

# Feedback to Inception Impact Assessment on the EU ETS revision November 2020



Sandbag welcomes the opportunity to provide feedback on the upcoming revision of the EU ETS. This update is timely and critical for the success of the EU's emission reduction efforts. Without significant changes to the EU ETS, emissions will conceivably be far above the EU's new 2030 target. Under current parameters, even meeting a not-so-ambitious 50% target is not guaranteed. Moreover, even without considering the EU's increased ambition in its 2050 and 2030 targets, there are **many areas of the EU ETS which need to be improved in order for the carbon pricing instrument to fulfil its potential in driving decarbonisation**. Sandbag is currently in the process of modelling and analysing the various proposed scenarios and combinations for the EU ETS revision. We will be happy to contribute this analysis to the public consultation and other stakeholder processes around the revision. This paper contains some initial assessments based on our findings to date, which indicate that the proposed changes to the ETS that are under discussion are not enough to guarantee that the 2030 economy-wide target will be reached.

## Rebasing the cap and strengthening the LRF

Under the current regulation, the EU ETS cap is not on a trajectory to contribute to the EU achieving climate neutrality by 2050. The EU's increased climate ambition for 2030 necessitates a new trajectory for the cap. The exact figure is yet to be finalised, with the Commission recommending a rather ephemeral "net" target of at least 55% emission reductions by 2030, the European Parliament calling for a 60% reduction and an equity approach in line with the Paris Agreement demanding 65%. Whatever the final figure chosen, it is clear that the EU ETS cap will need to be altered substantially to match the increased 2030 ambition. However, **changing the trajectory of the cap will not be enough – more structural reforms are needed**.

As Sandbag's past research has demonstrated, there are certain structural shortcomings in the EU ETS which limit its decarbonisation capacity. **The cap is currently far too high above real emission levels, resulting in a price signal which is inadequate for rationalising low-carbon investments**.<sup>1</sup> This has led to a large number of surplus allowances, which in turn only further dampens the effectiveness of the EUA price. Among the different propositions on the table, **rebasing the cap is a crucial measure which would lead to more ambitious emission reduction pathways**. We are pleased that this proposal to rebase the cap, which Sandbag made ahead of the last revision of the EU ETS,<sup>2</sup> is now seriously considered in the Inception Impact Assessment. **The cap must be rebased to start from current emission levels**, so that the decarbonisation incentive of an ETS with a net-zero 2050 target is effective immediately. The trajectory of the cap should then be set with a Linear Reduction Factor that will see ETS sectors achieve their contribution to climate neutrality by 2050.

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<sup>1</sup> Sandbag (2020). Relaunching a sustainable industrial sector. [https://sandbag.be/wp-content/uploads/2020/05/industry\\_report.pdf](https://sandbag.be/wp-content/uploads/2020/05/industry_report.pdf)

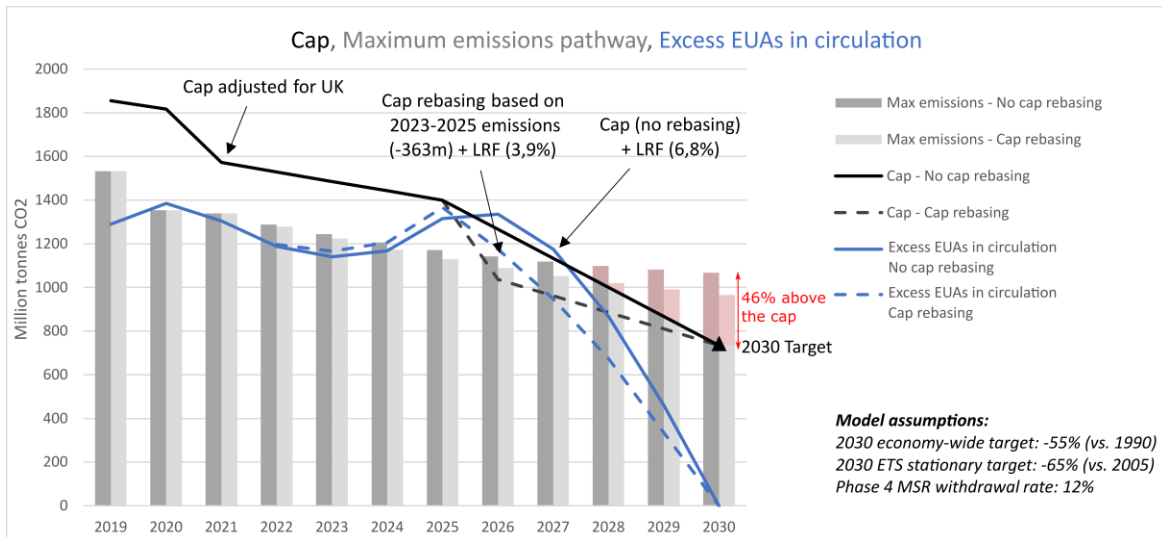
<sup>2</sup> Sandbag (2016). Getting in touch with reality. [https://sandbag.be/wp-content/uploads/2016/10/Sandbag\\_Realiging\\_EUETS\\_Ph4\\_cap.pdf](https://sandbag.be/wp-content/uploads/2016/10/Sandbag_Realiging_EUETS_Ph4_cap.pdf)

