

Future role of the EU ETS in achieving Europe's decarbonisation targets

EFET Discussion Paper

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Since 2005, the European Emissions Trading System (EU ETS) has been the cornerstone of Europe's climate policy and a key tool for cost-effective greenhouse gas (GHG) emissions reduction. Covering some 45% of the EU's emissions from the power sector, industry, and aviation (flights within the European Economic Area), the EU ETS is currently the world's largest emissions trading market. It accounts for over three-quarters of international carbon trading and it constitutes one of the most mature carbon markets globally.

Following the revision of the EU ETS Directive, substantial progress has been achieved in strengthening the price signal for CO₂ in Europe. The latest Commission report on the functioning of the European carbon market indicates a substantial decrease in emissions from the EU ETS-covered installations in 2018 (4.1% compared to 2017).¹ This dynamic is also confirmed by the recent analyses showing that in 2019 power emissions decreased by some 13,9%, industrial heat by 5% and industrial emissions by 1,8%.²

Successful implementation of the EU ETS reforms designed to tackle the surplus of allowances has also already brought tangible results. More specifically, some 30% fewer allowances were auctioned in 2019 compared to 2018. The Market Stability Reserve (MSR) surplus indicator published for the third time last year, together with the 2017 indicator, led to a reduction in auction volumes by nearly 40% (or some 397 million allowances) in 2019.³

Strengthening and expanding the EU ETS: new challenges and opportunities

Substantial progress has been achieved in improving the design and the functionality of the European carbon market over the past three years. However, today it is clear that the EU ETS framework will have to be strengthened and reformed in order to be able to deliver on Europe's increased climate ambition, to maintain resilience in the face of the coronavirus-induced economic crisis and to contribute to Europe's green recovery.

¹ Report on the functioning of the European carbon market, COM (2019) 557 final/2, 2020

² 2020 State of the EU ETS Report, ERCST, Wegener Center, BloombergNEF and Ecoact, 2020

³ Ibid.

1. EU ETS and the European Green Deal

The European Green Deal (EGD) set in motion the revision of Europe's 2030 targets and mandated the preparation of a Climate Law proposal aiming to enshrine Europe's climate neutrality objective in EU law. It also proposes the assessment of a possible expansion of the EU ETS to buildings, road and maritime transport, and to reducing the EUAs allocated for free to airlines.

1.1. The Climate Law proposal and the inception impact assessment for an EU 2030 Climate Plan

The objective of the EU Climate Law proposal defined in the EC legislative financial statement is described as “**climate neutrality achieved through a well-functioning EU carbon market** and a fair operating framework for EU MS to reduce emissions in other sectors.”⁴

The key role of a credible, harmonised EU-wide carbon pricing scheme as the long-term driver for decarbonisation across the economy is recognised in the Frontier study. In the short term the challenge remains to strengthen the ETS within the existing scope of installations to which it applies. In the medium to long term, there is an opportunity to turn it into a wider scheme, to bring a carbon abatement price signal to bear in relation to other end uses of hydrocarbons. Indeed, strengthening of the EU ETS, followed by reform and expansion, could eventually result in consistency of carbon pricing across most sectors of the European economy.

A credible, expanded and reformed EU ETS should therefore be featured as a crucial climate policy instrument in the 2030 Climate Plan, in order to help achieving Europe's increased 2030 climate ambition, as well as the 2050 climate neutrality target.

We recognise that in the short to medium term some Member States may want to introduce national carbon abatement measures in addition to the EU ETS. The same or their national governments may decide on progressive prohibitions on the use of hydrocarbon fuels in certain end uses. Such initiatives will create a risk of inconsistencies between national schemes or measures on the one hand and the auctions and allocation mechanisms involved under the EU ETS on the other. and distort wholesale energy price signals. To help preserve the integrity of the EU ETS, modelling of variable prices signals emerging from national measures will be needed. The European Commission could then intervene by setting **pathways for greater harmonisation between national carbon abatement schemes and their eventual merging with an expanded EU ETS.**

We fully support the Commission's intention set out in the IIA to come with a proposal on how to expand emissions trading to the shipping sector, building on the existing regulation on monitoring reporting and verification of shipping emissions. We would

⁴ European Commission proposal for a Regulation of the European Parliament and of the Council establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Law), Legislative Financial Statement, p.13

also welcome an analysis of pathways towards expanding the ETS to buildings and road transport, in line with the EGD.

It is worth noting that some Member States are already working on extending carbon pricing to sectors not yet covered by the EU ETS and on fuel usage bans in particular applications. In this context, the development of a German national emissions trading scheme for the transport and heating sectors is an interesting example.⁵ A clear pathway for integration of such schemes introduced at national level into the EU ETS is necessary.

1.2. EU ETS and energy system integration

The Commission has recently announced the development of a future strategy for energy system integration.⁶ This strategy is aimed at strengthening links between electricity and gas systems and energy end-use sectors across the EU economy, and it is positioned as one of the means of achieving Europe's climate targets in a cost-effective way.

