Carbon Market Watch's response to the public consultation on the EU Emissions Trading System (EU ETS) review

February 2021

Summary

The EU Emissions Trading System (EU ETS) covers around 40% of the EU's greenhouse gas emissions from more than 11,000 installations and airlines.

As part of the EU Green Deal implementation, the scheme will be revised starting in the summer of 2021. The revision is a crucial opportunity to ensure that the sectors covered by it reduce their emissions in line with the EU climate goals and the Paris Agreement objective of limiting global temperature rise to 1.5 degrees Celsius.

To this end, Carbon Market Watch makes the following recommendations:

- **Increase the rate at which emissions decrease (the "Linear Reduction Factor", LRF) to 5.8% as of 2023 or to 3.1% if combined with a one-off reduction of the cap by 450 million allowances** to drive faster emission reductions
- **Increase the intake rate of the Market Stability Reserve (MSR) to 36% from 2024 onwards, adopt declining thresholds and an automatic cancellation of allowances held in the reserve for more than three years** to effectively handle the market surplus
- **End free allocation of allowances for energy-intensive industries and the aviation sector** to incentivise climate action in these sectors
- **Use 100% of auctioning revenues in further climate action, industrial innovation, just transition and international climate finance**
- **Do not include road transport and buildings** to avoid a distraction from more effective regulation in these sectors
- **Include international maritime transport** in the absence of action at the global level, **and waste incineration** to encourage other more sustainable and low-carbon waste treatment options
- **Bring all flights under the carbon market** in line with the current "stop-the-clock" regulation from 2024 at the latest
- **Exclude Carbon Dioxide Removal (CDR) credits** to avoid that such credits risk distracting from emission reduction efforts

- **Delete the article 26** to set limits on greenhouse gas emissions in environmental permits under the EU industrial emissions directive.

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The upcoming revision of the EU Emissions Trading System (EU ETS) is a crucial opportunity to strengthen the Directive and ensure that it contributes to the Paris Agreement 1.5°C goal. To do its fair share of global climate action, the EU needs to cut emissions by at least -65% by 2030, and be climate-neutral by 2040. The investments required to achieve these goals have to be considered against the tremendous costs of inaction.

Carbon Market Watch believes that the review should include the following elements.

1. **Increase the rate at which emissions go down (the "Linear Reduction Factor", LRF and one-off reduction of the cap)**

The EU ETS Directive covers around 40% of the EU's greenhouse gas emissions and thus its revision needs to ensure that it fully contributes to the overall climate goals. Recent research[1] shows that a 65% climate target by 2030 would require around 70% emissions reductions in ETS sectors (compared to 2005).

It is therefore crucial that the ETS revision focuses on an increase of the Linear Reduction Factor (LRF) in combination with a one-off reduction of the cap, in order to reach zero emissions by 2040. The LRF determines the pace at which the total number of available allowances (the cap) reduces every year.

In the ETS phase 3 (2013 - 2020) the LRF was 1.74%, and was set to increase to 2.2% as of this year. However, this reduction would lead to the full decarbonization of the EU's power and industry sectors only in 2058. For the cap to reach zero by 2040, the pace at which emission allowances decline should drastically pick up.

The overall cap on carbon emissions has been significantly higher than the emissions of installations covered by the ETS since 2009. In 2019, the gap between the cap and the actual emissions was estimated to be around 250 million allowances (EC, 2020). This difference is expected to continue and risks aggravating as a consequence of the Covid-19 pandemic. Without any intervention to align the cap with the actual overall emissions, a large surplus of allowances is likely going to depress the carbon price signal and undermine the impact of the system. In order to ensure that the cap better reflects real emission levels, it should be readjusted through a one-off reduction of 450 million allowances as soon as possible.

