

THE COMMISSION PROPOSAL ON THE ETS REVIEW: A COOL-HEADED ASSESSMENT

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The Review of the EU ETS

This paper takes stock of ERCST activities in preparation of the 2021 ETS review and puts forward an analysis of the July 14 Commission proposal. The analysis covers the topics that have been at the core of the discussion leading to the publication of the proposal.

- The general ambition of the revised ETS, – including the new target, LRF, rebase and MSR parameters
- The new free allocation regime and its relationship with CBAM
- The new ETS for transport and buildings
- The new rules governing the use of ETS revenues.
- Flexibility

AMBITION

The impact assessment accompanying the Climate Target Plan (CTP) indicated that the ETS would have been even more at the very core of the EU emissions abatement efforts throughout 2030. The Commission proposal on the ETS review confirmed what had already been outlined in the CTP, stipulating that the ETS has to reduce their emissions faster than sectors covered by the Effort Sharing Regulation.

Under the most effective emissions reduction pathway, ETS sectors are indeed expected to deliver the bulk of emissions reduction through 2030, reducing their emissions by 61% when intra-EU maritime is included in the calculation. This translates in a relative contribution to total abatement efforts of sectors covered by the ETS equal to 56.5%, an increase compared to the 54% ETS share under the current Climate and Energy Framework.

The ETS has showed a gap between the cap and actual emissions of around 360 million allowances in 2020, which is expected to persist in the first part of the decade. The more ambitious complementary energy efficiency and renewable energy policies that will be implemented as part of the EU Green Deal will likely keep the emissions profile further below the ETS cap. This makes it ever the more important to tackle this surplus and bring the ETS cap in line with the revised 62% emissions reduction target.

To achieve this goal, the Commission proposed a combination of a higher linear reduction factor and a one-off reduction of the cap (rebase), both to be implemented the year following

the effective entry into force of the revised ETS directive. The necessary LRF to reach the 61% ETS 2030 target depends both on its starting year and on its starting level, which in turn is based on whether a one-off reduction of the cap is implemented or not.

Under the current proposal, the linear reduction factor is increased to 4.2%, up from the current 2.2%. The one-off reduction of the cap will be calculated so that “the new linear reduction factor has the same effect as if it would have applied from 2021”. In other words, the longer it will take for the directive to enter into force, the larger the cap rebase will be, with a potential bullish impact on the EUAs market.

Increasing the ambition of the cap must be done by carefully considering its impact on EUA prices. In this respect, ERCST has already stressed that it is of paramount importance to consider the dynamic interaction between the new MSR parameters and the new LRF, an eventual rebase and other EU overlapping climate policies.