A credible, expanded EU ETS has a key role to play in gradually facilitating energy system integration and encouraging uptake of least cost emission reduction technologies and solutions (to the extent that the supply of EUAs tightens and the demand for them spreads into further end uses of hydrocarbon fuels).

While ultimately unlikely to be as efficient as a long-term credible carbon price, market-based support mechanisms for new technologies, such as low-carbon gas production, may constitute an interim solution.

We recognise that support schemes for new or non-mature decarbonisation technologies and services may be necessary at the outset. At the same time, we strongly believe that the design of support mechanisms must draw on learnings from the past experience of RES-E support schemes.

This means that **any support schemes** for technologies facilitating decarbonisation and energy system integration **must be strictly market-based, technology-neutral, non-distortive, and open across EU borders, harmonised between countries as early as possible and aligned with the EU ETS.**

Creating market led decarbonisation incentives and a "common currency" for carbon abatement attributes aligned with the EU ETS

In the drive to integration of power and gas systems with decarbonisation in mind, it will be increasingly important to distinguish between the carbon footprints of various energy sources. For the purpose of the EU ETS molecules and electrons qualifying as

⁵ German law establishing the National Emissions Trading System for Fuel Emissions, available at the following link: <http://dipbt.bundestag.de/dip21/btd/19/147/1914746.pdf>

⁶ Please see our response to the Commission's consultation on a future energy system integration strategy at the following link: https://efet.org/Files/Documents/Internal%20Energy%20Market/Energy%20System%20Integration/EFET_recommendations%20for%20a%20future%20EU%20strategy%20on%20energy%20system%20integration.pdf

“renewable” under RED II are already deemed to be exempt from a requirement to obtain or purchase EUAs, even if carbon emissions are involved in their production. In many countries certain renewable sources additionally attract financial support. But what of low carbon sources not deemed to be renewable? Short of giving energy produced from them an advantage through expansion of the ETS into new end use sectors, there are two main market-based methods to bring them a benefit:

- A) The establishment of a **voluntary market in low carbon certificates**, whereby customers, in addition to or in parallel with buying energy, purchase a certificate from a supplier which guarantees derivation from a zero or low carbon production source;
- B) The introduction at EU level or by national governments of targets for carbon abatement in sectors outside the EU ETS currently, pursuant to which they then require suppliers of energy to meet **low carbon quotas** and set up a **certification scheme** for the fulfilment of those quotas.

In either case, a standard methodology to ascertain and certify the carbon footprint would be needed. In a fairly simple scheme applying to hydrocarbon fuels, including gases, the actual carbon intensity of the fuel would be the measurement criterion. In a more complex evolution, consumers might want to obtain information about the full carbon footprint of a chosen energy production source, whether the energy carrier is electrical, liquid or gaseous (i.e. including carbon emissions involved in antecedent equipment manufacture, in a facility construction phase, and in fuel transportation.) Then schemes would provide for tradable certificates to evidence “carbon intensity”, based on lifecycle analysis and overall sustainability information.

Certainly, for relatively simple certification schemes, whether voluntary, or regulated based on fulfilment of quotas, the industry and/ or regulator would have to develop a kind of “**common currency**” of carbon content. It would help determine the extent to which different gases as energy carriers, for example, should be rewarded or not under the scheme, according to their respective carbon intensity as primary fuels. This common currency could (together with the respective market-based support mechanisms) eventually **be extended to electricity and other energy carriers**, becoming one of the enablers for energy system integration.

With careful planning the design of such a **common currency could be aligned with the operation of the EU ETS**, in order to avoid double counting the deemed “green value” of the certified sources, especially in end use sectors not currently covered by EUAs such as heating and transport.

2. EU ETS revision and the 2021 MSR review

The EU ETS review announced in the EGD, as well as the 2021 review of the MSR would have to ensure that the EU ETS design is ‘fit for purpose’ to help delivering on Europe’s climate ambition, address the consequences of the coronavirus-induced economic crisis and contribute to Europe’s green recovery objectives. Apart from that, the upcoming reforms would need to factor in the potential consequences of Brexit and a possible establishment of a UK ETS linked to the EU ETS.

It must be ensured that **the design of the expanded and reformed EU ETS is in line with Europe's 2030 climate targets and the 2050 climate neutrality objective.** This would entail a revision of the EU ETS cap and the establishment of a timeline for progressive adjustment of the MSR intake rate and the LRF.

The upcoming MSR review would have to address the sharp increase of the EUA surplus driven by the economic downturn caused by the Covid-19 pandemic, as well as the impacts of the overlapping energy and climate policies on the carbon market (i.e. the uptake of renewables and energy efficiency measures, as well as coal phase out in Germany).

This means that in Phase 4, the MSR would have to deal with the both the historical surplus of the EUAs and to absorb the lost demand (2019 alone saw an 8.9% drop in CO2 emissions).