[1] https://www.umweltbundesamt.de/en/publikationen/raising-the-eu-2030-ghg-emission-reduction-target

The ETS revision must implement a one-off reduction of the cap and a steeper LRF by 2023. In order for the ETS cap to reach -70% by 2030, the LFR will have to be increased to 5.8% as of 2023. If the cap is decreased by a one-off reduction of 450 million allowances in 2023, the LFR will have to be increased to 3.1% as of 2023[2]. It is therefore important both measures are combined in order to have the desired impact. A later implementation of these improvements will require a greater effort in a shorter amount of time.

Recommended amendments to EU ETS Directive 2003/87/EC

Article 9, paragraph 3(new) - one-off reduction of the cap and LRF increase for the ETS cap to reach -70% by 2030:

The Union-wide quantity of allowances issued each year starting in 2023 shall decrease by a one-off reduction of 450 million. Starting in 2023, the linear factor shall be 3.1%

2. Strengthen the Market Stability Reserve (MSR)

The Market Stability Reserve (MSR) is a mechanism to control the number of allowances in circulation on the ETS market. Each year, if the total number of allowances in circulation (TNAC) is greater than 833 million, 24% of the TNAC will be placed in the reserve. From 2024 onwards, this share is set to decrease to 12%.

If, on the contrary, TNAC is lower than 400 million, then 100 million EUAs will be released from the MSR. Finally, each year, if there are more allowances in the MSR than what has been auctioned in the previous year, the difference will be invalidated from the MSR.

Established in 2018, the MSR has proved effective in supporting the ETS carbon price signal in recent years. However, the MSR was designed to only handle oversupply accumulated in the past. It is not fit to deal with current or future surplus (linked to e.g. the Covid-19, economic downturn, planned coal plant closures...). For example, based on existing coal phase-out plans, a 2.07 billion tCO2e emission reduction between 2021 and 2030 can be expected. This means that a significant amount of allowances will add to the current surplus of allowances and negatively affect the carbon price signal.

The MSR will therefore need to be strengthened in the context of the ETS revision. The intake rate should be increased, rather than lowered, to 36% from 2024 onwards, declining

[2] Own calculations, based on the European Commission Decision of the cap for 2021 which takes into account the consequences of the UK leaving the EU (https://ec.europa.eu/clima/sites/clima/files/news/docs/c_2020_7704_en.pdf)

thresholds should be adopted and an automatic cancellation for allowances held in the MSR for more than three to five years should be set.

Recommended amendments Decision (EU) 2015/1814 (concerning the establishment and operation of the market stability reserve)

Article 1 - paragraph 5:

*Each year, a number of allowances equal to **36 %** of the total number of allowances in circulation [...] shall be deducted from the volume of allowances to be auctioned by the Member States*

Article 1 - paragraph 5b(new):

From 2023 allowances held in the reserve for a duration longer than 5 years shall no longer be valid.

3. Mandate full auctioning of emission allowances

Since 2008, over 200 billion euros[3] worth of free emission allowances have been handed out to heavy industry and the aviation sector under the EU ETS. At the same time, emissions from industrial installations like steel, cement and chemicals continue to stagnate (less than 0.4% annual reduction since 2013) and those from aviation keep increasing (>4% annual increase since 2013). Despite auctioning being the default rule, more than 95%[4] of industrial emissions, and about half of emissions from aviation, are currently covered by free emission allowances. In contrast, emissions from the power sector – where very limited free allocation is given - dropped by 13% just in 2019[5].

Polluting for free in times of a climate crisis is unacceptable and the EU ETS should immediately start auctioning all emission allowances. According to current rules, between 2021 and 2030, the EU industry will receive approximately 6.5 billion freely allocated emission allowances - valued at almost 200 billion euros[6] (with an average CO2 price of 30EUR/t). This represents foregone revenues that could instead be generated through auctioning and be recycled towards much needed climate action measures.

