MODEL ANSWERS: STUDIES REVEAL EU MUST REVAMP EMISSIONS TRADING SYSTEM TO LIVE WITHIN ITS CARBON BUDGET

BRIEFING

EMISSIONS TRADING EXTRA

LIFE ETX

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LEGAL NOTICE

FURTHER INFORMATION

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SUMMARY

The Intergovernmental Panel on Climate Change's (IPCC) latest report underscores the urgency of the climate crisis: the effects of the climate breakdown are already being felt around the world, and will only become more destructive in the coming decades. Humanity is rapidly running out of time to keep planetary heating limited to the Paris Agreement's 1.5°C target.

With just seven years left on the Climate Clock, the ongoing revision of the European Union's climate policy framework offers an eleventh-hour opportunity for the EU to do its part as one of the world's major emitters and go beyond its 55% reduction target for 2030.

However, the research we commissioned reveals that, despite its soaring climate rhetoric and trailblazing policy instruments, the EU is failing to rise to this historic challenge by massively lowering its emissions. However, all is not lost. Policymakers still have the chance to raise the ambition of Europe's climate goals and revamp the EU's Emissions Trading System (EU ETS) and make it a truly effective policy tool.

This policy briefing analyses the results of two studies which show that not only is the proposed reform of the EU ETS inadequate to bring down emissions to sustainable levels but there is also a strong chance that the system will fail to meet its own unambitious targets.

BACKGROUND

In the summer of 2021, the European Commission kicked off the legislative process related to the landmark European Green Deal with 12 legislative proposals (the so-called Fit for 55 package), which aim to slash net emissions by at least 55% by 2030 (compared to 1990). The package is now being reviewed and revised by the European Parliament and the 27 EU member states.

The EU ETS, which currently covers a third of EU emissions (mainly from power and industry), is an important component of the Fit for 55 suite. The European Commission proposed to raise the 2030 target for the EU ETS, from the current 43% reduction in the sectors covered to 61% (compared with 2005).

As the research clearly shows, this is insufficient. Both the EU's overall target and the EU ETS target have to be raised significantly in order to meet the challenges of the climate crisis.

INADEQUATE CLIMATE TARGETS

The world's governments are failing to collectively reach the target they set themselves in the 2015 Paris Agreement of limiting global warming to a relatively manageable 1.5°C.

All the promised climate targets and policies since then, even if enacted, would still lead to global heating of about 2.7°C by the end of the century. Every country in the world needs to do much more to move beyond current climate pledges and enact effective and robust measures swiftly.

EU leaders agreed to revisit and strengthen 2030 climate targets by the end of 2022 under the Glasgow Climate Pact - but they are already backpedalling on that commitment. The EU has a responsibility to cut its emissions faster than poorer countries because of its large historic emissions, its currently outsized carbon footprint and its high economic capacity. Its 55% net reduction target for 2030 has been deemed insufficient again and again, by the Climate Action Tracker, the Paris Equity Check and the UN Environment Programme. Improved and adequate EU climate targets are urgently needed.

SCIENCE-BASED AMBITION

If the remaining (and rapidly shrinking) global carbon budget was divided equally on a per-capita basis, the EU would have to reduce its emissions by at least 65% by 2030. With the current 55% target, the EU will double its per capita share of the remaining global carbon budget.[1, 2]

Therefore, the EU must shrink its greenhouse gas emissions by at least 65% by 2030 (compared to 1990 levels). In addition, the EU must aim for climate neutrality by 2040 (instead of 2050).

[1] Trio, W (2022). Why the EU must strengthen its climate target, including in the emissions trading system. March 2022.
[2] Note that even if the EU would emit just its per capita share, this would still not be in line with fairness and equity principles.

These targets may seem ambitious, but in the past decade the EU has been able to significantly outperform its climate commitments. By 2020, the EU had already reduced its domestic GHG emissions by 31% (compared to 1990). This was well above the 20% target set for 2020. From 2020 levels, an annual reduction target of about 3.5% would achieve a 65% drop in emissions by 2030.[3] Such a target is not only feasible, as numerous studies have confirmed, it would bring about significant socio-economic benefits in the EU.

This is a make or break moment for EU policymakers. They have it within their power to ensure that Europe shoulders its fair share of the global emissions burden or they can renege on this responsibility and use these potentially powerful policy instruments as a smokescreen for inaction.

Not only must Fit for 55 become Fit for 65, the European Green Deal must help transition the EU away from fossil fuels rapidly and mitigate the negative effects of the climate crisis - all while contributing to peace and prosperity in Europe.

RAISING THE EU ETS TARGET

Achieving more ambitious climate goals means that the component parts of the EU's climate policy framework also need strengthening. The current European Commission's Fit for 55% proposal raises the EU ETS target from a 43% reduction to a 61% drop by 2030 (both compared with 2005).

But even with this higher goal, the EU ETS would be allowed to emit half of the EU's remaining carbon budget up to 2030 - even though its sectors now only account for 36% of EU emissions. If the EU ETS is to contribute its fair share to a new EU-wide 65% reduction target (compared to 1990), the **EU ETS target has to be raised** **to** **at least 70% by 2030** (compared to 2005).

