

Structural Supply Side Management in the EU ETS

Reviewing the market stability reserve

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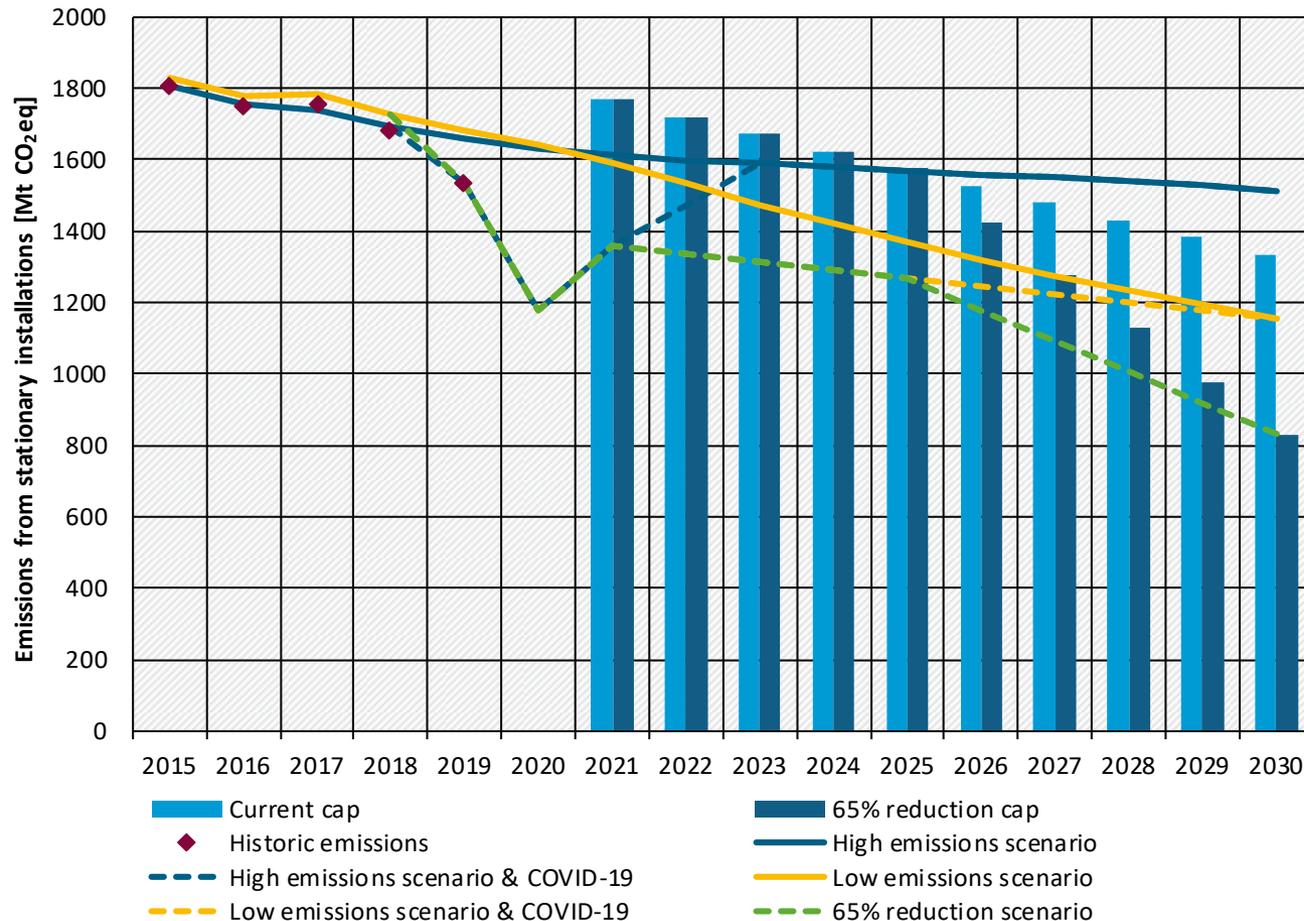


Structural Supply Side Management in the EU ETS

Reviewing the Market Stability Reserve

- Study by DIW & Öko-Institut, commissioned by DEHSt
- Objectives
 - Assess the operation of the MSR under different emission developments
 - Develop recommendations for the review of the MSR
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Is the MSR ,future proof‘?