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[3] Markus Trilling et al. (2017) Phase-out 2020: monitoring Europe's fossil fuel subsidies https://www.odi.org/sites/odi.org.uk/files/resource-documents/11764.pdf
[4] ERCST (2020), 2020 State of the EU ETS Report (https://ercst.org/publication-2020-state-of-the-eu-ets-report/)
[5] Ember (2020), 'Europe's coal power collapse exposes steel plants as Europe's biggest emitter' (https://ember-climate.org/project/ets-2019-release/)
[6] CMW (2019), 'Cracking Europe's hardest climate nut' (https://carbonmarketwatch.org/wp-content/uploads/2019/04/Cracking-Europe%E2%80%99s-hardest-climate-nut-2.pdf)

The European Court of Auditors[7] has recently found that free allocation of allowances to industry and aviation could slow decarbonisation, and needs better targeting. Given that the European Commission accepted this recommendation, the upcoming impact assessment should include options leading to full auctioning for all sectors.

Moreover, the European Commission is working on a proposal to introduce a Carbon Border Adjustment Mechanism (CBAM). Under this mechanism, a foreign industry that wants to import goods in the EU will have to pay a price for the carbon content of its products at the border. While details on how this measure will work in practice and to which sectors it is going to be applied are still being discussed, one thing is clear: "the main objective of CBAM is to fight climate change by avoiding carbon leakage" as reported in the inception impact assessment of the European Commission. Therefore, all current measures to protect European industries against the risk of carbon leakage should be ended.

Abolishing free allocation would incentivize industrial decarbonization, raise auctioning revenues and limit windfall profits. It would not cause substantial carbon leakage risks[8]. The upcoming revision of the EU ETS should therefore end free allocation in the EU for energy-intensive industries and the aviation sector.

Recommended amendments to EU ETS Directive 2003/87/EC *- Article 10b (transitional measures to support certain energy intensive industries in the event of carbon leakage) and Article 3d - Method of allocation of allowances for aviation through auctioning*

Article 10b - paragraph 1:

*Such sectors and subsectors shall be allocated allowances free of charge for the period until 20**23** at 100 % of the quantity determined pursuant to Article 10a.*

Article 10b - paragraph 4:

*[…] free allocations to other sectors and subsectors shall decrease by equal amounts after 20**21** so as to reach a level of no free allocation in 20**23***

[7] European Court of Auditors special report 2020 "The EU's Emissions Trading System: free allocation of allowances needed better targeting"
https://www.eca.europa.eu/Lists/ECADocuments/SR20_18/SR_EU-ETS_EN.pdf

[8] Eugénie Joltreau & Katrin Sommerfeld (2019) Why does emissions trading under the EU Emissions Trading System (ETS) not affect firms' competitiveness? Empirical findings from the literature, Climate Policy, 19:4, 453-471, DOI: 10.1080/14693062.2018.1502145

Article 3d - paragraph 2a(new):

From 1 January 2023, 100 % of allowances shall be auctioned

4. Recycle all auctioning revenues towards climate action, industrial innovation, just transition and international climate finance

The total revenues generated from the government auctions of emission allowances since 2012 exceed 57 billion euros. While EU Member States claim that they use a large part of ETS auctioning revenues for climate action, the Directive lacks harmonised obligations to ensure that this is the case. The Directive includes a non-binding provision that only at least 50% of auctioning revenues "should" be used for climate and energy related purposes.

The European Commission should propose earmarking 100% of revenues for climate action, to be invested in renewable and energy efficient technologies, clean industrial innovation, just transition and international climate finance.

Financial support and investments for industry to innovate and deploy zero-carbon breakthrough technologies is crucial to achieve climate neutrality as soon as possible. According to McKinsey[9], reaching climate neutrality by 2050 would require 410 billion euros of investments in clean technologies and techniques for the industrial sector alone. Given the amount of funding required to make this happen, it is clear that the current public and private funding is insufficient to effectively drive the clean energy transition in the industrial sectors. Public investments in R&D, innovation and clean energy have slowly increased over the past years but continue to represent only a small fraction of what is required.

The last EU ETS revision launched the Innovation Fund, successor of the NER300. The Fund covers renewable technologies, CCS and innovative low-carbon technologies and processes in energy-intensive industries, and allocates the derivatives of auctioning 450 million ETS allowances. At a ETS price of 25 EUR/t, this amounts to an average of 1 billion euros a year over the coming decade.

