Updated December 2023

EU ETS at a Glance

Years in operation	• Phase 1: 2005-07 • Phase 2: 2008-12 • Phase 3: 2013-20 • Phase 4: 2021-30
Overall cap & trajectory	In 2023, EUA issuance is at 1,509 million. In 2021-23 the linear reduction factor is at 2.2%, but will be increased to 4.3% for 2024-27, and to 4.4% for 2028-30. This rebasing (supply cut) will amount to 90 mn in 2024 and 27 mn in 2026. For 2030, the cap will be 847 million tCO2e.
Target(s)	- 62% by 2030, compared to 2005 levels in the EU ETS - Overall economy-wide emission reduction target for 2030: at least 55% below 1990 levels.
Covered emissions	Verified emissions for 2022 (stationary installations): 1,258 Mt CO2e. This represents a 4% drop from the 1,309 Mt in 2021, and a 39% drop from the 2,059 Mt in 2005 (includes estimated 287 Mt for sectors that were not then part of the scope, to allow for like-for-like comparison).
Emissions reduced to date	Since its launch in 2005, the EU ETS has reduced emissions from electricity, heat generation and industrial production by 37.3%. In 2022, overall EU ETS emissions amounted to 1,362.1 MtCO2e.
Sectors covered	• Power and heat generation • Industrial processes, including oil refining, steel works and production of iron, aluminium, cement, lime, glass, ceramics, pulp, paper, cardboard, acids, and bulk organic chemicals. • Aviation • As part of the “Fit for 55% review” of the EU ETS, the scope is extended to maritime from 2024. Ship operators are obliged to account for 100% of emissions from intra-EU journeys, 50% of emissions to/from external ports. The compliance obligation is introduced gradually: in 2025 shipping operators must account for 40% of their 2024 emissions. That share increases to 70% for 2025 emissions, then 100% for 2026 emissions. • An ETS 2, a separate, parallel ETS for buildings, road transport and additional industrial sectors is set to enter into force in 2027, for 2026 emissions. If energy prices remain high, implementation may be delayed to 2028.

GHGs covered	• CO_2 • N_2O • PFCs
# of covered entities	Approximately 11,000 installations and 12,000 ships once the system is extended to maritime sector.
Allocation method	Auctioning is the default method, with varying levels of free allocation to industrial sectors (based on harmonised rules) and power producers in a few lower-income EU Member States.
Trading rules	There is no holding limit for trading accounts. Since September 2023, transactions in excess of 2 million allowances can only be performed to Trusted Accounts.
Use of offsets and linking	On 1 January 2020, the EU ETS linked to the Swiss ETS, meaning EUAs are fully fungible with CHUs. No other international credits have been eligible for EU ETS compliance since 2021.
Other features	Allowances can be banked indefinitely, meaning any historic vintage can be used for future compliance. It is possible to borrow allowances from one year into the future if this is within a trading phase. It is not possible to borrow allowances between trading phases. In 2019, the Market Stability Reserve (MSR) was established. Based on a pre-defined set of rules, it withholds and cancels a certain volume of auction allowances based on the Total Number of Allowances in Circulation.
Penalties for non-compliance	€100/t, adjusted with the EU inflation rate from 2013 onwards. The shortfall in compliance is also then added to the compliance target of the following year.
Use of revenues	From 2024, 100% of auctioning revenues should be used by Member States for climate and energy related purposes. That can include indirect costs compensation, at the maximum level of 75% indirect emissions costs in years 2021-2030. It is proposed that 30% of revenues will be directed to the Union budget, the decision has not yet been made.

Major Developments

The key policy development over the last 12 months has been the completion of the “Fit For 55” (FF55) package that enables the EU to reach its emission reduction target of at least 55% emissions cuts by 2030. It includes a review of the EU ETS Directive, which recalibrates several EU ETS parameters, the establishment of ETS 2 and creation of a new instrument, the Carbon Border Adjustment Mechanism (CBAM).

A marathon of trilogue meetings on the ETS/CBAM files took place throughout the autumn of 2022, in parallel to the REPowerEU plan (see below), and against the backdrop of a series of emergency council meetings in which European leaders tried to tackle then-skyrocketing energy prices.

The agreement on the EU ETS revision was reached on 18 December 2022, followed by the endorsement in the European Parliament plenary and the European Council on 25 April 2023. It entered into force on 10 May 2023, upon publication in the EU Official Journal.

The most crucial adjustment to the ETS parameters is the supply tightening that will take annual issuance of EUAs down to 847 Mt in 2030, equivalent to a 62% reduction compared to the cap in 2005. The tightening is implemented through an increase of the annual reduction factor, plus two additional cap adjustments, in 2024 and 2026.