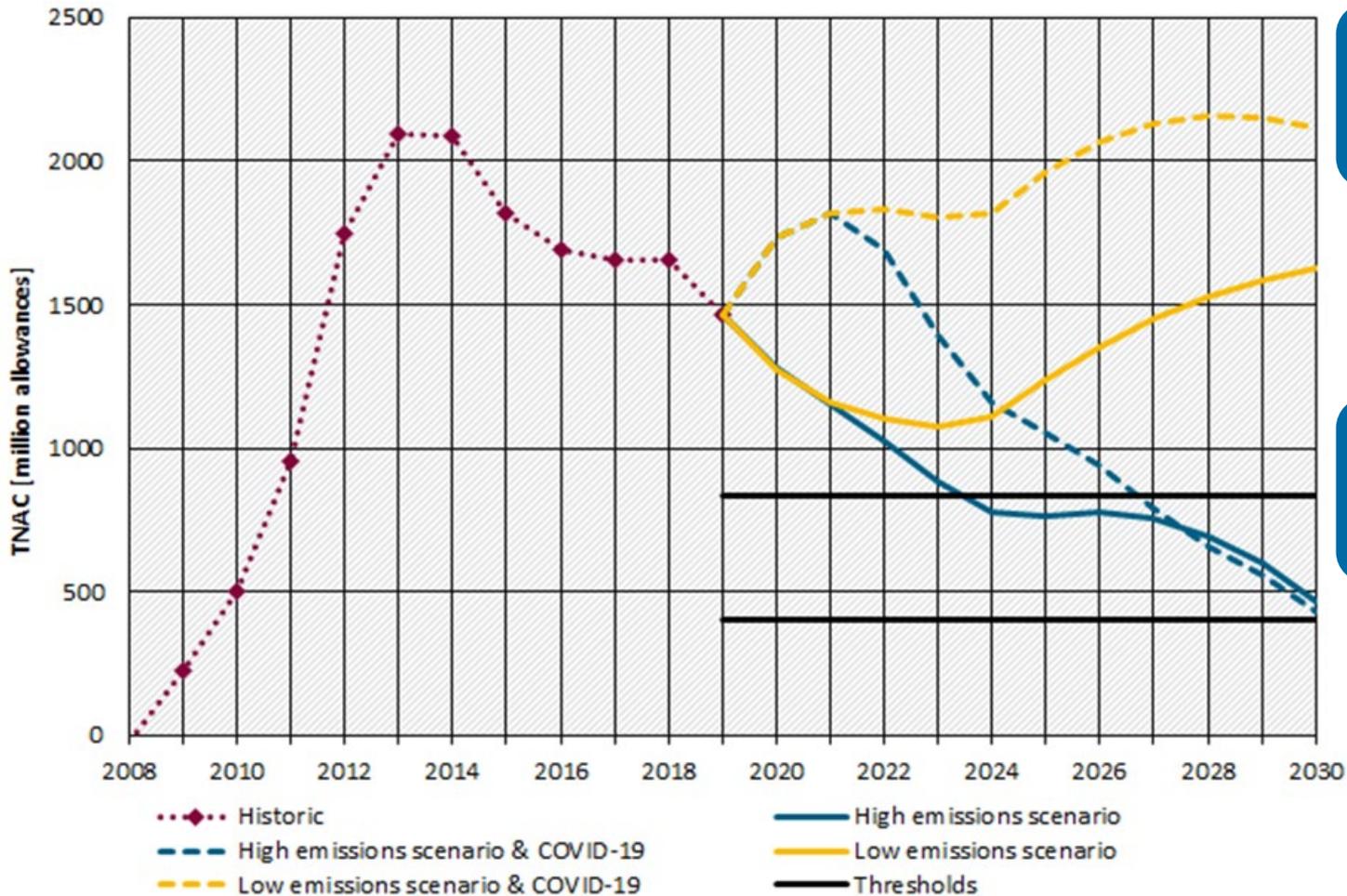
Answer depends largely on the emission trajectory assumed in comparison to the cap.