Our modelling shows that, to achieve a 2030 economy-wide target of a -55% emission reduction (with the EU ETS reducing emissions by 65% compared to 2005 and an MSR withdrawal rate of 12% until 2030), either

- From 2025, the LRF must be 6,8%, or
- The cap could be rebased on the back of 2023-25 emissions. In our maximum-emissions scenario, this would reduce the cap by 363m EUAs in 2026 (compared to 2025) after which the LRF would be 3,9%. **Rebasing the cap while keeping other parameters alike efficiently lowers the maximum emissions route compared to scenarios where the cap is unchanged.**

## The Market Stability Reserve and addressing surplus allowances

However, our preliminary analysis indicates that, regardless of the steepness of the LRF and the rebased cap, there will remain so many surplus EUAs in circulation that emissions could potentially go far above a cap aligned with the 2030 target. Our analysis shows that (presuming a linear emissions trajectory from 2021 onwards) **EU emissions could exceed the cap by 46% without rebasing and 31% with rebasing.**



Source: Sandbag, own modelling

We estimate that the number of EUAs in circulation by the end of Phase III will be 1,262 million, equivalent to nearly a year’s emissions. In addition, a number of mechanisms will contribute to increasing the supply of allowances beyond the yearly emissions cap.

These **surplus allowances come from the following reserves:**

- unused allowances from previous years not removed into the MSR
- allowances that are not allocated for free to industry in the early 2020s, which are kept available for production increases in the later years
- 320 million allowances transferred from Phase III surplus into the New Entrants Reserve, which could be allocated to industry plants which increase their production even if that should drive EU emissions above the cap
- 25 million allowances carried over from Phase III can be claimed and sold by Greece, regardless of EU emissions compared to the cap

- 100 million allowances per year released by the MSR if the lower threshold is met.

The MSR seeks to remedy the issue of surplus allowances caused by the mismatch between the cap and verified emissions. It does not solve the problem at its root, which requires a rebasing of the cap and a steeper LRF. Nor is the MSR able to fully cancel the current surplus. Our analysis shows that, counterintuitively, **maintaining the 36% withdrawal rate for the entirety of Phase IV does not necessarily lead to a larger surplus reduction** than a 24% withdrawal rate (as the amount of EUAs in circulation may fall within the MSR corridor earlier). Our preliminary results show that **adjusting the MSR thresholds (currently set at 833 million and 400 million), for example by applying the same LRF as for the cap, could lead to more ambitious emissions routes.**

MSR thresholds were set to 833 million and 400 million (high and low, respectively) in 2015, due to a misunderstanding. Power utilities explained that they needed to secure a supply of EUAs on top of their immediate needs to hedge their future power sales, because they buy EUAs as they sell power for delivery into the next 2-3 years. What was misunderstood is that power utilities only purchase *forward* EUA contracts for delivery in the future, not *spot* EUAs, so the underlying EUAs do not actually need to be on the market for those contracts to be purchased or sold. In other words, these MSR thresholds have no well-founded reason to exist. We therefore propose to **reduce those thresholds down to 100m and 0 for high and low, respectively, plus the cumulated aviation demand excluded from TNAC calculation.** This way, the thresholds would prevent up to 833m EUAs from being distributed in excess of the cap, allowing emissions to start rising again. Furthermore, we propose that in any year, **no allowance should be released from the MSR or any other above listed reserve if the previous year's emissions exceeded the cap.**