The reforms also expanded the EU ETS scope, to include maritime emissions from 2024. Emissions from road transport, buildings and additional industrial sector, covered under the Effort Sharing Regulation, will be capped under a separate ETS from 2027. Municipal waste incineration emissions might be added at a later point.

Independently, in 2023 the decision was made to monetise €20 billion-worth of EUAs to help finance the REPowerEU programme to free the bloc from its dependence on Russian fossil fuels. According to the Commission, initial REPowerEU auctioning volumes for years 2024-26, around 230 million EUAs will be auctioned by August 2026 for this purpose. The plan stipulates that the allowances will be sourced partly from member states' volumes (originally foreseen for later years), partly from the Innovation Fund. They will be offered as part of the volume offered on the daily auctions.

With high EUA prices prevailing since 2018, the revenues raised from EUA auctions have been an increasingly important source of funding for EU member states' climate and energy policies. So far, at least 50% have been earmarked for climate-related measures. From January 2024, all auction proceeds will be reserved for that purpose. At the same time, there is increasing pressure from the European Commission to redirect some of these revenues towards the common EU budget. According to a recent Commission proposal, 30% of auctioning revenues should be redirected to the EU's own resources.

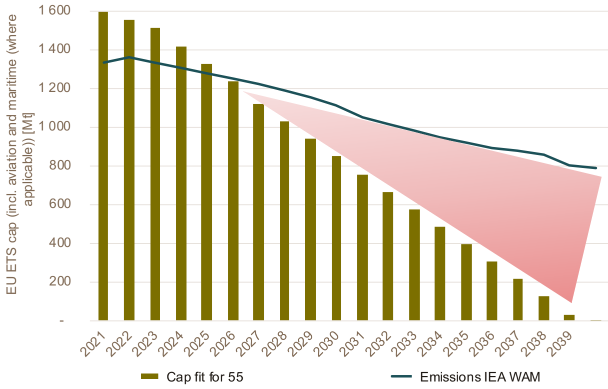
Market Commentary

The EU ETS is still oversupplied on a cumulative level, due to the legacy of generous EUA issuance, a large inflow of CDM credits and lower-than-predicted emissions in the previous two trading periods (2008-12 and 2013-20). The annual balance, meaning fresh supply versus emissions, was also positive in 2022, with some 1,552 million EUAs issued for emissions that came in at 1,285 Mt.

Since its inception in January 2019, the Market Stability Reserve (MSR) has addressed the supply-demand mismatch by soaking up EUAs otherwise reserved for the daily government auctions. By reducing the number of auctioned EUAs, the MSR has effectively limited the number of EUAs in circulation and lifted the EUA price.

The balance looks very different for the years to come, as cap tightening will decrease issuance at a much faster pace. Under the new trajectories supply and demand will cross in 2026, after which we will see an increasingly wide gap between rapidly dwindling issuance and more slowly declining emissions. Anticipation of future shortage has been the key bullish price driver in 2022 and 2023 against a backdrop of bearish drivers.

Mind the gap: How to address a zero cap in 2040?



- Massive abatement in industry sectors will be required
- Expand ETS to new sectors, link with ETS2?
- Open upto carbon credits from outside the EU?
- Allow for negative emissions/carbon removals into the EU ETS

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After testing the upside above €100/t in February 2023, and the downside below €80/t in early June, the European carbon front-year contract has traded sideways, close to €85/t.

The ongoing drop in fossil power emissions reduces demand for EUAs and is weighing on carbon prices. Recent power generation data show that the first half of 2023 saw overall demand for electricity decrease by 4.7% compared to H1 of 2022. With sharp drops in coal and gas fired generation in 2023, and with a fuel-switching price curve that disincentivises coal for the remainder of 2023, power sector emissions are on track for a 21% drop year-on-year.

Europe's manufacturing industries – the other big group of emitters – scaled down production (and their appetite for EUAs) in 2022, in response to skyrocketing energy prices. Emissions from industries covered under the EU ETS were down 7%. We expect industry sector demand for EUAs to remain limited, in line with last year's level.

At the same time as demand is dwindling, supply is increasing due to the front-loading of EUAs to help finance the REPowerEU programme. The fact that the EUA price has held up despite the short-term surplus can be explained by support provided by the anticipation of future shortage.

Useful Links

[Veyt European Carbon Analysis]

[ICAP ETS Map]

[2022 Commission report on the functioning of the EU ETS]

[European Environment Agency – EU ETS data viewer]

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