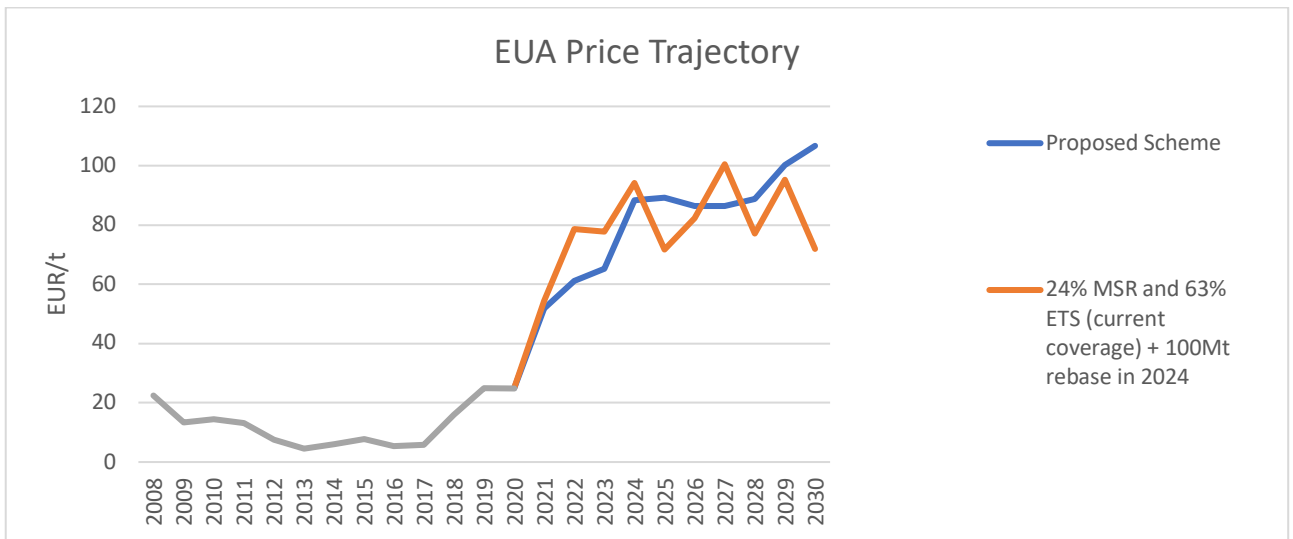
The ERCST and BNEF scenario analysis showed that under a 62% ETS target for 2030, a 12% MSR intake rate post 2024 guarantees a smoother trajectory of EUA prices compared to a 24% MSR, which generates instead several price spikes. Moreover, higher MSR intake rates amplify what is known as the MSR thresholds effect, which appears when the total number of allowances in circulation (the TNAC) is very close to the 833 million upper threshold triggering the intake of allowances in the MSR.

Under these conditions, one allowance more or less in the TNAC may trigger the full intake volume of 200 million allowances or nothing, depending on whether the TNAC is above or below the threshold. This uncertainty inherent in the functioning of the MSR creates price volatility on the market while also increasing the risk of potential market abuse. Considering the above, in past, ERCST proposed the establishment of a variable MSR intake rate based on the size of the market surplus and more frequent MSR reviews to cope with market uncertainties.

