P − Energy Research Strategy

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Design of ETS2 fuels its own political uncertainty

The first trade in ETS2 allowances took place on Tuesday, May 6, 2025. The futures contract for delivery in December 2028 is tradable via ICE. The contract is trading at around EUR 78 per ton. Market liquidity is currently limited, but it is expected to increase as the system's implementation in 2027 approaches.

The ETS2 market is influenced by several distinctive factors. Unlike the regular EU ETS, no free allowances are allocated. In addition, the emissions cap declines relatively quickly. Moreover, demand for ETS2 products is relatively inelastic with respect to price changes. These factors are expected to result in a tight market and contribute to upward pressure on prices.

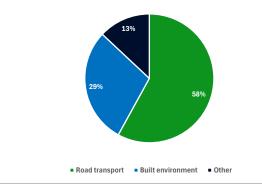
At the same time, the European Commission has introduced a mechanism intended to counteract excessive price increases. This "soft price cap" includes three scenarios under which additional allowances are released into the market. However, market participants may anticipate these predefined scenarios, potentially creating technical resistance levels around the corresponding price points. As a result, the effectiveness of the soft price cap could be undermined.

Finally, the Social Climate Fund is intended to reduce the burden for financially vulnerable groups. The fund acts as a buffer against potentially significant increases in household energy bills and gasoline and diesel prices. The key question is whether policymakers can design the system in such a way that it offers sufficient reassurance to the public.

Emissions trading for road transport and the built environment

Since its introduction in 2005, the EU ETS has provided a cap-and-trade system for emissions from large-scale industry and the energy sector (centralized heat and power) within the EU¹. Starting in 2027, a separate emissions trading system will come into effect, covering emissions from buildings, road transport, and small-scale industry. This new system is referred to as ETS2 and will operate independently from the existing EU ETS.

Share of emissions within ETS2



Source: Clearblue Markets

The majority of emissions covered under ETS2—58%—will come from road transport. Next are emissions from the built environment, accounting for 29% of the total. These are primarily emissions related to space heating in buildings, as the power sector is already covered under the EU ETS. Finally, the "other" category makes up 13% of ETS2 emissions, mainly originating from small-scale

¹ Emissions from parts of the aviation and maritime sectors are also covered by the EU ETS, but they represent a relatively small share.



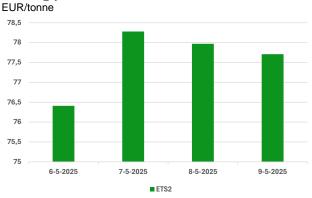
industrial activities. Member States also have the option to include additional sectors under ETS2. For example, the Netherlands has chosen to include greenhouse horticulture within the scope of ETS2.

ETS2 will launch in 2027, meaning that from that year onward, an emissions cap will apply to the relevant sectors. The cap for 2030 will correspond to a 42% reduction in emissions compared to 2005 levels. To achieve this goal, the supply of ETS2 allowances will decline annually by 5.38%.

Unlike the EU ETS, ETS2 will not include free allocation of allowances. Companies subject to ETS2 will be required to fully offset their emissions with allowances starting in 2027. In practice, the obligation to comply lies with the energy suppliers. In the transport sector, this refers to fuel suppliers, while in the built environment, it pertains to heat suppliers. The cost of ETS2 allowances will be passed on to end users, leading to higher prices at the pump and increased energy bills for consumers.

A tight market could lie ahead

A variety of ETS2 allowances can be traded, differing in terms of delivery dates. The contract with the earliest expiration is the December 2028 contract. Auctions for ETS2 allowances will not begin until 2027. Price discovery for ETS2 allowances first took place on May 6 on the ICE Futures trading platform². On this inaugural trading day, only a limited number of lots (the standard trading unit of 1,000 ETS2 allowances) for the Dec28 contract changed hands. The closing price was EUR 76.41.



Closing price ETS2

Source: ICE Endex

This first instance of ETS2 price discovery comes more than a year and a half before the system officially goes into effect. The early start allows market participants to respond to price trends and expectations. Energy suppliers, for example, can use this price information to estimate the future costs they may need to pass on in long-term contracts.

The supply of allowances is primarily determined by the emissions cap. The European Commission (EC) has set the cap for 2027 at just over one billion ETS2 allowances³. To anticipate potential market tightness at the outset of ETS2, the EC has also decided to "frontload" allowances. This means that more allowances will be auctioned early on to prevent excessively high prices at the beginning of trading. Allowances that would otherwise be auctioned between 2029 and 2031—according to the emissions cap—will instead be brought forward and auctioned in 2027. This frontloading accounts for 30% of the 2027 emissions cap.

