

# CARBON MARKET BUSINESS BRIEF

## EU

### 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 2021, the overall cap was 1,571 million tCO <sub>2e</sub> . During Phase 4, the cap declines by a Linear Reduction Factor (LRF) of 2.2%.  Currently a proposal to increase the LRF to 4.2% is under discussion by EU co-legislators.
Target(s)	-43% by 2030, compared to 2005 emissions.  In July 2021, the European Commission proposed to increase the EU ETS target to -61% by 2030, as the market system's contribution to the EU's overall climate target of -55% by 2030.
Emissions Reduced to date	In 2021, the verified EU ETS emissions from stationary installations, increased by 7.3% compared to 2020.
Sectors covered	<ul style="list-style-type: none"> <li>• Power and heat generation</li> <li>• Industrial processes, including the oil refineries, steel works and production of iron, aluminium, metals, cement, lime, glass, ceramics, pulp, paper, cardboard, acids and bulk organic chemicals</li> <li>• Aviation</li> </ul> <p>As a part of the EU ETS review the European Commission proposed to include maritime shipping in the EU ETS as well as to establish a separate, parallel ETS for road transport and buildings.</p>
GHGs covered	CO <sub>2</sub> , N <sub>2</sub> O, PFCs
# of covered entities	About 11,000 installations
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	N/A
Use of offsets and linking	On 1 January 2020, the EU ETS linked to the Swiss ETS, meaning EUAs are fully fungible with CHUs. Otherwise, no international credits are eligible for EU ETS compliance since 2021.

Other features	<p>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.</p> <p>In 2019, the Market Stability Reserve (MSR) was established. Based on a pre-defined set of rules, it withholds a certain volume of auction allowances based on the Total Number of Allowances in Circulation.</p>
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	At least 50% of auctioning revenues or the equivalent in financial value of these revenues should be used by Member States for climate and energy related purposes. Up to 25% can be used by Member States for indirect costs compensation.

## MAJOR DEVELOPMENTS

In July 2021, the European Commission published the 'Fit For 55' legislative package laying out how the EU would achieve its increased climate target of least a 55% emissions reduction by 2030. The package contains numerous proposals, including:

- Review of the EU ETS:

The proposal for the EU ETS review contains a stricter LFR of 4.2% and a one-off cap rebasing. The rebasing would allow a retroactive adjustment of the cap to a level consistent with a situation in which an LFR of 4.2% had been in place from 2021. That would allow the EU ETS to deliver a 61% cut in emissions by 2030, compared to 2005 levels.

The Commission also proposes to add the maritime sector to the EU ETS. The proposal foresees covering the maritime sector with a 'semi-full scope', including all emissions from intra-EEA voyages, at berth in EEA ports, as well as 50% of emissions from incoming and outgoing voyages in between a port under EU jurisdiction and a port outside the EU. Maritime operators would have to surrender emission allowances accounting for 20% of their verified emissions in 2023, 45% in 2024, 70% in 2025, and 100% from 2026.

Furthermore, the Commission proposal includes the establishment of a separate, standalone ETS for road transport and buildings from 2026, with the compliance obligation on fuel suppliers. To alleviate Member States' concerns on the potential impact of the new ETS on the most vulnerable households and transport users, the Commission proposes to use 25% of auction revenues from the new ETS to create a Social Climate Fund.

The European Commission also proposes to oblige Member States to spend all of their ETS revenues on climate action.

