

Meeting the EU's Climate Ambitions: The Evolution of Carbon Pricing to 2050

IETA's Position

Net-Zero By 2050

The European Commission has proposed a bold legally binding target of climate neutrality that reaches Net-Zero greenhouse gas emissions by 2050. IETA fully supports this climate neutrality objective, that is in line with the EU's commitment to global climate action under the Paris Agreement.

In order to reach Net-Zero emissions by 2050, the European Commission will have to take decisive steps to increase climate ambition. As the EU's principal decarbonisation instrument, the EU ETS must play a leading role in reaching the target of climate neutrality. It has proved to be a powerful tool for achieving the EU's climate goals, with one recent study estimating that the EU ETS saved about 1.2 billion tonnes of CO₂ between 2008 and 2016¹. The EU ETS has proven its effectiveness as an instrument in setting a binding carbon budget and steering the development of emissions.

Between 2005 and 2018, ETS emissions decreased by 29% and Member State Effort Sharing Regulation emissions fell by 11%². Looking ahead, the European Environment Agency's projections for 2005-2030 indicate that efforts to decarbonise the Effort Sharing Sectors *"would only achieve a -27 % reduction when additional policies and measures are included. These reductions remain insufficient compared with the 30 % reduction that the Effort Sharing sectors should achieve by 2030"* under the old EU targets³. Conversely, EU ETS emissions are projected to meet the current cap of -43% in 2030, compared to 2005. The EU ETS' success at meeting predefined targets, and the fact that it is designed to facilitate increased climate ambition, has shown the effectiveness of emissions trading as a policy instrument.

By setting a cap, the EU ETS is structured to provide verifiable emissions reductions within a clearly defined timeframe. Given the European Commission's Net-Zero target, IETA fully supports the work necessary to understand what changes are needed from the EU ETS to support this aim. IETA looks forward to working closely with the Commission on this critical task.

¹ Bayer and Aklin (2020)

² European Environment Agency: *"Trends & Projections in Europe 2019; Tracking Progress towards Europe's Climate & Energy Targets"* (2019)

³ European Environment Agency: *"Trends & Projections in Europe 2019; Tracking Progress towards Europe's Climate & Energy Targets"* (2019)

The Importance of a Strong Cap

Following the adoption of the 2050 climate neutrality target, a cost-efficient emissions reduction pathway from today toward 2050 should be established, including intermediate targets for 2030 and 2040 and consequent cap for the ETS sector. IETA strongly believes that a revised target for 2030 of at least -50% emissions reductions based on 1990 levels is required, and that a similarly ambitious 2040 target will be required. The ETS cap needs to be adjusted in accordance with the 2050 climate neutrality target as soon as possible in order to give predictability to the ETS, provide a necessary signal for low-carbon investments and GHG mitigation generally, and minimise cumulative emissions in the atmosphere. Under a strong cap, protection against the risk of the carbon leakage is also important; in the review of the EU ETS already underway, care should be taken that no additional pressures are applied to sectors at risk of carbon leakage (such as advancing the risk of a CSCF).

The LRF will also have to be adjusted in order to meet a steeper decarbonisation trajectory, taking into account that the longer the LRF is left unmodified, the more rapid the decarbonisation required. The question of the exact LRF percentage increase is critical, as even small changes have the capacity to result in very different emissions reductions pathways. There is no single route to climate neutrality; IETA would welcome analysis from the European Commission under the 2030 Climate Target Plan to forecast different LRF scenarios to ensure discussion over which scenario is the most cost-effective while representing a fair balance toward reaching the 2050 target.