² The Intercontinental Exchange (ICE) is a global exchange operator that facilitates marketplaces for, among other things, energy products, commodities, and financial derivatives.

³ A total of 1,036,288,784 ETS2 allowances.



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The futures market has opened before the actual auctioning of ETS2 allowances has begun. This means that futures can be traded in the absence of any physical ETS2 allowances. As a result, the market is displaying a unique dynamic, further influenced by the fact that no free allowances will be distributed. Parties currently selling ETS2 allowances are essentially taking on a liability; these allowances won't become available until 2027, via auctions. In this sense, selling ETS2 futures today is effectively a short position-a bet on falling prices.

At the same time, many market participants already consider the ETS2 market to be tight. This is due to the relatively steep linear reduction factor, the lack of free allowances, and the low price elasticity of demand. These factors all contribute to potential upward pressure on prices. Moreover, most EU member states currently have limited policies in place to reduce demand for emissions in road transport and the built environment. This combination of factors is expected to dampen the willingness to sell ETS2 allowances in the near term. As a result, market liquidity is likely to remain limited for the time being.

Inelastic nature ETS2 products pose a price risk

An important factor in the price development of ETS2 allowances is the price elasticity of demand. Price elasticity of demand refers to the degree to which demand for a good changes in response to a change in price. A distinction is made between elastic goods and inelastic goods. The former refers to goods for which demand changes significantly when prices rise or fall. In contrast, demand for inelastic goods changes only marginally in response to price fluctuations.

The products covered under ETS2 are generally relatively inelastic. Emissions from road transport and the built environment together account for nearly 90% of the total. This primarily involves the supply of gasoline, diesel, and heat. These products fulfill basic needs-namely, transportation and housing. As a result, high ETS2 prices are unlikely to lead to a significant short-term drop in demand.

However, higher ETS2 prices can indirectly create incentives for cost-effective alternatives. As ETS2 prices increase, sustainable alternatives become more financially attractive. For example, as gasoline becomes more expensive, alternatives such as electric vehicles become relatively cheaper in terms of operating costs. The level of the ETS2 price is a key factor in determining the cost comparison between fossil-based and sustainable options. That cost comparison, in turn, plays an important role in consumers' willingness to invest in the sustainable alternative.

Soft price cap should provide downward price pressure

The EU ETS includes a Market Stability Reserve (MSR), designed to help stabilize ETS prices over the long term. This mechanism adjusts the supply of allowances by either increasing or reducing it, based on the total number of allowances circulating in the market. ETS2, however, does not use a Market Stability Reserve. Instead, it features a mechanism that can be described as a soft price cap. This soft price cap introduces additional allowances into the market when certain price conditions are met. The European Commission has outlined three specific scenarios in which ETS2 allowances will be released:

- 1. 20 million allowances are added to the market when the average ETS2 price over two consecutive months exceeds EUR 55/ton.4
- 50 million allowances are added when, over more than three consecutive months, the average ETS2 price is more than twice the average price of the previous six months. For the years 2027 and 2028, the threshold is set at 1.5 times the previous average.

⁴ This is a price of EUR 45/ton based on the "European index for consumer prices for 2020. This corresponds to sun EUR 55 -60/ton in 2025. Moreover, these are auction prices, with which the system is only active from 2027.



3. 150 million allowances are added when the average ETS2 price exceeds three times the average price of the previous six months.

These measures are referred to as a soft price cap because they potentially expand supply in response to upward price movements. This increase in supply can in turn exert downward pressure on prices—though the additional supply, particularly under the first two scenarios, is relatively modest.

A greater potential risk lies in the fact that the largest volumes of allowances (in scenarios 2 and 3) are triggered by rapid price increases, rather than by high absolute price levels. In other words, sharp price spikes prompt intervention, but sustained high prices do not.

This raises the question of whether the functioning of the soft price cap truly reflects the political intentions behind its implementation. Policymakers tend to be sensitive to both high consumer prices and sharp price increases. However, the soft price cap primarily addresses price volatility rather than price levels. If prices remain high but relatively stable, the mechanism will not be triggered. Moreover, market dynamics driven by this mechanism could increasingly diverge from the policy goals it was meant to serve.