3. Auctioning revenues: a source of financing climate action and a means of facilitating a just transition

While the EU ETS Directive allows the Member States to determine how their respective shares of the auctioning revenues are used, it also encourages them to ensure that at least half of their auctioning revenues is allocated to climate and energy related initiatives. In 2018 alone, a strengthened carbon price signal in the European carbon market led to a record amount of revenues of some EUR 14 billion from the auctioning of allowances for Member States.⁷ Member States spent or planned to spend close to 70% of these revenues on climate and energy related initiatives over the course of the year.⁸ In the period 2013-2018, about 80% of auction revenues were spent on such purposes.⁹ It is also worth noting that in Phase 2 (2021-2030) the NER300 fund established under the EU ETS to facilitate the uptake of innovative low carbon solutions will be succeeded by the Innovation Fund.

The Innovation Fund is designed to become a key funding instrument for delivering Europe's economy-wide commitments under the Paris Agreement and supporting Europe's transition to a climate neutral economy by 2050.

Moreover, the revenues from the EU ETS auctions will also be used to support low-carbon investments in the energy systems of ten lower-income EU MS,¹⁰ through the Modernisation Fund established under the revised EU ETS Directive.

The existing revenue streams fueling the Innovation Fund and the Modernisation Fund could be expanded with the potential expansion of the EU ETS to road and maritime

⁷ European Commission, Report on the functioning of the European carbon market, COM (2019) 557 final/2, 2020

⁸ Ibid.

⁹ Ibid.

¹⁰ These Member States are Bulgaria, Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia.

transport, as well as buildings. This would allow boosting the financing of clean energy innovation in the respective sectors.

4. The EU ETS and the global carbon market

In the absence of schemes equivalent to the ETS elsewhere in the world, or ideally a global carbon price signal, measures taken within Europe can distort international trade, especially in the products of energy intensive industries.

Extension of carbon trading both within Europe and internationally constitutes the most efficient solution to address carbon leakage and to reduce global CO₂ emissions cost-effectively.

With this in mind, we support the Commission's continued international engagement and collaboration initiatives on carbon trading, including with California, China, and New Zealand.

We also welcome and support the work carried out at international level on Article 6 of the Paris Agreement, which provides for the use of international carbon markets for achieving the emissions reduction targets set by the Parties. An important prerequisite for ensuring the transparency and environmental integrity of international carbon markets would be the establishment of a framework for robust common accounting rules and offset mechanisms under Article 6, a topic addressed at the last COP25 meeting and to be discussed further in the framework of COP26.

EU ETS and CORSIA

The resolution (Resolution 17/1) of the International Civil Aviation Organization (ICAO) on international offsetting scheme for aviation emissions (CORSIA) the international offsetting scheme for aviation emissions (CORSIA) poses questions regarding the functioning of the scheme alongside the EU ETS.

More specifically, paragraph 18 of Resolution 17/1 includes an exclusivity clause, which positions CORSIA as "the only global market-based measure applying to CO₂ emissions from international aviation so as to avoid a possible patchwork of duplicative state or regional market-based measures, thus ensuring that international aviation CO₂ emissions should be accounted for only once."

We welcome the Commission's initiative to assess the alignment between the EU ETS and CORSIA and how the two system are expected to function alongside each other.

Recommendations

Over the last fifteen years the European carbon market has evolved into the largest and one of the most mature carbon markets in the world. The revision of the EU ETS has already brought tangible results and improved the functionality of the carbon market in Europe. At the same time, we recognise that further reforms are necessary in order to allow the EU ETS to help delivering Europe's ambitious climate targets in a cost-effective way.

Our policy recommendations aimed at improving the design and the functionality of the EU ETS both in short to medium term, as well as in the long term, are as follows:

1. Recognise a **credible, expanded EU ETS as a crucial instrument to facilitate decarbonisation of Europe's economy and energy system integration across the relevant policy frameworks that are currently being developed** (notably, the European Climate Law, the 2030 Climate Plan and a future energy system integration strategy).
2. **Expand the EU ETS** to maritime and road transport, buildings sector and the sectors currently covered by the Effort Sharing Regulation. At the same time, it must be ensured that the **integrity and the functionality** of the European carbon market is **strengthened** with the expansion.
3. Ensure that **the design of the (expanded) EU ETS is in line with Europe's (revised) 2030 climate targets and the 2050 climate neutrality objective**. This would entail a revision of the EU ETS cap and the establishment of a timeline for progressive adjustment of the MSR intake rate and the LRF.
4. Improve **coherence and alignment between the EU ETS and the overlapping instruments/** policies introduced both at EU and at national level, which have an impact on the European carbon market.
5. Setting pathways for **greater harmonisation between national carbon abatement schemes and their eventual merging with an expanded EU ETS**.
6. Aligning any market-based support schemes for technologies and solutions contributing to Europe's decarbonisation objectives with the EU ETS.
7. Aligning a potential "common currency" for energy carriers with the EU ETS.
8. Establishing a linking agreement with the UK which would ensure a close alignment of the potential UK ETS and the EU ETS at the outset.
9. Recognising and supporting the international role of Europe's carbon market by way of fostering the development and implementation of Article 6 of the Paris Agreement.