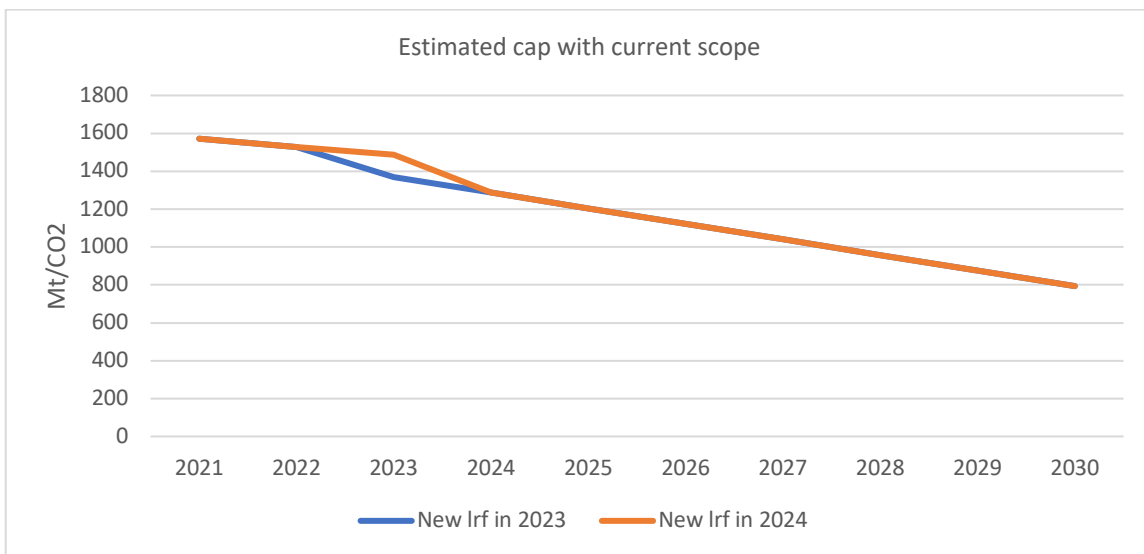
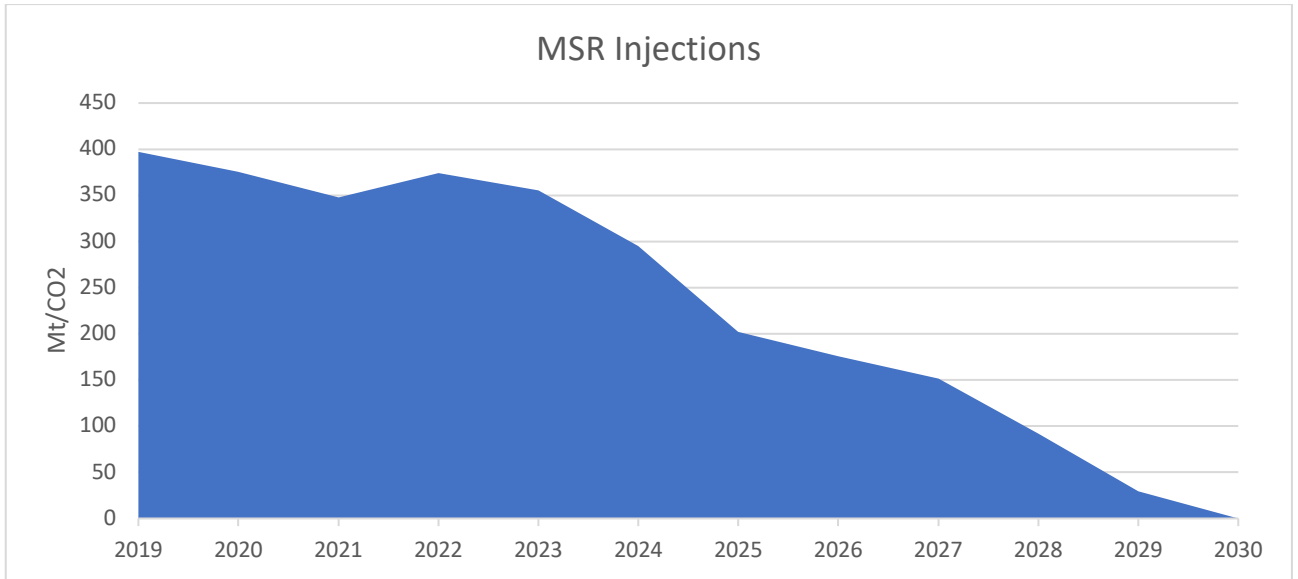
ERCST also warned that both changes should have been carefully calibrated, as they inevitably impact the predictability and the complexity of the mechanism.

The Commission aimed to strike a balance between the exigency of tackling the market surplus in a reasonable time and the predictability and complexity of the MSR. Under the proposal, the 24% MSR intake rate is maintained until 2030. At the same time, the risk of EUA price spikes and amplified discontinuities associated with larger MSR intake is mitigated by the introduction of the so-called *buffer intake rate*.