... but market forces may prevent that

The soft price cap does not only create the potential for increased supply and the resulting downward pressure on prices—it also introduces a kind of psychological overhang in the market. The mere prospect of additional allowances being released can establish technical support or resistance levels, depending on how speculative market participants are positioned. If the market is positioned net long, the soft price cap mechanism may create technical resistance levels. This resistance can prevent prices from rising fast enough to actually trigger the supply thresholds outlined in scenarios 2 and 3. As a result, there is a risk that ETS2 prices will continue to rise over time—without ever activating those scenarios.

Market participants in the ETS2 system are, after all, enables to be aware of how specific price movements can lead to supply increases. This knowledge can influence their behavior. When prices approach those critical levels that would trigger additional supply, traders may take offsetting positions to hedge their exposure. In such cases, downward price pressure caused by expected additional supply is viewed as a risk to their investment strategies. As prices approach the trigger levels, a logical hedging strategy would be either to close long positions or to open short positions—both of which contribute to downward price pressure.

The question is to what extent this potential market reaction will actually materialize, and whether it will gain enough traction among the parties who stand to benefit from it. Market participants—especially speculative investors—tend to operate with relatively short time horizons. In contrast, the soft price cap mechanism is based on longer-term price trends. Still, the fact remains—and it presents a real risk to elevated ETS2 prices—that market participants can act on this information.

Social Climate Fund should help build support for ETS2

A portion of the revenues from ETS2, along with the proceeds from 50 million allowances under the EU ETS, will be used to finance the Social Climate Fund (SCF). The SCF was established concurrently with ETS2 under Regulation (EU) 2023/955⁵, with the goal of shielding the most vulnerable groups from bearing the brunt of the associated costs. For the period from 2026 to 2032, the total budget allocated to the SCF amounts to EUR 65 billion, with annual caps on disbursements.

In principle, up to 150 million ETS2 allowances will be auctioned to fund the SCF through 2032. Additional allowances may be auctioned to ultimately reach the maximum EUR 65 billion fund size.

⁵ <u>https://eur-lex.europa.eu/eli/dir/2003/87/oj/eng</u>



Revenues from the remaining auctioned allowances will flow directly to the Member States. This is expected to amount to roughly 75% of total auction proceeds⁶. While Member States retain discretion over how these funds are spent, they are required to prioritize activities that address the social impact of ETS2.⁷

The Dutch government has indicated that most of the revenues will be directed toward the general budget. According to the government, this is necessary due to the separation between income and expenditure in the national budget framework. However, it is also true that the European directive underpinning ETS2 obliges the Netherlands to use auction revenues to support climate policy.

Funds from the SCF can be used for direct income support—for example, by compensating households through energy subsidies or tax relief. The fund can also be used for structural investments, such as decarbonizing the built environment or promoting sustainable transportation. At least 37.5% of each Member State's allocation must be spent on structural investments.

The functioning of the SCF is crucial to ensuring public support for ETS2. A significant share of ETS2related costs will fall on people who lack the financial means to invest in sustainability. These costs can be (partly) avoided by switching to electric vehicles, improving home insulation, or installing a heat pump. But the segment of the population unable to afford such investments will bear a disproportionate share of the burden. The SCF is designed to mitigate this imbalance—making the equitable distribution of the fund essential.

ETS2 remains a financial and political uncertainty

The initial price formation of ETS2 presents both opportunities and risks for market participants. While the market appears to be tight from a fundamentals perspective, the European Commission has introduced a soft price cap mechanism that could help temper upward price pressure. However, there is a risk that this mechanism, shaped in part by market dynamics, may overshoot its intended purpose.

The soft price cap is meant to serve a political objective: curbing excessive prices. In principle, embedding such a mechanism should help safeguard political expectations around price development. Yet, it remains to be seen whether this is achievable, given the inherent risks of the mechanism itself. Moreover, ETS2 will inevitably drive up energy costs for consumers. In today's political climate— where populist sentiment is gaining ground—that's fuel on the fire.

With only a year and a half to go before ETS2 takes effect—and with little political attention currently focused on the system—there is limited momentum for timely reforms. The absence of early adjustments may bolster confidence in the system's stability, but it also feeds skepticism about its long-term resilience under future political pressure.

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⁶ https://zoek.officielebekendmakingen.nl/kst-36407-A.odt

⁷ Page 94: <u>https://eur-lex.europa.eu/eli/dir/2003/87/oj/eng</u>



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