## Free allocation and carbon leakage protection

A major shortcoming of the EU ETS is the practice of free allocation for industrial sectors. While the power sector, no longer eligible for free allocation in most cases, has seen emissions fall over the lifetime of the EU ETS, heavy industry shows few signs of decarbonisation on a large scale. Emission reductions from energy-intensive industries have effectively stagnated over Phase III of the ETS, [reducing at a rate of a mere 0.55% per year.](#)<sup>3</sup> These industries continue to receive a large proportion of their emission allowances for free, shielded from the carbon price. Between 2013 and 2018, [most heavy industries received 95% of their allowances for free, with some receiving over 100% of their emissions in the form of free allowances.](#)<sup>4</sup> While some sectors will see their free allocation reducing from 30% to 0 over Phase IV, sectors deemed at risk of carbon leakage, [which for Phase IV will cover 94% of the EU's industrial emissions,](#) will receive free allowances up to 100% of their product benchmark.<sup>5</sup> Benchmarks determining free allocation can also run contrary to incentivising decarbonisation as they often exclude and therefore disincentivise low-carbon alternative technologies and products. Furthermore, free allocation is unsustainable in the medium- to long-term as the total number of allowances decreases.

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<sup>3</sup> Sandbag (2020). Relaunching a sustainable industrial sector. [https://sandbag.be/wp-content/uploads/2020/05/industry\\_report.pdf](https://sandbag.be/wp-content/uploads/2020/05/industry_report.pdf)

<sup>4</sup> European Environment Agency (2020). European Union Emissions Trading System data from EUTL. <https://www.eea.europa.eu/data-and-maps/data/european-union-emissions-trading-scheme-14>

<sup>5</sup> European Court of Auditors (2020). The EU's Emissions Trading System: free allocation of allowances needed for better targeting. <https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=54392>

Currently, there is little evidence that carbon leakage exists, [other than in the power sector](#).<sup>6</sup> Nevertheless, more ambitious climate targets could increase the potential risk of leakage. It is crucial that measures to limit carbon leakage do not interfere with the primary goal of the EU ETS, to reduce emissions in line with the demands of climate science and in a cost-effective manner. Free allocation, the current barrier against carbon leakage, does exactly the opposite. **Another means of tackling carbon leakage is clearly needed and a Carbon Border Adjustment Mechanism (CBAM) appears to be the most direct and best option** for creating a level playing field for EU industries as they undergo their net-zero transformations. The CBAM should mirror the EU ETS price and target those high-emitting sectors covered by the EU ETS, particularly cement, steel, electricity and certain chemicals (e.g. ammonia and polyethylene for plastic production). The CBAM should be implemented as soon as practicable during Phase IV of the EU ETS. **The CBAM and free allowances should not be applied to the same emissions, and introduction of the CBAM must be coupled with the simultaneous cessation of free allocation**, leading to the abolition of free allocation during Phase IV, ideally by 2026. Our further proposals on the CBAM can be found [on our website](#).<sup>7</sup>

## Reform the heat benchmark

The heat benchmark for CHP plants is currently based on the average carbon intensity of gas plants, which is out of touch from the reality of many CHP plants running on biomass. As a result, many CHP plants will receive more free allowances than they need, to the detriment of other sectors or the member states that could have otherwise auctioned those allowances. Another perverse effect of this benchmark is that the wrong projects currently get selected by the Innovation Fund, which uses the EU ETS benchmark to rate emission reduction potential from projects. According to this rule, some projects that are far from low-carbon may get selected by the Fund. We therefore propose to **urgently reform the heat benchmark to represent the 10% most efficient plants**, as is the rule applied to all other industry sectors.

## Maritime and aviation emissions

The EU ETS update should not only seek to include intra-EU maritime emissions, but **all maritime emissions from voyages within, to or from the EU. The same is true of the EU's aviation emissions**. Despite its shortcomings, the EU ETS is a more ambitious instrument for reducing emissions than CORSIA or energy efficiency requirements under MARPOL. Aviation and shipping are increasingly serious drivers of greenhouse gas emissions and need to be tackled with the most comprehensive policy instruments at the EU's disposal. Global efforts at reducing emissions should be maintained, but as long as international measures are lacking ambition, the EU should use its own policy tools to address the problem.