→ We test all recommendations against a high and a low emission scenario.

Current MSR rules

- The current MSR is rule based and activated by quantity based triggers.
- If the total number of allowances in circulation (TNAC) exceeds 833 million allowances, the auction quantity is reduced by 24% in the next year (12% from 2024 onwards).
- If the TNAC drops below 400 million allowances, then the auctioning quantity in the subsequent year is increased by 200 million EUAs (100 m EUAs from 2024 onwards).
- From 2023 onwards all allowances in the MSR exceeding the auctioning amounts in the previous year will be invalidated.
- Member States may voluntary cancel a certain amount of allowances to reflect power plant closures.

Development of the TNAC under different emission scenarios (current MSR rules, current cap)



Emissions constantly below the cap

Emissions comparable to cap levels

Is the MSR as it currently stands future-proof?

- The MSR can absorb excess allowances in the case of unforeseen shocks – such as the Covid-pandemic or the economic crises. However, it will take several years to neutralize the allowance surplus due to the Covid-19-effect.
- ETS emissions have declined more than anticipated when the cap was set. The MSR in its current parametrization is not able to balance the market in a situation of structural oversupply.
- We conclude that the MSR need to be reviewed in order to be able to stabilize the allowance market in the new trading period.

How can the MSR be improved

Goal:

- Recommend design options that enable the MSR to absorb an oversupply in the market quickly and also in the event of structural surplus.

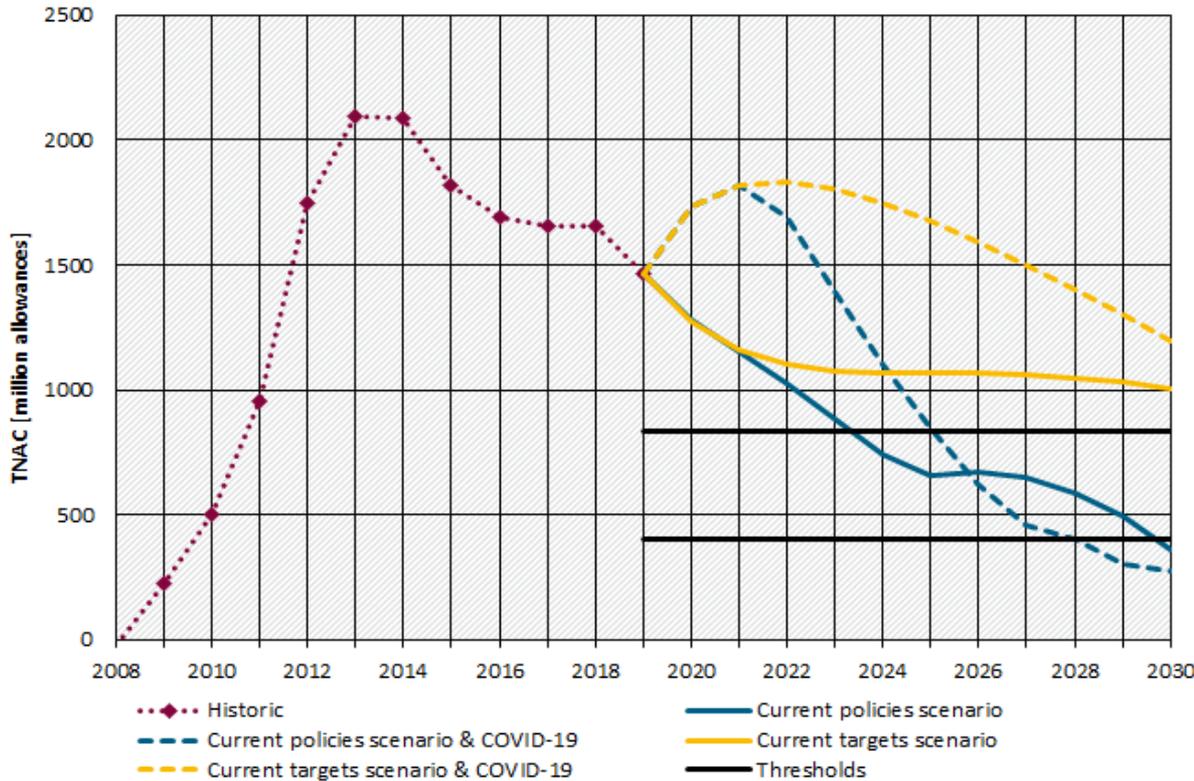
Parameters assessed:

- Intake and release rate
- Thresholds that trigger the MSR
- Speed of MSR response

Further design element

- Voluntary cancellation

Strengthening the MSR: Increased intake rate – 24% until 2030



Intake rate of 24% is just enough to prevent a new surplus from building up in the low emissions scenario.

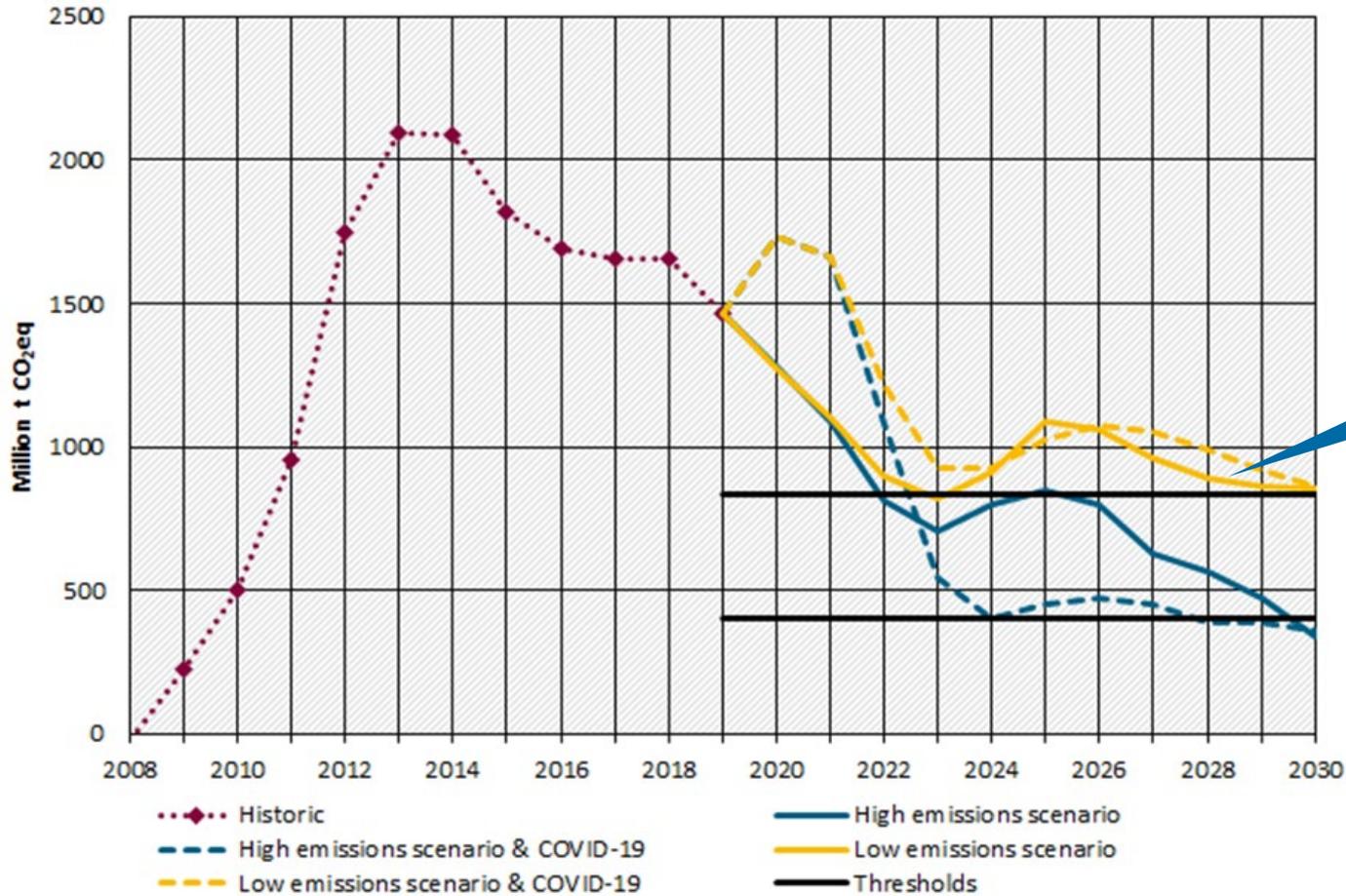
It is insufficient to reduce the surplus which has already accumulated in the market or cope with the impact of the Covid-19 pandemic.