The Innovation Fund can play a crucial role in helping industry decarbonise but does not have enough resources, as shown by the first call for large-scale projects launched in July 2020. The demand and variety of low-carbon projects that applied to the Fund was more than 20 times what the fund made available in the call.

[9] McKinsey, 2020 "How the European Union could achieve net-zero emissions at net-zero cost": https://www.mckinsey.com/business-functions/sustainability/our-insights/how-the-european-union-could-achieve-net-zero-emissions-at-net-zero-cost

On the other hand, it is estimated that in the current trading phase, governments will allocate 6.5 billion allowances to industry for free. At a carbon price of 30 EUR/t, this amounts to almost 200 billion euros. The total amount of public funding dedicated to innovation through the Innovation Fund is around 13 billion euros. This makes the value of free allowances more than 15 times the value of the ETS innovation fund.

The overall financial capabilities of the Innovation Fund should therefore be drastically increased. This would act as a major opportunity and support for industry in their efforts to decarbonise and is much more effective than the non targeted allocation of free allowances. More auctioned revenues should be redirected to make the Fund bigger.

If ETS revenues were used to complement public investments in clean energy, funding would be more effective and Europe could accelerate its progress towards a carbon neutral industry.

Recommended amendments to EU ETS Directive 2003/87/EC *Article 10 - auctioning of allowances*

Article 10 - paragraph 3:

~~*Member States shall determine the use of revenues generated from the auctioning of allowances.*~~ ***100 %*** *of the revenues generated from the auctioning of allowances […], or the equivalent in financial value of these revenues,* ***shall*** *be used to support* ***climate action, to invest in renewable and energy efficient technologies, clean industrial innovation, just transition and international climate finance****.*

Article 10a - paragraph 8:

2.8 billion [10] allowances from the quantity which could otherwise be allocated for free […] shall be made available to support innovation[…] that contributes substantially to mitigating climate change, ***in line with the objective of achieving climate neutrality by 2050***

5. Do not include road transport and buildings

[10] Estimate based on McKinsey (see reference above).The report estimates that the industrial sector alone will need 410bn EUR between now and 2050 for investments in clean technologies. Dividing this number equally over 30 years, the amount of funding needed for the period 2021-2030 would be about 136bn EUR. As per current rules, the Innovation Fund only funds 60% of the relevant costs of investments, so it would need to increase its budget to 82bn EUR. At a carbon price of 30EUR/t, this would result in 2.8bn allowances.

Extending the EU ETS to road transport and buildings would have little to no impact on emissions. Even if this idea were properly implemented, the resulting price signal is unlikely to encourage citizens to switch to cleaner technologies and it would do nothing to address the real barriers to the zero carbon transition in the building and transport sectors. It therefore risks becoming a distraction from existing climate policies in those sectors, such as tighter CO2 standards or accelerated energy efficiency improvements, both at EU and national level.

By removing these sectors from the binding national climate targets in the Effort Sharing Regulation, national governments would no longer be incentivised to take national action to tackle decarbonisation of road transport and buildings, such as implementing fiscal measures, encouraging a modal shift, energy savings or building renovation. Finally, the social impacts risk to be negative if citizens were forced to pay higher prices for transport fuel and heating without having the possibility of choosing cleaner alternatives.

6. Include international maritime transport

There is a lack of progress at the global talks to tackle carbon pollution at the International Maritime Organisation (IMO), with emissions from this sector allowed to continue rising up to 2030 at least. The European Commission should therefore move forward on the basis of the European Parliament position from the shipping "monitoring, reporting and verification" (MRV) file to swiftly extend the EU ETS to international shipping.

The European Parliament position can and should already be taken forward before the EU ETS revision even starts. Important elements from the European Parliament position to be taken on board in any case are: full scope inclusion (both incoming and outgoing voyages), no free allocation for shipping, setting up of a sectoral fund to a.o. push and finance the zero-carbon transition of the sector and the complementary emission intensity target.

