



Factsheet on emissions trading

Signature in the presence of Doris Leuthard, President of the Swiss Confederation, and EU Commission President Jean-Claude Juncker, of the agreement between Switzerland and the EU for the linking of their emissions trading schemes (23 November 2017)

Emissions trading is an internationally established instrument of climate policy. It aims to reduce greenhouse gas emissions and operates according to market principles. The emissions trading schemes in Switzerland and the EU have significant similarities. Emissions trading should not be confused with trading certificates from climate protection projects.

1 Emissions trading based on ‘cap and trade’

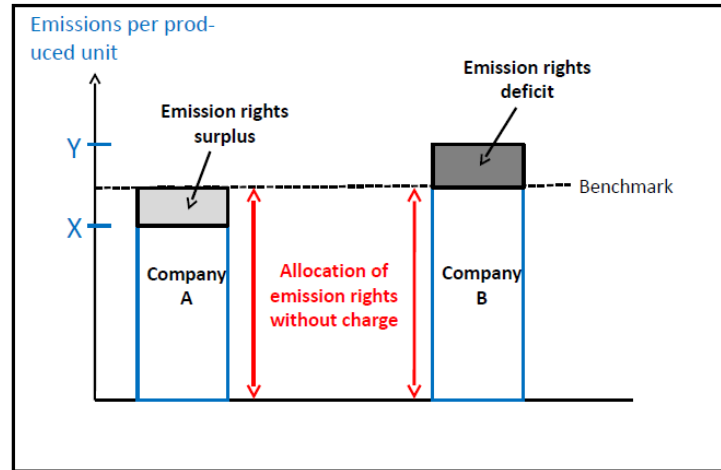
An emissions trading scheme (ETS) based on the ‘cap and trade’ principle is a volume control instrument¹. It is comparable to quotas, in the sense that the state issues emission allowances within the scope of a pre-defined upper limit for emissions (cap) and allocates them for a certain period to companies that participate in emissions trading. These companies are thus given the right to emit a certain volume of greenhouse gases free of charge and to trade emission allowances.

In Switzerland, as in the EU, participation in emissions trading is compulsory for companies in certain greenhouse gas intensive industries (including cement, paper, refineries, chemicals, glass, steel and ceramics). Companies must surrender sufficient emission allowances each year to cover the volume of their greenhouse gas emissions. If they produce more emissions than they should, exceeding their allocation of emission allowances, they are required to purchase additional credits. Alternatively, companies can reduce their greenhouse gas emissions and thus avoid the need to purchase extra credits. These credits are either surplus emission allowances from other ETS companies that produced less emissions than their allocation of emission allowances, or, to a limited extent, certificates from climate protection projects abroad (see section 2). Companies that do not surrender a sufficient amount of credits must also pay a fine for each excess tonne of emitted CO₂.

Every year, the companies are allocated a certain amount of emission allowances free of charge, which are based on average values (benchmarks). This system rewards efficient companies that produce fewer emissions. In the chart below, companies A and B each receive an equal amount of emission allowances per unit of production, irrespective of their actual greenhouse gas emissions. Company A, with an emissions output under the benchmark (X), ends up with more emission allowances than it needs to cover its emissions, while company B produces emissions in excess of the benchmark (Y), and must either take appropriate action or purchase emission credits.

¹ In contrast, the CO₂ tax is a price-control instrument that imposes a surcharge on fossil fuels, encouraging less use of such fuels and thus reducing CO₂ emissions. In emissions trading, the volume is predetermined, and CO₂ prices are based on supply and demand.

Diagram: Allocation free of charge based on a benchmark



In the Swiss emissions trading scheme there are currently 54 high-emission industrial plants that are obliged to participate, whereas there are more than 11,000 industrial plants and fossil-thermal power plants in the EU emissions trading scheme. Civil aviation has also been integrated into the EU scheme since 2012. The upper limit for emissions under the ETS is set in advance for the duration of the trading period (currently 2013 to 2020), while the amount of available emission allowances is reduced annually across the system (currently by 1.74%). The Swiss ETS covers around 5 million tonnes of CO₂-equivalent (CO₂-eq), which corresponds to approximately 10 percent of Switzerland's emissions, whereas the EU ETS covers approximately 2 billion tonnes of CO₂-eq, or around 45 percent of EU emissions. Every year, 5% of the available emission allowances are reserved and set aside for the event that new companies join the ETS or existing ETS participants expand their production capacity. Emission allowances which are not allocated free of charge can be purchased at regular auctions.

The price for a tonne of CO₂ in Switzerland, initially 40 Swiss francs in 2014, fell steadily to 6.50 Swiss francs, but rose again at the last auction in November 2017 to 7.50 Swiss francs. In the EU, the price is now 7 to 8 euros and is therefore significantly higher than it was a few months ago. These still relatively low prices are nonetheless evidence of a surplus of emission allowances, especially in the EU, and currently provide little incentive for investment. In response to these low prices, in 2015 the EU introduced a market stability reserve, thanks to which with effect from 2019 it will be possible, in the event of an over supply, to siphon off a certain quantity of European emission rights and allocate them to this reserve mechanism.

Switzerland and the EU are aiming to link their two emissions trading schemes. This means that the emission rights in both schemes can be mutually recognised. An agreement was initialled at the beginning of 2016 and signed on 23 november 2017, and will enter into force on 1 January 2020 at the latest, subject to parliamentary approval in Switzerland and the EU. Once the two schemes are linked, this should lead to a convergence in CO₂ prices and an equal playing field for the involved companies. Furthermore, similar to the current regulation in the EU, civil aviation and any fossil-thermal power plants will be integrated into the Swiss ETS. In return, for fossil-thermal power plants the existing compensation obligation will be discontinued.

2 Trading certificates from climate protection projects

Emissions trading based on the 'cap and trade' principle should not be confused with the trade in certificates from climate protection projects. These certificates are an instrument of the Kyoto Protocol that allows industrialised countries with the aid of flexible mechanisms to credit emission reductions achieved abroad to their reduction targets. The most widely used is the Clean Development Mechanism (CDM), which permits countries sponsoring climate protection projects in developing countries to obtain emission reduction certificates provided certain requirements are met. A UN agency issues the certificates retroactively for substantiated reductions and they may be traded freely.

A certificate entitles the holder to emit one tonne of CO₂ and may be surrendered by companies in an emissions trading system (see comments in section 1) instead of an emission allowance. However, the available quantity of certificates is limited both in Switzerland and in the EU. Like the EU, as of 2021 Switzerland will not admit any more certificates to its ETS. Certificates are also used by countries that have made a reduction commitment under the Kyoto Protocol, or they are acquired on a voluntary basis, for example for CO₂ compensation for air travel.

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