Understanding the EU ETS: How the market works and what keeps it functioning

The EU ETS is not only a central pillar of climate policy, but also a mature, highly regulated market. The declining cap guarantees emissions reductions, whilst the market ensures that these reductions occur where abatement is most efficient across the European economy. Assessments from the European Commission and ESMA repeatedly confirm the market's well-functioning.

With this paper, the signatory sectors representing active stakeholders in the EU ETS market aim to explain how the market functions in order for companies to acquire allowances most efficiently and without bottlenecks. Liquidity, transparent price discovery, and multi-year hedging tools are structural prerequisites for companies to make investments towards achieving the EU climate target. These principles should be preserved during any review of the EU ETS regulatory framework.

1. THE ESSENTIALS OF MARKET FUNCTIONING

1.1 The architecture of primary and secondary markets

Companies with compliance obligations under the EU ETS must acquire allowances (EUAs) to cover their emissions, something they typically aim to do well in advance of the annual deadline. They acquire EUAs through free allocation, primary auctions, or secondary markets. Together, these form a seamless ecosystem that allows companies to plan their compliance and efficiently manage price changes.

Free allocation: Free allocation covers part of eligible installations' compliance needs, accounting for 43% of all allowances under the EU ETS cap. Depending on the amount received relative to emissions, entities may need to buy additional allowances or have a surplus to sell.

Primary auctions: 57% of all allowances under the EU ETS cap are first sold to the market via auctions on behalf of the Member States and European Commission.

- **Daily allocation**: Every day, approx. 2.7 million EUAs are auctioned, establishing a transparent price signal while generating revenues for dedicated national and EU budgets.
- **Strict oversight**: Auctions are regulated by the Auctioning Regulation, which for example determines who is allowed to participate. As detailed further below, in addition to bespoke regulations, also the EU financial services framework applies.
- **Robust participation**: Daily auctions see between 15 and 32 bidders, from ~120 admitted companies. Eligible firms are companies with compliance obligations under the ETS, as well as banks and other intermediaries. Also other obligations such as being EU-based apply. This diversity ensures solid price formation and consistently healthy cover ratios where demand always exceeds supply and prices are formed efficiently.

Secondary markets: Companies can buy or sell EUAs continuously as their needs evolve.

- **Real-time flexibility**: Companies trade in response to changed production, emissions or weather conditions, or in response to regulatory changes. They can do so at any time,

either on the spot (EUA delivery within days) or through futures (price and quantity are locked in today for EUA delivery in a few months, or up to 7 years ahead).

- **Investment certainty**: Most trading in the secondary market takes place through derivative contracts such as futures, which are primarily traded on regulated exchanges. This lets companies manage their carbon costs in advance and invest with more confidence. In 2025, more than 13.8 billion EUAs were traded in 4.4 million transactions.
- **Deep liquidity**: The secondary market features a wide diversity of participants. This helps ensure that companies can always find a counterparty to trade with, when they need to, and at a transparent price.
- **Banking**: Banking allows allowances to be carried over between ETS compliance phases. This enables companies to account for expectations of future EUA supply and demand in their trading and investment decisions and contributes to price formation across time.
- **Strict oversight:** Just as the auctions, secondary markets fall under the EU's financial market regulatory framework.

Whether companies participate in auctions, secondary markets or use service providers to acquire EUAs, depends on their internal strategies and abilities.

1.2 A diverse ecosystem of market participants

An efficient EU ETS relies on a diverse ecosystem of market participants across auctions and secondary markets. Compliance firms all have to buy allowances within a similar timeframe and try to mitigate similar risks e.g. an increasing carbon price. They therefore rely on counterparties who are willing to take the opposite side of the transaction and the associated risk. These may be other compliance companies or financial intermediaries such as banks or investment firms. Above all, diversity of traders benefits compliance entities as they can manage price risks when they want, face lower costs and benefit from lower price volatility.