Strengthening the MSR: Increased intake rate

Alternative design options are needed that absorb more allowances when the TNAC is especially high.

- 24% continued until 2030; if TNAC > emissions intake increases to 36%
- Proportional: $12\% \cdot \frac{TNAC}{lower\ threshold}$
- All allowances exceeding the upper threshold are moved to the MSR
- The effect is only activated in case of large oversupply in the market → is does not harm.
- Proportional approach scores best in terms of its ability to keep the TNAC close to the upper threshold level.

Increased intake rate: Proportional intake rate



Able to keep the TNAC close to upper threshold

Strengthening the MSR: Thresholds that trigger the MSR

- The threshold that activate the MSR were set in way to ensure liquidity in the market estimating the hedging demand (especially of the power sector not receiving free allocation).
- Thresholds have remained unchanged even though:
 - The cap declines
 - Emissions decline and thus the volume required for hedging
- Keeping the ratio cap to threshold constant simple way to reflect decreased hedging demand over time.
- When the cap is updated, the thresholds would follow automatically.

Strengthening the MSR: Faster response

- The MSR is slow in reacting to changes in market outcomes.
- The speed of the MSR's response can be increased by **compressing the reaction period**. However, speed gains from changes to the auction calendar are limited.
- **A floor price** would increase the speed (unauctioned allowances being transferred to the MSR immediately). It would also increase policy certainty and therefore providing stable investment incentives for market participants.
- However, a price floor introduced in addition to the MSR's quantity triggers would also further increase the complexity of the EU ETS and potentially make it more difficult to predict MSR behavior and the development of TNAC.
- Setting the floor price is expected to be highly political.