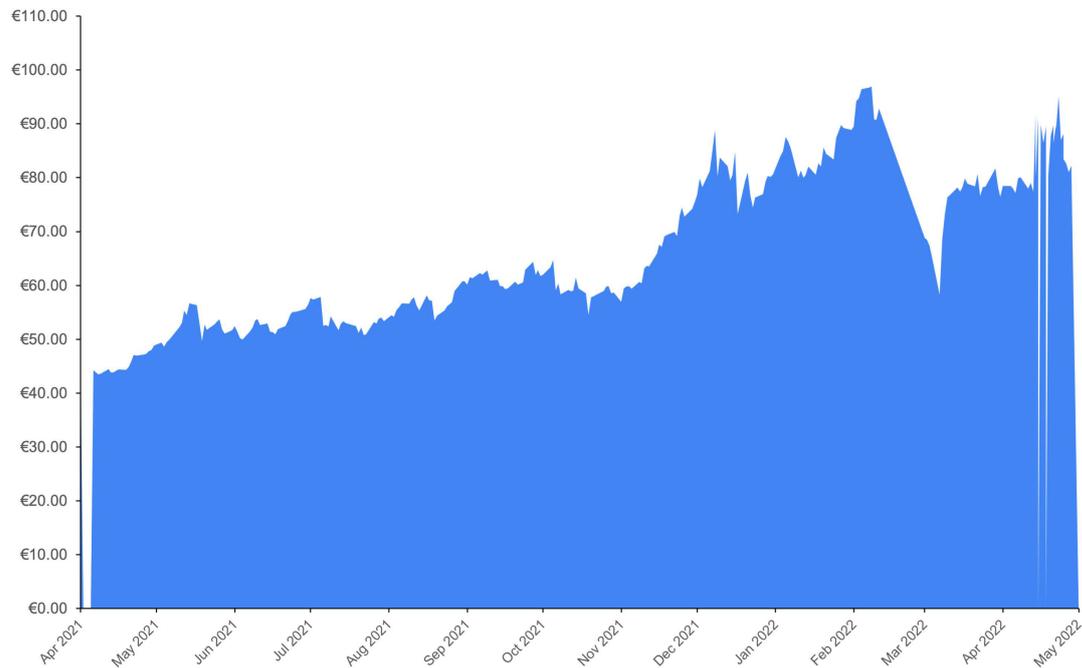
- The establishment of a Carbon Border Adjustment Mechanism (CBAM):

The proposed CBAM would cover direct emissions from industrial production of iron and steel, aluminium, cement and fertilizers as well as electricity. The introduction of the CBAM would enable the gradual phase out of free allocation for covered sectors by 2035. Industrial sectors at risk of carbon leakage that are not covered by the CBAM will continue receiving free allocations until at least 2030.

- The MSR review:

The Commission proposed to maintain an increased allowances intake rate of 24% by 2030, but to reduce intake when the Total Number of Allowances in Circulation is closer to the upper threshold level.

## MARKET COMMENTARY



**FIGURE 1**

Front-December EUA daily settlement and volume  
Source: ICE Futures Europe

Emissions under the EU ETS increased by 7.3% in 2021, the biggest ever annual increase, according to preliminary data from the European Commission in April 2022. The growth reflected the recovery in industrial output after the COVID-19 pandemic.

The European Commission highlighted that overall emissions in 2021 did not recover to pre-pandemic levels in 2021, with the aviation sector particularly hard-hit by travel restrictions.

EUA prices rose steadily through the first nine months of the year as the market continued to price carbon in order to maintain natural gas' competitive advantage over coal in power generation.

Prices advanced from €32.70 at the start of January to a peak of €65.77 in late September, before the steady increase in natural gas prices took the fuel beyond carbon's ability to maintain its position at the top of the electricity merit order.

Natural gas prices rose steadily throughout the year as European buyers worked to refill depleted storages after an extended winter 2020-21, and began to focus on delays to the completion of the Nord Stream 2 gas pipeline from Russia to Germany. Delays to the approval of the pipeline underpinned the gas price rally, before rising anxiety over potential interruptions to gas supply through Ukraine added to the market turmoil.

The carbon market had also experienced steady growth in speculative interest, with the number of active investment funds steadily increasing over the year. 2021 was also notable for the launch of a number of exchange-traded funds offering retail investors exposure to the price of EUAs and other carbon allowances.

As the last quarter of 2021 began, institutional and speculative traders came to the fore, driving the market to a record €90.75 in early December.

The December 2021 futures contract expired at €79.38, but prices for the incoming benchmark contract reached a peak of €98.49 in early February 2022. The invasion of Ukraine caused a widespread sell-off that saw prices plunge briefly to a low of €55.00 as traders sold EUAs to generate cash to support gas and power positions, but carbon rallied to nearly €90 by the end of April 2022.

The pre-existing positive correlation between carbon and natural gas prices was turned on its head as coal-fired power dominated electricity market economics. Instead, the rising price of natural gas triggered concerns that industrial companies might be forced to reduce operations or even suspend production, thereby cutting demand for EUAs.

## USEFUL LINKS

[ICAP ETS Map](#)

[European Commission](#)

[European Green Deal](#)

## AUTHORS

Julia Michalak  
Senior Advisor, EU Policy, IETA  
[michalak@ieta.org](mailto:michalak@ieta.org)

Alessandro Vitelli  
Communications Advisor, IETA  
[vitelli@ieta.org](mailto:vitelli@ieta.org)