A mix of compliance companies and intermediaries participate in the primary and secondary markets:

- **Companies covered by the EU ETS ('compliance entities')**: So far in 2026, typically, 50%-65% of allowances sold in the auctions are bought by companies with a relatively large compliance obligation, such as energy utilities. They also buy allowances in advance on the secondary market for hedging purposes, to manage their annual compliance needs and the risk or expectation that prices rise over time. Smaller compliance firms often do not have the trading staff or funds to participate directly in either market, so they use banks or other firms to do so on their behalf.
- **Banks and other intermediaries**: Financial firms are essential counterparties in EUA markets, acting as both buyers and sellers, thereby supporting liquidity and efficient price discovery. Concretely, banks and other intermediaries such as investment firms may buy EUAs at the auctions for their clients, hold them on their own balance sheets and/or resell them on the secondary market in the form of derivatives (futures or forwards). A key practice is "carbon financing" where financial firms buy EUAs at auction and sell futures contracts to compliance firms for delivery at a later date. They thereby fill the gap of missing sellers in this market and increase the number of buyers in the auctions, while preventing supply from being concentrated among fewer companies. In addition, as the

final financial transaction takes place at that later date, this also frees up capital of compliance firms for decarbonisation investments while still being able to hedge their carbon costs.

› **Investment funds**: Funds support secondary market liquidity by acting flexibly as both buyers and sellers depending on market needs. Their net positions account for less than 10% of all positions in the carbon market.

This largely reflects a service relationship between the compliance companies and financial firms, rather than competition for the same supply. ESMA confirms this in its 2026 Report: "*Financial intermediaries are central to the functioning of the EU carbon market. They provide liquidity, act as counterparties to non-financial firms, and help compliance entities access allowances and manage price risk*."

1.3 A predictable and transparent supply

Allowance supply is strictly defined by the EU ETS Directive through the emissions cap, the Linear Reduction Factor (LRF), the Market Stability Reserve (MSR), and free allocation rules. Their predictability supports investment certainty and avoids undue volatility. Ad-hoc interventions outside of these parameters undermine this certainty away and put investments at risk.

1.4 A transparent and freely formed carbon price

Since the start of the system, the EU ETS has retained its nature as a **volume-based cap and trade system with free price formation**. Together with the above-mentioned predictability of volumes, this price incentivises emissions abatement at the lowest marginal cost across sectors and borders.

Overt time, the price reflects supply-demand fundamentals based on long-term climate trajectories, policy rules, and industrial abatement costs. Critically, the price responds flexibly to external factors such as energy prices, economic developments or regulatory changes. This approach is the basis for the liquidity of the market, providing certainty for participants that they can rely on these transparent price signals for their own investment plans. Over the past years, the carbon price has remained relatively stable, notably compared to energy prices. Significant short-term price movements have largely been driven by external shocks and political developments affecting expectations about the future of the system, not by deficiencies in market functioning. Preserving a credibly price signal is above all a matter of regulatory predictability; clear and stable rules allow investors to look beyond short-term fluctuations.

1.5 A thoroughly regulated ecosystem

The EU ETS markets are subject to a robust, multi-layered, regulatory framework, including for its financial aspects, which was tightened during the last EU ETS review. In addition to the ETS Directive and Market Stability Reserve Decision, the following rules apply:

› **Regulation & Supervision**: Since 2018, EUAs and their derivatives are classified as financial instruments under MiFID II. This means that trading on both the primary and secondary market is strictly governed by EU financial services regulation including, i.a. MiFID II/MiFIR, the Market Abuse Regulation, EMIR, the Anti-Money Laundering Directive,

the Settlement Finality Directive and DORA. These set requirements for how exchanges operate (including position management controls), prohibit market manipulation and insider trading, mandate daily reporting to supervisory authorities and impose further rules related to anti-money laundering and digital resilience.

- **ESMA monitoring**: Since 2022, ESMA has a mandate to monitor the integrity and transparency of the carbon market, on which it reports yearly. These reports have repeatedly highlighted that ESMA's analysis has unearthed no major abnormality, systemic misconduct, or manipulative behaviour in the EU ETS markets.

2. PRESERVING MARKET FUNCTIONING DURING THE EU ETS REVIEW

These foundational principles of market functioning must guide any review of the EU ETS regulatory framework. Ad hoc- intervention and regulatory threats risk to increase price volatility, inject unnecessary risk premiums into bills and deter low-carbon investments – something Europe cannot afford right now. The following aspects are especially at stake during the current review process:

- **Open market access**: Preserving broad and diverse participation in auctions and secondary markets is a core pillar of the EU ETS. Whether compliance companies participate in auctions, secondary markets or use service providers to acquire EUAs, depends on their internal strategies and abilities. Many of them rely on financial intermediaries to buy allowances and manage their price risks. This ecosystem supports liquidity and price formation and as such the efficiency of decarbonisation efforts.
- **Supply predictability**: A stable market and predictability that supports long-term investments depend on knowing how supply will develop. This rests mainly on the trajectory of the LRF and the rules governing the MSR without ad-hoc interventions.
- **Freely formed carbon price**: The EU ETS' volume-based design requires restraint in the design of, for example, Article 29a, as well as the avoidance of distortive measures such as transaction levies. Article 29a should remain an rules-based exceptional measure in case of excessive price movements, rather than a tool for regular price-based intervention or a de facto price corridor that would ultimately harm trust in the system. Other tools, such as the MSR, are designed to support market stability in the long-term in a way compatible with the EU ETS design.
- **Scope and linking**: A larger scope of economic activities covered by the EU ETS benefits the market as a whole as diversity of participation increases and the most cost-efficient decarbonisation options can be spread more broadly. This is equally true for linking ETSs.
- **Evidence-based regulation**: Policy decisions should rely on the findings of supervisory analysis such as ESMA's annual report.

Referenced sources and further reading:

- The latest version of ESMA's annual carbon market can be found here and details especially how secondary markets function based on financial regulatory data: link
- The latest version of the European Commission's carbon market report including an assessment on market functioning can be found here: link
- Auction volumes can differ according to, for example, holiday periods or other reasons. Calendars are available here: link
- References to mentioned laws: MiFID II 2014/65/EU (link), Market Abuse Regulation (596/2014) (link), Auctioning Regulation 2023/2830 (link), ETS Directive 2003/87/EC (link), EMIR 648/2012 (link), DORA 2022/2554 (link), Settlement Finality Directive (link), Anti-Money Laundering Directive (link)
- The 2023 report on Participation in EU ETS markets commissioned by DG CLIMA details that the system works well in terms of access to allowances. Compliance entities use attractive arrangements by financial intermediaries to acquire EUAs: link

Figure 1 Distribution of volumes bought per category in the auctions across April 2024-June 2026. Source: European Commission quarterly report on Auctions by the Common Auction Platform (link).

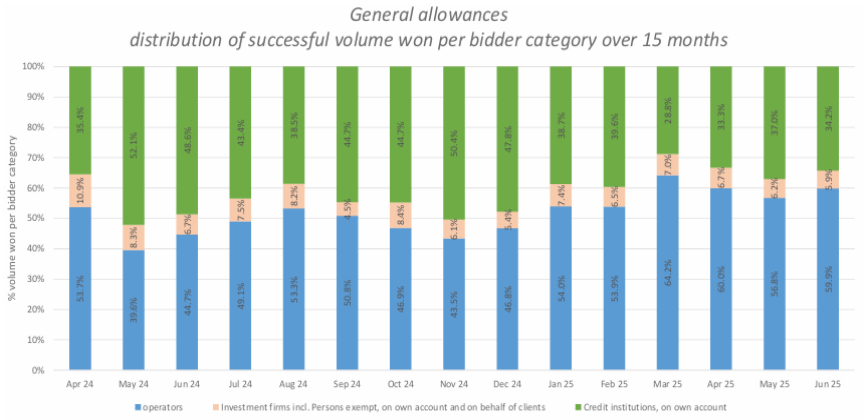
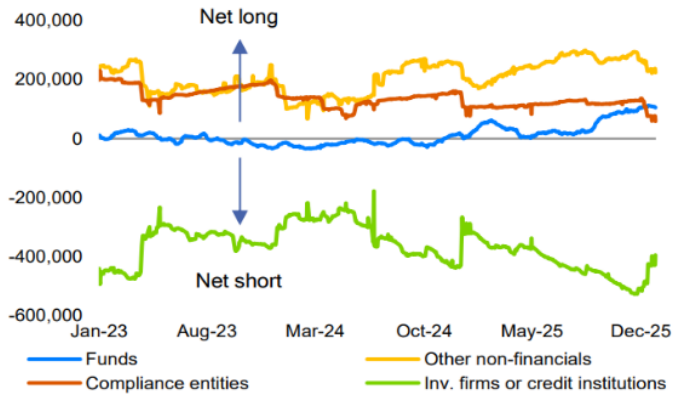


Figure 2 Net derivative positions by category, showing the complementary roles of (non-) compliance companies in the secondary markets. Source: ESMA 2026 EU Carbon Market Report (link).



Note: Number of net positions in EUA derivatives held by counterparty sector, in lots (1,000 allowances).
Sources: ICE Endex, EEX, Nasdaq Oslo, ESMA.