The sector has had years to prepare itself for ETS inclusion and has detailed data on its GHG emissions due to the EU MRV system. Moreover, research by Transport & Environment shows that the risk of carbon leakage is negligible. So there is no need to delay climate action through either a transition period or through free allocation to this sector.

7. Include waste incineration

Municipal Solid Waste (MSW) incinerators (with energy recovery) are used to burn waste that is then converted into usable heat, electricity or fuels through a variety of processes.
The EU ETS does not currently cover emissions from these incinerators, although they are highly emitting plants and their emissions have doubled in 2018, reaching 52,102kt fossil CO2.

The revision of the ETS Directive should bring Municipal waste (MSW) incinerators in the EU carbon market. This would make waste incineration subject to the carbon price signal and thus make this practice more expensive. It would encourage other more sustainable and low-carbon waste treatment options. Evidence shows that MSW incineration has a growing negative impact on the climate and that much of what is found in residual waste is either recyclable or compostable. The inclusion of incinerators in the EU ETS would encourage more material recovery and better waste management.

Recommended amendments to EU ETS Directive 2003/87/EC
Municipal Solid Waste incineration plants should be added to Annex I of the Directive

8. Bring all flights under the carbon market and end free allocation for airlines

In accordance to the existing "stop-the-clock" regulation, all flights departing and leaving from EU member states should be again covered by the EU ETS from 2024 at the latest. This is necessary given the failure of the international process at the UN aviation agency ICAO to produce a credible climate policy covering all CO2 emissions from the aviation sector. Free allocation of allowances to airlines should also end immediately as there is no risk of carbon leakage at current prices (see point 3 above). Finally, additional measures should be adopted to tackle the non-CO2 impacts of aviation, which multiply the warming impact of CO2 alone by a factor of three according to the European Aviation Safety Agency (EASA).

9. Exclude Carbon Dioxide Removal (CDR) credits

Some level of carbon dioxide removal (CDR) will be needed in the longer term to reach climate neutrality. However, this EU ETS revision should not be used to introduce any CDR-related units or offsets into the EU ETS. Decarbonisation is the climate priority and goal of the EU ETS. Too much focus on the CDR risks deterring mitigation efforts.

There is no equivalence between a removed emission, and a reduced emission. The CDR-related MRV systems are not yet mature - solutions for addressing permanence, life-cycle analysis and long-term liability for storage need to be developed before considering CDR under the EU climate policy framework. In this regard, we welcome the Commission's incipient work on the Carbon Removal Certification Mechanism. However, it should also not lead to accounting equivalence between reduced and removed emissions, nor should it lead to carbon removals being included under the ETS.

Regarding "carbon capture and use" (CCU), this practice can in most applications not be considered permanent storage, but rather delayed emissions. Therefore, CCU should continue to be excluded from the EU ETS.

10. Reinforce the Industrial Emission Directive by deleting ETS Article 26

Art. 26 of the EU ETS Directive served to amend the former IPPC Directive, now Industrial Emissions Directive (IED), so that installations included in Annex I of the EU ETS can be exempted from certain requirements dictated by the IED. More specifically, this article allows member states to exclude greenhouse gas emission limit values when issuing environmental permits - which are required for any industrial plant to operate - for industrial installations that are covered by the EU ETS. Moreover, it leaves to member states the option to not impose requirements related to energy efficiency on the same installations.

Because greenhouse gas emissions were excluded from the scope of the IED with the introduction of article 26 in the EU ETS directive, EU governments have not set limits on these emissions when issuing environmental permits under the IED. For the same reason, it is also optional for governments to set binding energy efficiency standards based on performance on those installations that are covered by the EU ETS.

These limitations are counter-productive and incompatible with the European Green Deal and the integrated approach of the IED to prevent pollution at source. They also provide little incentive to industries to invest in more environmentally friendly processes and move towards climate neutrality. In light of the urgent need to tackle the climate crisis, this oversight and shortcoming need to be corrected. The revision of the EU ETS is an opportunity to eliminate these limitations and start correcting both directives.

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