## Road transport and building sectors

Whatever the make-up of an extension of the EU ETS, **the existing shortcomings of the EU ETS must be resolved before the system can be successfully extended to other sectors**. Extending the EU ETS to cover emissions from buildings and road transport would be a major change. There are important qualifications to be made in considering such an extension, primarily, that **the EU ETS in isolation will not achieve decarbonisation at the speed required to reach the EU's climate targets**. Looking at the sectors currently

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<sup>6</sup> Ember (2020). The Path of Least Resistance: How electricity generated from coal is leaking into the EU. <https://ember-climate.org/project/interconnectors-and-coal/>

<sup>7</sup> See Sandbag's full response to the public consultation on the CBAM here: <https://sandbag.be/index.php/2020/10/28/carbon-border-adjustments-in-the-eu-who-what-when-why-and-how/>

covered by the EU ETS, emission reductions in the power sector have also been driven by extensive policy support for renewable energy development at EU and national level. Emissions from heavy industry have been very slow to decrease, and our research shows that in order to achieve industrial decarbonisation by 2050, [reform of the EU ETS will need to be coupled by other regulatory measures](#) to support innovation and create new markets for low-carbon industrial products.<sup>8</sup> The CO<sub>2</sub> abatement costs in the buildings and road transport sector are different to those in power and industry, and demand in the buildings and transport sectors is less responsive to price changes. This makes it paramount, regardless of whether the EU ETS is extended to these sectors or not, that other regulatory measures and financial supports for the decarbonisation of buildings and road transport are maintained and expanded.

There are also socio-economic and distributional impacts to be borne in mind, as the largest impact of subjecting road transport and heating to the EUA price would fall on low-income households, especially in the short term to 2030. [Consumers with less capacity to reduce discretionary spending and to replace their cars or home heating system will face lock-in to high-carbon technologies](#).<sup>9</sup> In short term, low-income households would need to be supported to manage the costs of the EU ETS extension, while in the long term, supports to transition to low-carbon technologies are needed.

## Support for low-carbon investment and innovation

The EU ETS Innovation Fund is a policy instrument for reducing costs and de-risking low carbon technologies, but it will not be effective as it is. **The Fund needs to be reformed to support projects that can contribute to delivering net zero by 2050**, and not to projects that are *lower*-carbon but not zero-carbon. Currently, for projects that apply for Innovation Fund grants, the Commission has proposed an assessment methodology that compares the project's expected emissions performance with the relevant ETS benchmark. However, this method could lead to the funding of emissions reduction projects that will become stranded assets thirty years from now. To reduce that risk, **project developers should be required to demonstrate the compatibility of their project with a net-zero economy of 2050** to qualify for funding.

In addition to these funding mechanisms, experience from the power sector shows that additional policy measures are needed to support decarbonisation. **The EU ETS revision must be accompanied by a policy package that includes supports for low-carbon alternative products to those covered by the ETS**. This could include, for example, the use of wood as a substitute for cement or steel. Further regulations should set product requirements such as limits for embodied carbon or minimum requirements for recycled content for basic materials such as steel. The same applies for any other sectors that are added to the EU ETS – additional regulation will be needed to fully realise decarbonisation at the speed required.

*Sandbag is a non-profit think tank which uses data analysis to build evidence-based climate policy. We focus on EU policies such as the EU ETS, the Effort Sharing Regulation and emissions reductions in industrial sectors.*

Rue du Trône 60, 1050 Ixelles, Belgium

[www.sandbag.be](http://www.sandbag.be)

<sup>8</sup> Sandbag (2020). Relaunching a sustainable industrial sector. [https://sandbag.be/wp-content/uploads/2020/05/industry\\_report.pdf](https://sandbag.be/wp-content/uploads/2020/05/industry_report.pdf)

<sup>9</sup> Cambridge Econometrics (2020) Decarbonising European transport and heating fuels – Is the EU ETS the right tool? <https://europeanclimate.org/wp-content/uploads/2020/06/01-07-2020-decarbonising-european-transport-and-heating-fuels-full-report.pdf>