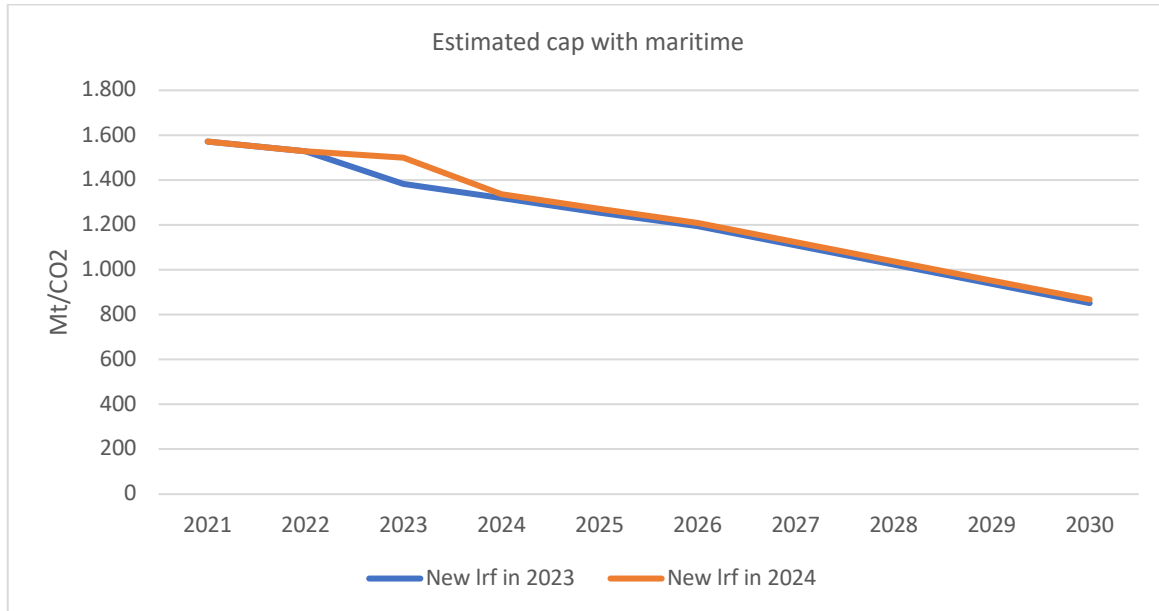
When TNAC is between 833 and 1096 million. In that case, the intake will be equal to the difference between the TNAC and the 833 thresholds. When TNAC > 1096, the normal 24% intake rate would apply, at least until 2030. This adjustment is in line with what the argument already advanced by ERCST that MSR intakes would better reflect market fundamentals if applied only to the number of allowances above a determined threshold.



Our price scenario indicates that the combination of changes in cap, linear reduction factor and MSR has a bullish impact on the market pre-2025 and bearish beyond 2025. We also notice that proposed parameters seem to guarantee a rather smooth upward carbon prices' trajectory over the trading phase despite the 24% MSR. This is probably due to the establishment of the buffer intake mechanism. In the graph the price trajectory is compared to a scenario where a 24% MSR with the old intake mechanism is coupled with a 63% ETS emissions reduction objective and a 100Mt rebase in 2024. The combination of these parameters would create several price spikes throughout phase 4. On the contrary, the price path is much smoother under the scheme proposed by the EU Commission.



Since the EU legislative process takes around two years, it is reasonable to expect the new LRF to become effective in 2023-24. We estimate that the implied LRF for 2024 would be 10.2% without the inclusion of maritime. A 4.2% linear reduction factor would amount to an annual reduction of 82.1 million metric tons of CO₂ (MtCO₂), the one-off rebase would be 117.3MtCO₂ were it to happen in 2024. That would mean a 61.8% reduction for ETS sectors would amount to a cap of 793.6 MtCO₂ in 2030 before maritime is added. In a scenario where the new linear reduction factor starts applying in 2023, the rebase would only have to be 78.2MtCO₂.



Including a gradual phase-in of the 79MtCO₂ from maritime, we estimate a cap of 851MtCO₂ by 2030 with a new lrf in 2023 and of 867MtCO₂ with a new lrf in 2024. After the total phase in of maritime, the cap would decline annually by 85MtCO₂.

ETS prices dynamics and their interaction with developments in the broader commodity market will have to be monitored very carefully. ETS prices have been on an upward trend since Q4 2020 and recently surging to €60 a ton, producing a knock-on effect on electricity prices, which also hit record highs, and heating the national political debate surrounding the EGD, especially in Poland and Spain.

Paradoxically, such all-time high EUA prices are failing to trigger the desired emission abatements. On the contrary, gas undersupply in Europe is making gas very expensive, offsetting the positive impact of rising EUA prices on gas competitiveness vis-à-vis coal and inducing utilities to use coal rather than gas to generate power. In the first quarter of 2021, high gas prices partially reverse coal-to-gas switching, with the carbon intensity of the EU power sector increasing by 9% year-on-year in Q1 2021¹.