Market Expansion

IETA strongly believes in the economic benefits of placing new sectors under a cap. Currently, the EU ETS covers about 40% of the EU GHG emissions, but this share is expected to decrease to 35% by 2030. An extension in the longer term of the ETS to new sectors would increase the economic efficiency of emissions reductions and would help the EU to achieve its climate objectives. Moving further emissions under a cap would provide a clear roadmap for future decarbonisation. Over the next 30 years, there may well be opportunities to include new sectors within the EU ETS. Where the marginal cost of abatement is substantially different in comparison to sectors currently covered by the EU ETS (such as Road Transport and Buildings), a short- to medium-term solution is to create separate stand-alone ETS systems for these sectors. Any stand-alone sectoral ETS must be transparently designed to ensure that there is a clear cap and sufficient liquidity (an issue that IETA would be glad to make additional recommendations on), as a non-liquid market does not provide adequate price signals for decarbonisation. Any standalone sectoral ETS would be a stepping stone designed to create a strong price signal for sectors that would otherwise not receive one through EU ETS inclusion. But in the longer term, IETA believes the European Commission should aim to slowly integrate these sectors (and any sectors currently covered by stand-alone national ETS schemes) into the EU ETS. This project should identify criteria to be met in order to ensure a balanced extension of EU ETS, allowing for a meaningful carbon price and avoiding shocks to the system.

The issue of Aviation and Maritime sector inclusion are more complex, precisely because of the international nature of these industries. IETA fully supports ICAO's CORSIA programme, and believes that the EU should work toward CORSIA's compatibility with the EU ETS. IETA's view is that the EU should also encourage the IMO to find a similarly comprehensive global solution to the climate challenge. However, given that no international climate scheme for maritime currently exists, IETA supports placing the intra-EU maritime sector in the EU ETS (as long as rigorous MRV requirements are met).

The effect of expanding the EU ETS into new sectors will be to reduce the coverage of the non-traded sectors. This must be accompanied by a transparent adjustment of effort between the EU cap and ESR targets. This is the right approach; sectors included in the EU ETS are subject to a legally binding target that will ensure they meet the challenge of climate neutrality by 2050.

Negative Emissions & The Role of Removals Credits

In order to transition to Net-Zero, the EU will have to consider how to net-out residual emissions from the energy system. Whilst there may be some cost-effective options to decarbonise the hard to abate sectors, it is risky to base policy solely on this assumption. IETA fully supports the EU's "*Clean Planet for All*" strategy which highlights the role that negative emissions will have to play in achieving climate neutrality by 2050; each of the eight possible scenarios in this document call for significant usage of carbon sinks. In order to ensure the stability of the ETS in the next thirty years, the European Commission will need to propose how verified carbon emission removals from all sectors that meet high quality standards can be introduced into the ETS.

Ensuring that carbon removals are both scalable and within a reasonable price range will require European policymakers to start work on this issue in the 2020s, and have removal mechanisms ready by the 2030s. IETA advocates a neutral approach to removal mechanisms; both technological and nature-based solutions will be required to meet the Net-Zero target.

In the short term, nature-based solutions are likely to be the most immediately available. There may be some availability domestically of land-based credits, as is evident through the establishment of pilot schemes in EU countries such as France, The Netherlands, and Spain. This is a first step to providing a strong policy signal to enact investment that will ensure credits are readily available in a sufficient timescale. IETA thus welcomes the Commission's recent announcement that it is launching work on devising an EU regulatory framework for a carbon removal certification mechanism under the Circular Economy Action Plan.

However, just EU credits are unlikely to provide sufficient liquidity for compliance in the ETS as we work toward Net-Zero GHG emissions by 2050. In the longer term, supplementing these with international credits sourced under Article 6 of the Paris Agreement can provide cost-effective solutions that also speak

to other EU SDG deliverables. Article 6 provides opportunities for pilot programmes that would enable channels of supply through international cooperative approaches.

International Cooperation

Climate change cannot be solved by national or regional solutions alone. The most efficient way that carbon markets can truly effect an outcome consistent with the Paris Climate Agreement, is if Governments around the world work toward a series of ETS linkages and harmonisation that eventuate in a global carbon pricing system. The result of this would be a global level playing field in carbon pricing, and largely aligned cost implications for industry across jurisdictions. This has the global potential to enable \$250 billion per year of cost reductions to Nationally Defined Contributions (NDC) by 2030, according to a recent study modelled by the University of Maryland, and has the capacity to allow for a more even playing field in relation to competitiveness concerns.⁴

International cooperation through trading has the potential to accelerate the achievement of Net-Zero emissions in the EU and could enable the region to become net-negative after 2050. If the NDC savings mentioned above are invested in enhanced ambition, then international trading has the capacity to facilitate additional abatement under the Paris Agreement by 50% or ~5 GtCO₂/year in 2030.⁵ Instead of acting alone, trading between sectors and countries that are subject to emissions limits/caps can enable and galvanize global community action to get farther and faster towards Net-Zero together.