[3] LIFE ETX (2022) Why the EU must strengthen its climate target, including in the emissions trading system, https://etxtra.org/publications/why-the-eu-must-strengthen-its-climate-target-including-in-the-emissions-trading-system/

EU FAILING ON ITS OWN TERMS

The global climate emergency calls for urgent action. The European Commission's proposed revision of the EU ETS, however, does not even ensure the EU will meet its current 2030 target. Two separate modelling analyses, carried out by Climact and the Öko Institute[4] on our behalf in the context of the Life ETX project, indicate that the proposed revision by the Commission would fail to achieve the 61% EU ETS target - undermining the EU's ability to reach the objectives of the European Green Deal.

According to the Öko Institute,[5] overestimations of the demand for allowances needed for risk management (i.e. those required for energy sector hedging and industry long-term banking) are the reason why the Commission assumes its proposal is in line with the European Green Deal. This is the basis for the functioning of the Market Stability Reserve (MSR), which is supposed to address the current and future surplus on the market by adjusting the supply of allowances to be auctioned. If the Market Stability Reserve parameters are not strengthened during the revision process, the massive existing oversupply of pollution permits on the market and uncertainties related to emission trends and market behaviour will make it impossible for the ETS to reach the 2030 climate targets. As hedging and long-term banking demand will fall significantly, the Öko Institute finds that this risk will increase.

In addition, the surplus of allowances which has haunted the ETS since 2008 would increase again over the 2025-2030 period due to an overgenerous cap remaining significantly higher than actual emissions and reduced Market Stability Reserve intake once the oversupply drops below about 1.1 billion allowances.

In conclusion, the ETS rules proposed by the Commission add insult to injury - as the ETS proposal is not even fit to meet an already insufficient target.

[4] Öko-Institut (2022) The Revision of the European Union Emissions Trading System Directive: Assessing Cap and Market Stability Reserve Reform Options. May 2022.

[5] Öko-Institut (2022) The Revision of the European Union Emissions Trading System Directive: Assessing Cap and Market Stability Reserve Reform Options. May 2022.

THE SOLUTION IS NOT ROCKET SCIENCE

The European Commission's proposal must be made far more ambitious if the EU ETS is to play its role in ensuring the EU delivers effective climate action.

The timing of the entry into force of the new ETS Directive is critical in this regard. Any delay beyond 2024 would hold up the starting point of the increased linear reduction factor (defining the annual decline of the cap) and would increase the cumulative emissions permitted under the EU ETS. A single year delay could increase emissions from ETS sectors by a whopping 156 million tonnes.

We need a three-stage rocket:

1. The one-off reduction ("rebasing") needs to be drastically increased from 117 million to at least 350 million tonnes, to bring the ETS cap in line with actual emissions. This will not only have a direct environmental benefit, but also is a strong determinant for the ETS carbon budget up to 2030.

2. The Linear Reduction Factor not only sets the carbon budget but also implies a zero-emissions target. If increased from 2.2% to 4.2% (as the Commission proposes), the ETS cap reaches zero by 2040. Raising the LRF to 4.4% combined, together with a one off-reduction of 350 million allowances, would be more in line with what is needed to make the EU ETS 2030 cap Paris compatible as well.

3. The resilience of the ETS to shocks and emission trends between 2021 and 2030 will depend strongly on the Market Stability Reserve (MSR). There is still a large surplus of pollution permits in the market, and significant uncertainties related to emission trends and market behaviour, especially by financial institutions. The MSR thresholds need to be revised downwards, and preferably decline to zero by 2030, instead of letting them increase and undermine the climate ambition of the system, as the Commission has proposed.

The first two stages set the ETS cap, determining the carbon budget ETS sectors can emit up until 2030. The third stage (the MSR) ensures that emissions in 2030 do not exceed the ceiling and the 2030 target is actually reached.

Jettisoning any stage will cause the rocket to crash and the ETS will not be able to meet its target, as this and other modelling exercises clearly demonstrate.

A comprehensive and meaningful package of all three critical elements (LRF, one-off reduction and MSR) is needed to implement the 70% reduction target by 2030. The Öko Institute finds a robust package to do that would be for the LRF to be increased to 4.4% (starting without delay in 2024), and a one-off reduction of emission allowances of 350 million allowances.

However, whether that target is actually reached in 2030 depends on the strengthening of the MSR thresholds. The MSR parameters need to be set in a conservative and realistic manner. Assuming high hedging demand up to 2030 is unrealistic since fossil fuel power plants are expected to close, and industry will need to significantly decarbonise by 2030. If the Commission proposal is enacted, the upper threshold will be about the same size as the 2030 cap. The more hedging demands are overestimated, the larger the risk that emissions in 2030 will be higher than the cap, endangering the achievement of the European Green Deal goals. Therefore the MSR thresholds should go to zero by 2030 - or at the very least decline in line with the cap.

This combination of enhancing the LRF, MSR and a one-off reduction does make for a complex policymaking process as any discussion on one of these rocket stages must fully account for the impacts of the other rocket stages. There can only be limited trade-offs between these critical rocket stages, and an integrated assessment of options combining all three variables needs to be at the centre of policy discussions.

In conclusion, the EU ETS has a key role to play in ensuring the European Union stays within its carbon budget and meets its commitments under the Paris Agreement. Evidence-based policymaking should be at the core of the revision process as we have no more time to waste to tackle the climate crisis.