While this situation may be temporary and the result of energy commodity markets dynamics, it nevertheless poses questions about the desirability of very high carbon prices and

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https://ec.europa.eu/energy/sites/default/files/quarterly_report_on_european_electricity_markets_q1_2021_final.pdf

associated compliance costs for regulated entities and end-consumers if these do not drive most polluting fuels out the grid.

Some observers are directly questioning the European Commission's estimates of carbon prices under the proposal, which estimates the price of EUAs between 50 and 80 euros. Particularly, the Commission would have underestimated allowances demand to hedge against future high prices.

Moreover, as increasing carbon prices affect inflation, which in turn drives commodity prices upward, financial actors might also want to buy allowances for hedging purposes. Changes in hedging behaviours under the ETS represents indeed a major unknown for the EU carbon market. Coal phase-outs and the parallel rise of renewable electricity generation are expected to decrease the need of hedging in the power sector.

At the same time, as higher carbon prices trigger industrial decarbonization, industrial hedging is slated to increase. How these two diverging trends will impact the market is difficult to predict. Moreover, increasing investors' participation in the market and the potential increase in speculative activities adds a further degree of uncertainty.

On closer inspection, very high prices are indeed to be associated with current contingencies in the commodities market. Moreover, current ETS price might not be an accurate reflection of the current policy environment connected to the EU Green Deal, but rather the result of incomplete information. Carbon pricing is only one - albeit very important - tool at the Commission's disposal to reach the -55% target by 2030. In fact, complementary non-price-based instruments, like command-and-control regulations or incentives to clean technologies represent an *implicit carbon price* than in turns lowers the necessary *explicit carbon price* necessary to achieve the EU emissions reduction goals. Once market actors will factor in the impact of those policies, the reasoning goes, this will be also reflected in ETS prices. However, it should be noted that while explicit carbon prices have the merit of ensuring transparency about the cost of the transition, other type of policies fail to provide the same information to society.

The inclusion of aviation allowances in the calculation of the Total Number of Allowances in Circulation (TNAC) – the reference value to trigger MSR intakes - significantly improves the effectiveness and the accuracy of the MSR in preserving the stability of the market. Aviation produces a net demand for allowances, which in turn reduces actual circulation. As demand for aviation allowances is slated to increase in the next years, MSR injection may fail to reflect supply/demand conditions if TNAC keeps excluding aviation allowances. Including aviation in

TNAC calculations allows for MSR intake to be more accurately based on the actual surplus on the market.

The cancellation mechanism starting in 2023 marks a significant departure from the MSR initial design and purpose. The MSR, in its conception, is not supposed to affect the overall cap. The Commission's proposal does not abolish the invalidation rule but makes it more predictable. Under current rules, as of 2023, allowances in MSR above the level of auction volumes of the previous year are invalidated. This level depends however on a number of elements, such as the cap and MSR operations. The Commission proposed instead to limit the number of allowances in the reserve at a level of 400 million allowances, which is also the lower threshold for the value of the TNAC, below which allowances are released from the MSR.

FREE ALLOCATION AND CBAM

More stringent policies and a tighter cap increase the pressure on industry to tackle its own emissions and increase the risk of carbon leakage. Against this backdrop, the Commission faced the complex task of preserving the international competitiveness of the EU manufacturing sector while also incentivizing its decarbonization, so as to enhance the climate ambitions of the EU.

A carbon adjustment mechanism at the border is the solution proposed by the Commission to protect EU industry from competition by companies based in jurisdictions with less ambitious climate policies. Sectors covered by CBAM – iron & steel, aluminium, cement, certain fertilizers, and electricity – would have a 10-year transition period to adapt to the new regime before free allocation is fully phased-out. Free allocation for this sectors would decline by 10% yearly, starting in 2026, and would be zero by 2035.

The Commission proposal strikes a balance between the need to gradually reduce free allocation in view of the -55% and net zero targets, and the parallel necessity of allowing industry to adapt to the new system. Moreover, the legal, political, and operational challenges that CBAM will likely face all suggest that a transition period should be established so as to allow for a gradual phase in until the new mechanism will be fully operational.

