Key analytical conclusions
A combination of elements from the European Parliament and Council ETS positions, if maintained in trialogues, would leave the Emissions Trading System in better shape - though still with further to go to guarantee cost-effective emissions reductions.

- Particularly positive would be the Council position on annual cancellation from the Market Stability Reserve (MSR), especially combined with doubling the MSR withdrawal rate. These changes would initially increase the speed with which the MSR takes allowances from the market during Phase 4 (up to 2030), supporting an increased carbon price. Under base emissions the reform theoretically removes the surplus on the market by the early 2030s, but in reality this outcome isn’t certain; it will depend on the level of actual emissions.

- Cancellation of allowances by Member States, as proposed by Parliament, would also be a positive step, giving MSs the flexibility and national autonomy to respond to closures of coal plants and other changes to the system; though it is hard to assess accurately the likely level of benefit.

- However, these changes are only part of the solution. With a current surplus in circulation of 1.7Bn tonnes in the EU ETS, we still forecast a surplus available to the market of over 900Mt in 2025. And in a “low emissions” scenario (e.g. if coal plants close more quickly than expected) the reforms will not remove the surplus on the market by the end of Phase 4, carrying a surplus of over 2Bt into the 2030s.

- No amendments currently on the table address the impact on the market surplus of overlapping policies for power sector emission reductions, despite the potentially large cancellation of allowances stored in the MSR. We therefore believe that the withdrawal rate of the MSR should be increased beyond 24% for the whole period 2021-2030.

- Most importantly, the changes would represent only a temporary fix to a structural problem, which requires a structural response. The disconnect between the cap and real emissions is the main reason why the EU ETS is not delivering its intended price signal, failing to drive the emission cuts taking place.

We continue to believe that the best solution is to remove surplus from the market quickly by rebasing the cap to the real-world level of emissions. The European institutions have correctly decided to link the Effort Sharing Regulation to real emissions; the same should be done for the ETS. It’s a simple question of taking stock: we can’t expect the EU to land in 2040 using emissions estimates from 2007, and this exercise will have to be done periodically.
The need to plan for uncertain future emissions reductions

Emissions in the EU ETS sectors are very likely to remain below the cap throughout the 2020s. However, for the most part these emissions reductions have been driven by other policies (e.g. on renewables support) rather than by the ETS itself. Sandbag welcomes progress on emissions reductions in the power sector particularly; but the ETS needs to play a role in driving continued reductions across the European industrial economy.

Our forecasts are consistent with other analysts’ (see graph below), and many likely scenarios would lead to our base or low case outcomes. Take, for example, a scenario assuming coal shutdown in 2030 (noting that in 2015 ETS, 42% of ETS emissions were from coal generation). Replacing all the coal capacity with gas would deliver Sandbag’s base case; replacing it all with renewables would deliver our low case. If we assume only 50% of coal is shut down but it is replaced 100% by renewables, we would still end up in our base case. Fundamentally, there remains a high element of uncertainty to any long-term forecast, so the EU ETS needs to remain robust to all scenarios.

![Figure 1 Emissions projections and cap](image-url)
The impact on prices would be moderate

Sandbag has estimated the relative impact on price trajectories of the different reform elements, based on their effect on the surplus in circulation (excluding those in the MSR). The Council proposal will barely affect the market surplus in the period to 2030. Doubling the MSR withdrawal rate will initially reduce the surplus more quickly, but by the end of the period we are in substantially the same situation (42 M tonnes difference in 2030). Cancellation from the MSR will only affect prices to the extent that it limits the volumes returned by the MSR operation. However, there is no expectation that the MSR starts returning volumes during Phase 4, so any price effect of cancellation will not be felt before the early 2030s. Apart from market fundamentals, sentiment can also affect prices; but, given the limited time horizons taken by traders, we do not expect sentiment alone to translate into a sustained price rise as a consequence of current reforms.

The price trajectory chart below should be considered from the point view of the relative difference of price effects of the different options that affect the surplus on the market, not the absolute numbers. Carbon price forecasts (and even indicative trajectories) from a range of sources, however robust, have a history of being inaccurate. The Sandbag numbers reflect the expectation that a market clearing price of 30 Euros would be the cost-effective price for fuel switching in the ETS.

Figure 2 Indicative price trajectories
None of the current proposals provides a guarantee that the ETS itself will become a driver of emissions reductions.

**European Council General Approach**

Position includes:

+ MSR doubled over first five years from 12% to 24%
+ MSR annual cancellation from 2024 onwards, equivalent to the previous year auctions.
- Carryover of significant volume of allowances from Phase 3 instead of placing them in the MSR

As shown in the graph below, the cumulative surplus remaining in 2030 (under our base case) would be significantly reduced if the first two of these proposals were implemented, which is why we support them. However, if emissions fell faster, as under our low case, we would still end in Phase 4 with a surplus in circulation of over 2Bn tonnes.

Most importantly, however, this package introduces a mechanism by which the size of the annual cancellation is dependent on the amount of allowances auctioned the year before. This means that indirectly, the surplus will be linked to changes in real emission levels. While this is not the direct response we would have like to see, it is a great step towards establishing a mechanism that allows for the EU ETS cap to respond to developments in other policy areas, or, in other words, to respond to changes in emission levels, occurring as a result of positive overlapping of policies.

Cancellation from the MSR is a positive step, but would not affect the surplus on the market until at least the early 2030s (under base case scenario) or until at least the early 2040s (under low emissions scenario).

*Figure 3 Council General Approach proposal - effect on MSR and surplus under base emissions scenario*

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1 Up to 470Mt for the New Entrants Reserve & Innovation support
**European Parliament position**

Key differences from Council position:

- MSR cancellation is a one-off 800Mt rather than a responsive annual cancellation.
- Member States annual cancellation (impossible to foresee impact, likely insignificant).
- Potential LRF increase to 2.4% in 2024 as a part of post-Paris review, so overall a 2.3% LRF for the whole decade, an increase of a 0.1%.

This important difference in the MSR cancellation means that it will only make an impact in the 2050s. The MSR will contain over 3Bt, so at a rate of release of 100Mt/yr, this means releasing volumes for the next 30 years or more, decades after 2050, when the EU economy is supposed to have decarbonised by 80-95%.

**Figure 4 MSR volumes in 2030 by decade of return under the EP position, under a base case emissions scenario**

The impact of the LRF change is insignificant, resulting in a surplus reduction of 242 million tonnes. The post-Paris review should bring a thorough assessment of how much the LRF should be increased to match the post-Paris cost-effective trajectory.

The EU institutions should support these elements from both positions, further strengthen them to improve their robustness for all emission scenarios, and look to adopt rebasing as lasting method for creating a carbon market that drives cost-effective emissions reductions.

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