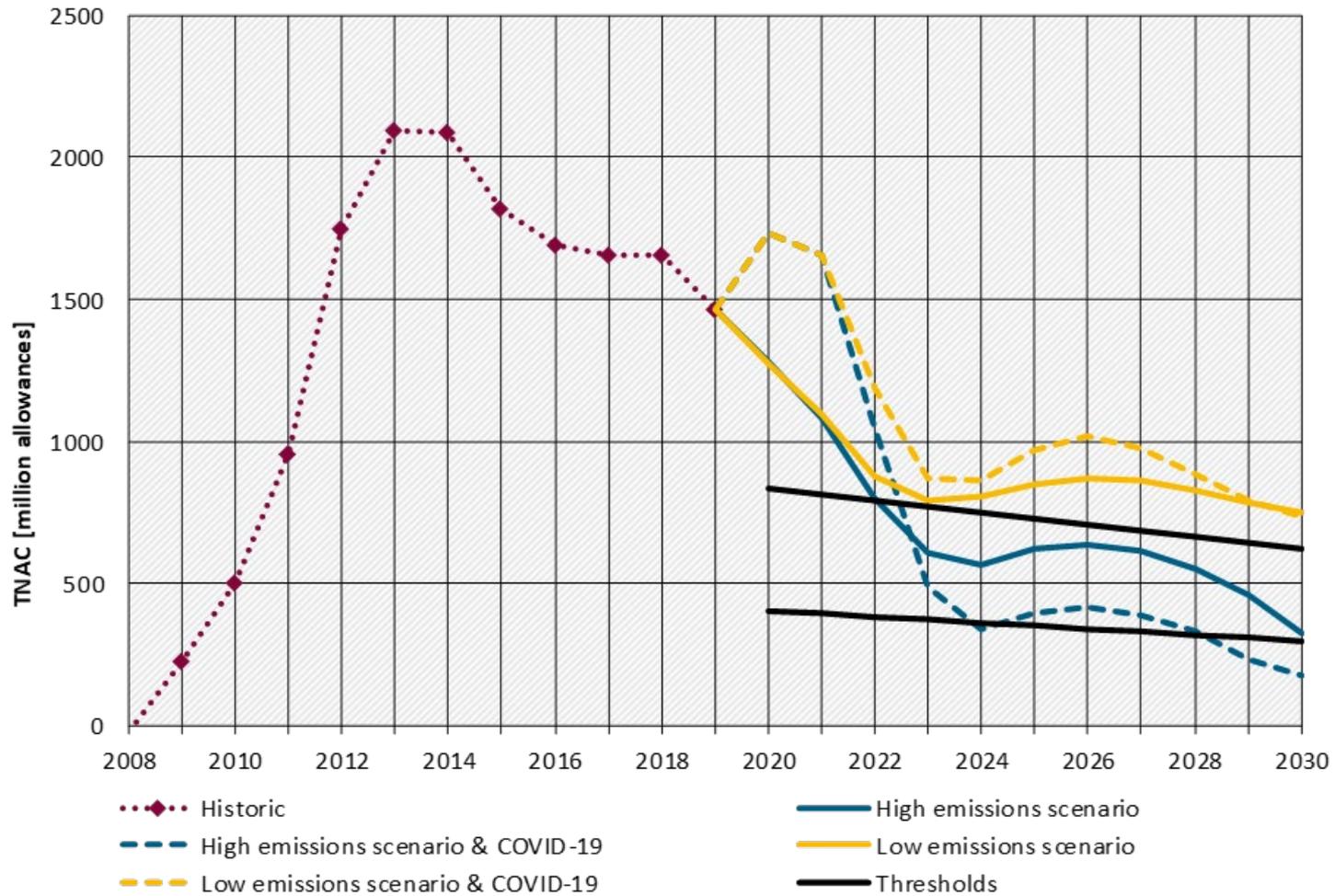
Further design element: Voluntary cancellation

- The MSR is partially effective at puncturing the waterbed for a limited time through its invalidation mechanism. Voluntary cancellation of allowances supplements the MSR and member states should make use of it.
- The effectiveness of voluntary cancellation is diminished in the presence of the MSR and vice versa, because voluntary cancellations reduce the TNAC and, hence, cancellations by the MSR.
- Voluntary cancellations should be developed further to increase their effectiveness. We recommend introducing a simple EU-wide rule-based cancellation policy based on a simple approach in order to limit administrative burden and uncertainty for market participants.

Key messages

- Current configuration of MSR
 - able to compensate for COVID-19 shock in high emission scenario, but not able to cope with long-term structural surplus
- Strong MSR as a safeguard against future shocks essential – also when the cap ambition is increased.
- Increasing intake rate is no-brainer
 - short markets: very limited impact vs current rules (MSR inactive)
 - Long markets: Ensures stabilising effect of MSR
 - Proportional intake rate most robust in all scenarios assessed
- Thresholds need to reflect lower emissions/targets
- Faster intake speed can help contain TNAC, especially for shocks
- Voluntary cancellation should be developed further

Reform package future proof MSR



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