Businesses' main concern regarding CBAM relate to the absence of export rebates in the proposal, which would harm the competitiveness of EU industry in global markets vis-à-vis international competitors. The Commission has maintained that export rebates – including rebates or exemptions for domestic exporters – under the EU CBAM would significantly increase the risk of non-compliance with WTO rules.

To pass the WTO test, the General Agreement on Tariffs and Trade (GATT) mandates that the CBAM not discriminate between domestic and foreign suppliers as well as between foreign suppliers. Also, under international trade law, the ETS is likely to be considered a regulation rather than a tax.

The Agreement on Subsidies and Countervailing Measures (ASCM) does not allow for export rebates of regulatory costs, underpinning the hypothesis that export rebates would be considered illegal, not least because of the methodological challenges involved. Moreover, rebates also risk undermining the justification of the CBAM as an environmental measure under the exceptions set out in Article XX of the GATT.

However, some EU industrial stakeholders claim that, if well-designed, rebates could actually pass the WTO test, and rely on recent legal opinions that support this argument. Against that backdrop, it seems likely rebates will be one of the most contentious points during the coming political dialogue on CBAM.

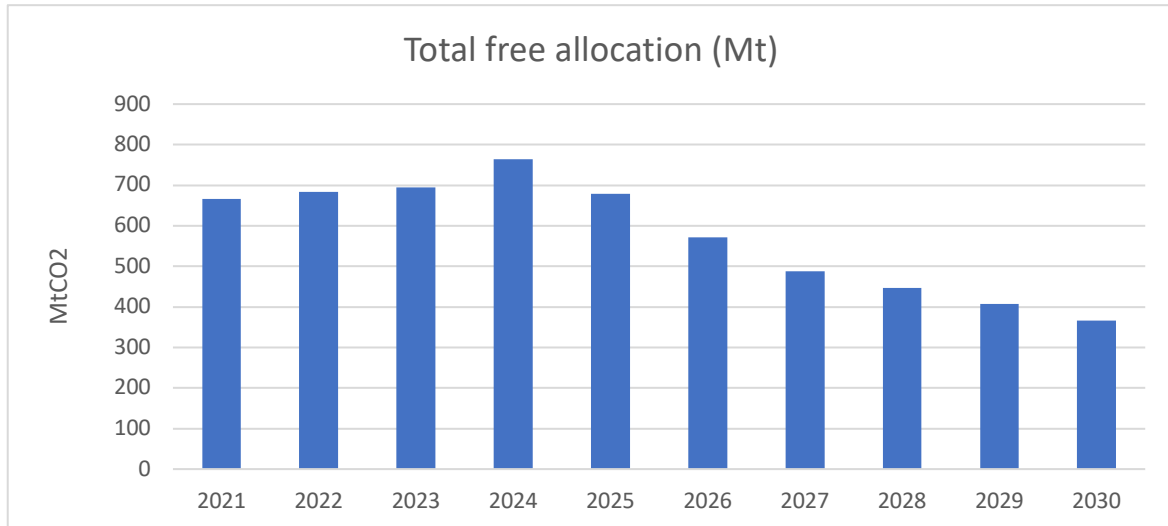
Benchmark values are also modified in the proposal. The increase of the maximum update rate of benchmarks to 2.5% as of 2026, up from current 1.6% for sectors with higher innovation uptake is meant to ensure better targeting of free allocation as well as to reflect innovation and technological progress more promptly. At the same time, this would help avoid the application of the cross sectoral correction factor, thus ensuring a fairer and more transparent distribution of free allocation.

Free Allocation is also made conditional on decarbonisation efforts, to incentivize the uptake of low-carbon technologies. Installations covered by energy audit obligation will be required to implement report recommendation or demonstrate the implementation of other measures leading to equivalent GHG reduction, otherwise free allocation will be reduced by 25%.

