

Starting with the third trading period (2013-2020), the EU emissions trading system has extensively been harmonised: besides the common cap on greenhouse gas emissions, the same rules for the allocation and auctioning of free emission allowances will initially apply in all EU Member States. The European Commission has also proposed the establishment of mandatory requirements for greenhouse gas emission monitoring and the introduction of a common emissions trading registry.



All basic decisions are taken centrally at EU level. This is intended to avoid distortions of competition between Member States and to prepare the European system for an even better global emissions trading scheme. The world's largest EU emissions trading system already covers about 12,000 energy and industrial installations operating in the 28 EU countries, Norway, Iceland and Liechtenstein. Together they cause about 45 percent of European CO₂ emissions.

Facts about the first, second and third trading periods in Germany (stationary installations)

	1 st trading period	2 nd trading period	3 rd trading period
Period	2005-2007	2008-2012	2013-2020
German emissions trading budget (without international project credits)	499 million tonnes of CO ₂ per annum	444 million tonnes of CO ₂ per annum	EU-wide overall budget (cap): 1.95 bn tonnes CO ₂ per year (trading period average); annual reduction rate: 1.74 %; calculated share of German installations: 416 m tonnes CO ₂ per year (trading period average)
Participants	~ 1,850 energy and industrial installations	~ 1,650 energy and industrial installations	~ 1,900 energy and industrial installations
Allocation and auctioning	Hardly any harmonisation at EU level Allocation of free allowances, based on historic emissions (grandfathering) for energy and industrial installations No auctions	Hardly any harmonisation at EU level Energy: free allowances, based on historic production ('benchmarking'); further reduction of 40 million allowances for auctioning Industry: grandfathering with a fixed reduction factor of 1.25 %	Extensive harmonisation at EU level Basic allocation rule: auctioning; Power sector must cover 100 % of demand on the market, industry and heat production receive free allocation based on benchmarks; the share of free allocation will decrease from 80 % of 2013 benchmark allocation to 30 % in 2020

Emissions and allowances: falling tendency

The third trading period started on 1 January 2013 and lasts for eight years. The cap on greenhouse gas emissions will gradually be reduced by 21 percent by 2020 compared to 2005 and will ensure compliance with the EU's climate protection target. The volume of emission allowances decreases annually by 1.74 percent. Or in terms of figures, there were still about 2.08 billion certificates in the 2013 EU budget, in each of the following years they decrease by nearly 38.3 million. The 38.3 million is 1.74 percent of the 2010 value which is the underlying reference value of 2.2 billion allowances across the EU.

Scope

In Germany, emissions trading covers around 1,900 installations in energy supply and energy-intensive industries (iron and steel production, mineral processing, refineries, chemical industry, paper and pulp production and non-ferrous metal production). In addition to carbon dioxide (CO₂) emissions, nitrous oxide (N₂O) and perfluorinated hydrocarbon (PFC) emissions are also recorded. Both gases are considerably more climate-damaging than CO₂: nitrous oxide by 300 times and PFC by more than 6,000 times. Since 2012, emissions trading also includes intra-European flights in addition to the stationary sector. Germany manages around 80 airlines.

Allocation methods for 2013-2020

Auctioning

Auctioning is the basic allocation method throughout Europe. Electricity producers must acquire the total number of emission allowances required in the third trading period at an auction. Industrial sectors and heat producers continue to receive a free allocation based on benchmarks, which is, however, subject to an annual reduction according to cap development. Germany has the highest share with 19.5 percent among the Member States at the Europe-wide auction volume. The auctions take place on existing emission trading exchanges such as the EEX in Leipzig.

Benchmarks

For the allocation of free allowances, the European Commission has identified 52 product emission values from 21 sectors – from aluminium to cement clinker. These benchmarks specify how much greenhouse gas the 10 percent most efficient installations in Europe are emitting per tonne of product.

In addition to the benchmark, the production level in a base period is also considered for the allocation. If an installation emits more than its benchmark stipulates, the operator will not be able to make it up with the free allocation and must purchase additional allowances. In addition, free allocation is subject to an annual reduction (also called cross-sectoral correction factor for industrial installations) in order to comply with the budget limits at EU level ('industrial cap').

Carbon Leakage

There are exceptions for all industrial sectors that face strong international competition and are heavily burdened by emissions trading in order to prevent a production shift, and thus emissions, to regions without comparable climate protection measures ('carbon leakage'). Sectors on the Carbon Leakage List receive a 100 percent free allocation of the benchmark allocation over the trading period (before applying the annual reduction). The list is reviewed and revised by the European Commission every five years. The current Carbon Leakage List is valid until 2020.

Backloading and Market Stability Reserve

Since the middle of the second trading period, emissions trading has been characterised by a high number of excess allowances and sharply falling prices. Measures were taken in the third trading period to make the supply more flexible and to reduce the surplus: between 2014 and 2016, a total of 900 million emission allowances were held back from auctions (backloading). These emission allowances and others not allocated free of charge are transferred into a Market Stability Reserve (MSR). As of 01/01/2019, the MSR will reduce the auction volume annually by 24 percent, as long as there is a surfeit of emission allowances (surplus > 833 million) in circulation. Thus, the surplus will already be significantly reduced by the end of the trading period. Conversely, additional emission allowances can be auctioned off from the MSR should the number of emission allowances (surplus < 400 million) in circulation be insufficient in later years.

Monitoring

The methods for greenhouse gas emission monitoring need to be described in an installation-specific monitoring plan. The monitoring plan specifies how the requirements of the EU Monitoring Regulation should be implemented for each installation. It must be compiled by the operator before the beginning of the monitoring period and approved by the DEHSt as the competent authority.