Switzerland is expected to reach an emissions level of 47.3 $MtCO_2$e in 2020 (excluding LULUCF). This constitutes a decrease in domestic GHG emissions by only 10.5% below 1990 levels. As a result, additional emissions reductions are expected through the use of flexible mechanisms under the Kyoto Protocol (CERs and ERUs).

Over the last two decades, emissions have remained fairly stable, ranging from 52-55 MtCO2.

The current policy projection used in our analysis is taken from the scenario "with existing measures" in the NC6.

The overall effect of policies and measures implemented since 1990 is estimated to reduce emissions by around 5 $MtCO_2$e by 2020, compared to a "without measures" scenario. The largest reductions result from policies related to energy use and taxes.

Data sources and assumptions

Pledge

We calculated targets for 2020 from the most recent national inventory submissions (2013) 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 in calculating their reference level.

Current policy projections

Greenhouse gas emission inventories are available from 1990 to 2012 in the CRF 2014 submitted to UNFCCC. We use these historic values up to 2012 and then use growth rates based on Switzerland's Sixth National Communication under the UNFCCC, published in 2013.

Sources and Footnotes

Sources

CRF (2014). 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

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.

Walz, A., G.P. Calonder, F. Hagedorn, C. Lardelli, C. Lundström, V. Stöckli (2008). "Regional CO2 budget, countermeasures and reduction aims for the Alpine tourist region of Davos, Switzerland". Energy Policy Volume 36, Issue 2, February 2008, Pages 811-820.

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

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