ETS benchmarks have also been accused of favouring incumbent carbon intensive installation at the expense of low carbon competitors, by granting more allowances to high carbon production methods and disincentivizing the switch to low or zero carbon processes, as it could imply falling outside of the ETS and give up on free allocation in its entirety. The Commission proposal introduces a number of features that address the flaws of the current benchmarking approach.

- Installations stay in the ETS where they reduce the total capacity of their combustions units to reduce GHG emissions (i.e. through electrification)

- The definition of activities is made technology neutral, eliminating references to fossil fuels or specific production processes
- Reference is made to production rather than combustion capacities
- Benchmark definition are reviews to ensure equal treatment of installations, independent on the technology used (to be done before 2026).



		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
CSCF	AFTER	100%	100%	100%	100%	91%	83%	79%	75%	70%	64%
FLEXIBILITY	SHARE (%)										

Our estimate for free allocation reflects the base case scenario, where the new LRF and the one-off are both applied in 2024 and free allocation for CBAM sectors is phased out by 10% each year starting in 2026. Projections show that the total amount of free allocation slowly increases until 2024 before starting to constantly decrease until the end of the trading period. However, our projections shows an earlier triggering of the CSCF compared to the Commission’s estimates. In our analysis, the CSCF is applied as of 2025, reducing free allocation by 9% in 2025 and up to 36% in 2030.

A final mention should be made on indirect cost compensation. Since electricity prices are set at the margin and the EUA price continues to increase it should be noted that indirect costs compensation is a growing source of demand for the use of revenues from the EU ETS. However, again, the proposal fails to introduce a harmonized EU approach for indirect costs compensation.

ETS FOR TRANSPORT AND BUILDINGS

In the Green Deal Communication, the EU Commission claimed that a number of factors, such as the slow pace of decarbonisation in the road transport and building sectors, the efficiency gains inherent from a larger ETS market, and the need to preserve the liquidity of the EU carbon market as the cap gets tighter, makes it desirable to extend the ETS coverage to these two sectors.

While a cap-and-trade system guarantees considerable efficiency gains over other command and control regulations, there are risks associated with this policy choice. These risks are associated with the presence of market failures and non-price barriers to investments in energy efficiency improvements, as well as the low-price elasticity of energy demand in these sectors and the high upfront costs of substantial emissions abatement options.

These elements suggest that the inclusion of these sectors into the current ETS would exert a dramatic upward pressure on EUA prices while probably failing to deliver the desired emissions abatement in these two sectors. The outcome may be that the traditional ETS sectors would be destabilized, and poorer households would be disproportionately affected.

The Commission proposal takes these concerns into account. To prevent a destabilization of the current ETS by introducing sectors with widely different abatement potentials, a separate ETS – without free allocated allowances and with its own cap, LRF, and MSR is established for road transport and buildings in 2025, with compliance obligations starting in 2026. The cap of the new ETS will be set from 2026, alongside a linear reduction factor in line with a 45% emissions reduction in these sectors by 2030 compared to 2005.

Moreover, to prevent very high carbon prices, prevent volatility and address the low-price elasticity of these sectors, a cost containment mechanism is put in place. Under this mechanism, the MSR for this separate ETS will release additional allowances – 50 mln or 150 mln - based on the average price level of allowances over a three-month period.

Due to the large number of small emitters in the sectors of buildings and road transport and exigencies of technical feasibility and administrative efficiency, the point of regulation for this parallel ETS is established further upstream in the supply chain rather than with emitters like in the traditional ETS.

The EU will also set up a Climate Action Social Fund to “address social impacts of the extension of emissions trading to road transport and buildings”. The fund will be financed by the EU budget, using an amount equivalent to 25% of the expected revenues of emissions trading for building and road transport fuels.

USE OF REVENUES

In light of the increasing needs for low and zero carbon investments as well as the exigencies to support the most vulnerable households throughout the transition, the Commission proposes to increase the share of auction revenues that Member States are required to spend on climate-related purposes from the current 50% to 100%.