Article 6 of the Paris Agreement allows for a broad range of applications through the use of carbon markets. This can be in the form of linkages between different national/regional carbon markets or through the procurement of international credits. IETA believes that linkages between different jurisdictions will be increasingly important in reaching Net-Zero.

Earlier this year, international linkage was achieved between the EU and Switzerland; an agreement that will clearly benefit both. This linkage proves that it can be done, and provides a framework for future negotiations with other countries. Learnings from this should be used to actively consider linkages between the EU ETS and other carbon markets. An active negotiation along these lines is currently taking place between the EU and UK, and the possibility of linkage between the EU ETS and a proposed UK ETS has been considered. IETA strongly believes that test cases such as this can be critical in creating a framework for discussion around the policy conditions required for a linkage, and in encouraging the internationalisation of carbon markets. The European Commission should be mindful that similar policy ambitions are needed for a link to happen, leading to an equal CO₂ cost burden for industries in the two different jurisdictions.

⁴ IETA & Carbon Pricing Leadership Coalition: “*The Economic Potential of Article 6 of the Paris Agreement and Implementation Challenges*” (2019)

⁵ IETA & Carbon Pricing Leadership Coalition: “*The Economic Potential of Article 6 of the Paris Agreement and Implementation Challenges*” (2019)

However, for as long as an uneven playing field exists in relation to carbon pricing, the need for reducing the risk of carbon leakage from one jurisdiction to another will exist.

It is IETA's view that the EU's ambitious decarbonisation plans must now be matched by efforts to bring other countries on the same journey. Through working toward the internationalisation of carbon markets, the EU can ensure that the risk of carbon leakage is diminished; protecting the competitiveness of European industries which compete globally. By allowing a degree of technical compatibility, and in some cases integration, with different ETS', a truly global solution can be achieved that encourages an accelerated and far-reaching transition to Net-Zero which addresses the EU's contribution to climate change.

Conclusion

Since its establishment in 2005, the EU ETS has proved to be a cost-efficient way of reaching predictable and verifiable GHG emissions reductions targets. The clear advantages of the EU ETS over other carbon pricing mechanisms are that trading ensures the most-cost effective approach, whilst the cap provides a guaranteed environmental outcome. The EU's goal of achieving climate neutrality by 2050 demands just such a guaranteed outcome. The EU ETS should therefore continue to be the bloc's main policy instrument for decarbonisation, whilst avoiding overlapping policies that could put at risk the cost-effectiveness of this tool. To necessitate such an ambitious decarbonisation trajectory, changes will be needed to the structure of the ETS; the Cap will have to be tightened, LRF adjusted, new sectors placed under a cap, and serious consideration given to how the EU ETS can deliver Net-Zero emissions with a balance between sources and sinks.

Whilst the ETS has proved to be the success story of the EU's climate policy efforts, the path to 2050 will require more than simply incremental changes. Climate Change is fundamentally a global challenge, and international solutions will prove to be the most effective. Perhaps the most significant next step for the EU would be to work toward international cooperation in the area of carbon markets. This will require working toward a robust framework for Article 6 of the Paris Agreement, and ensuring that international action is enabled through EU law under specific conditions. This is an international solution for a global problem. Put simply, international linkages and harmonisation of carbon markets will provide the most cost-effective and efficient pathway to Net-Zero. By advocating for harmonised carbon pricing systems, the EU will be showing that it is willing once again to be at the forefront of climate action, paving the way for other national actors to follow its example. This is a strong message to send to the international community.

IETA encourages European policymakers to consider how to transform the EU ETS from a regional tool to an international and multilateral mechanism with the capacity to spearhead a global carbon pricing system.