This is a significant increase, even when we consider the fact that member states in the last years have assigned around 78% of the auction revenues to climate purposes. The proposal is in that line with what ERCST advocated for in a paper on ETS funding mechanism. To mitigate potential regressive impact of the transition, ERCST also supports the introduction of a minimum threshold of 20% of auctioning revenues to be spent by Member States to address social aspects in low- and middle-income households. Such amendment is however absent in the Commission proposal.

Modernisation Fund

The Commission proposal provides for an additional 2.5% of the cap to be auctioned to finance the transition in MSs with GDP per capita below 65% of the EU average in 2016-18 through the Modernisation Fund. This increase is welcomed but most likely insufficient to support the necessary energy investment in eligible member states. The modernisation fund was initially designed to cover between 3-9% of the additional investment needs associated with the 2030 climate and energy framework, estimated in 2014 at € 8.4 billion per year to implement a 40% emissions reduction target. To meet the EGD 55% target, the Commission estimates 300 bn Euros per year of additional investments, thus highlighting the need to improve the scale of the instrument.

Under the proposal, the Commission also intends to prevent the financing of investments in any fossil fuel through Modernisation Fund resources – instead of only solid fossil fuels as it is currently stipulated. This means, for example, that it would no longer be possible to use Modernisation Fund resources to finance investments in coal-to-gas fuel switching projects. This raises questions about what type of emission pathway the Commission imagines towards net zero and whether there is any room for graduality.

Innovation Fund

The first calls for proposals for the Innovation Fund have manifested the mismatch between the resources put at its disposal and EU project developers' funding needs. In fact, while resources available amounted to €1.1 billion, applications submitted requested a total of €22.7 billion. At current market prices, the Innovation Fund would provide around €18 billion

over the entire Phase 4, an amount not sufficient to cover even what requested in the first call.

Under the Commission proposal, the size of the Innovation Fund would also increase. 50 mln allowances are added to the Fund. Additional 150 mln allowances would come from the separate ETS. The Commission proposes that member states must use 100% auction revenues for climate-related purposes, including low-income households' sustainable renovation. This would be a significant increase from both the current requirement to spend at least 50% on these purposes, and the 78% average expenditure that countries have recorded since 2013.

ETS for road transport and buildings. Moreover, the proposal also establishes that free allocation no longer provided to CBAM sectors will be auctioned, with revenue accruing to the Innovation Fund. The scope of the Innovation Fund would also be extended, to allow for the support of project via carbon contracts for difference.

FLEXIBILITY

As the EU increases its climate ambitions and the ETS cap rapidly decreases, consideration should be given to providing installations with the flexibility to comply with their ETS obligations, both to preserve liquidity as well as to facilitate compliance for energy intensive industries.

The Commission proposal recognizes the potential of CCUS technologies. While in the current ETS an obligation to surrender allowances does not arise for GHG which are considered to have been permanently stored, the Commission proposes to also consider emissions that are utilised to become permanently chemically bound in a product, thus opening for the possibility for projects aiming at recycling CO₂ to make other products of value². The proposal, however, does not allow for the generation of *additional* allowances (or other units used to comply with EU ETS obligations) through the storage of CO₂ (especially from direct air capture).

The current revision presents the opportunity to allow for the creation of compliance units in the EU ETS through the storage of CO₂ from direct air capture. This will provide one incentive to do direct air capture as well as to create storage capacity.

² <https://ec.europa.eu/research-and-innovation/en/horizon-magazine/how-carbon-intensive-industries-can-scale-co2-recycling>

While not directly connected to the EU ETS this can be complemented through additional obligations, such as a Carbon Storage Obligations (CSO) for distributors of fuels with embedded carbon, i.e. a mandate to geologically store a defined fraction of the carbon imbedded in the they supply. CSO would be satisfied by submitting Carbon Storage Unit (CSU), which are created when a tonne of CO₂ is permanently stored in the geologically. These obligations would run in parallel and create complementary flow of funds for storing CO₂.