



The EU ETS in phase 4

An analyst reflection

18th Annual IEA-IETA-EPRI GHG Emission Trading Workshop

Session 6: EU ETS in phase 4

07 November 2018, Paris

ICIS

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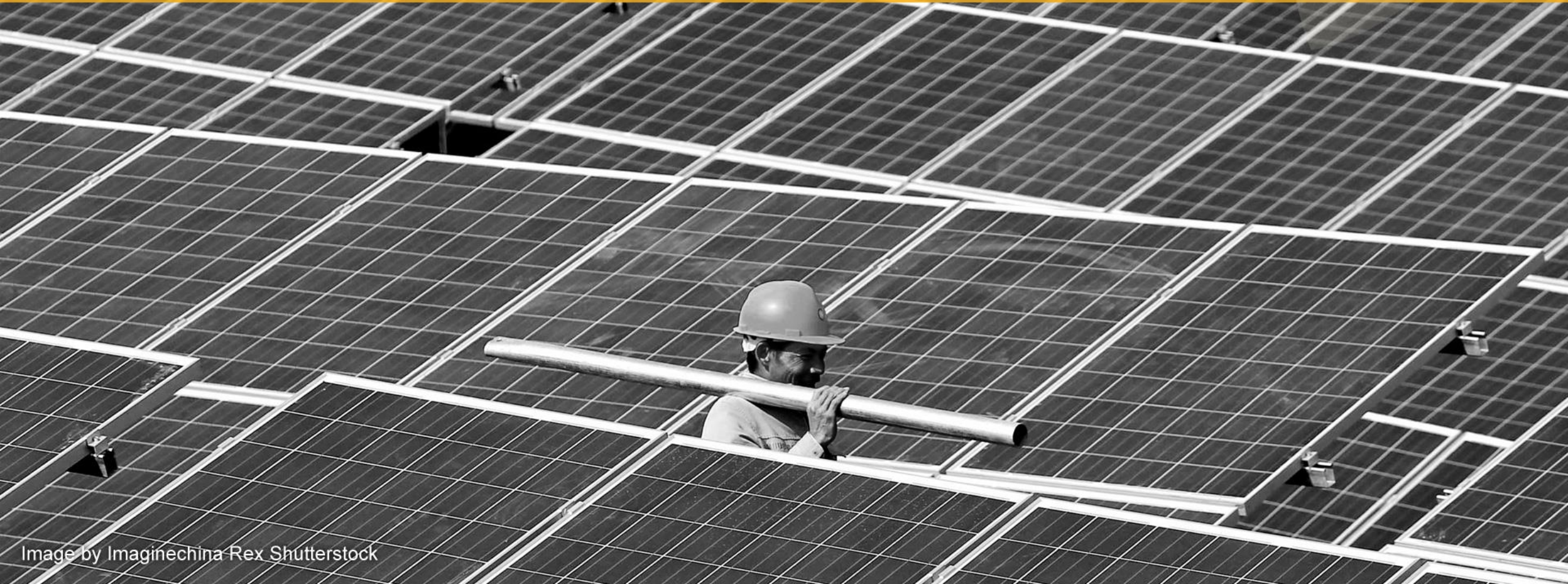


Agenda

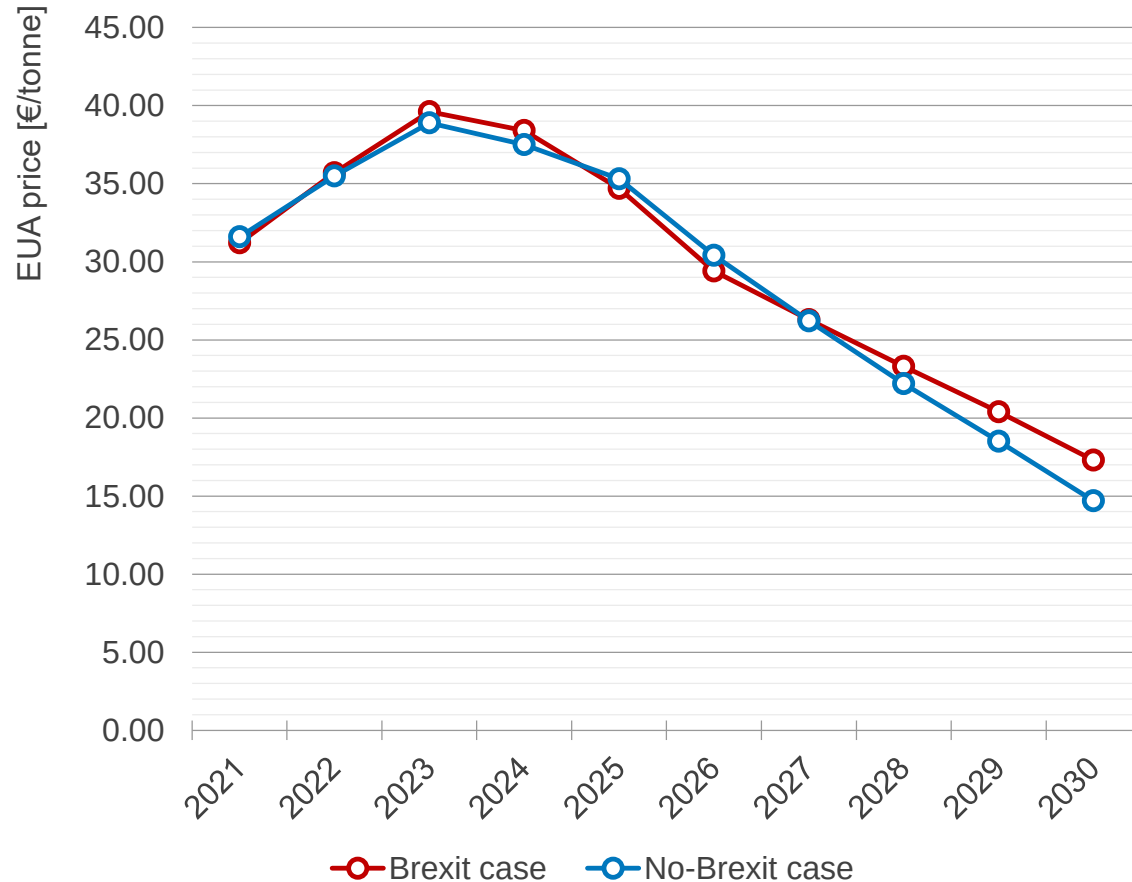
- 1) Brexit – UK installations and the market impact
- 2) Market Stability Reserve – room for review
- 3) Coal phase-out – implications for the the market stability reserve



Brexit and its implications for the EU ETS



Brexit: Short- and long-term EUA price risk



Source: ICIS

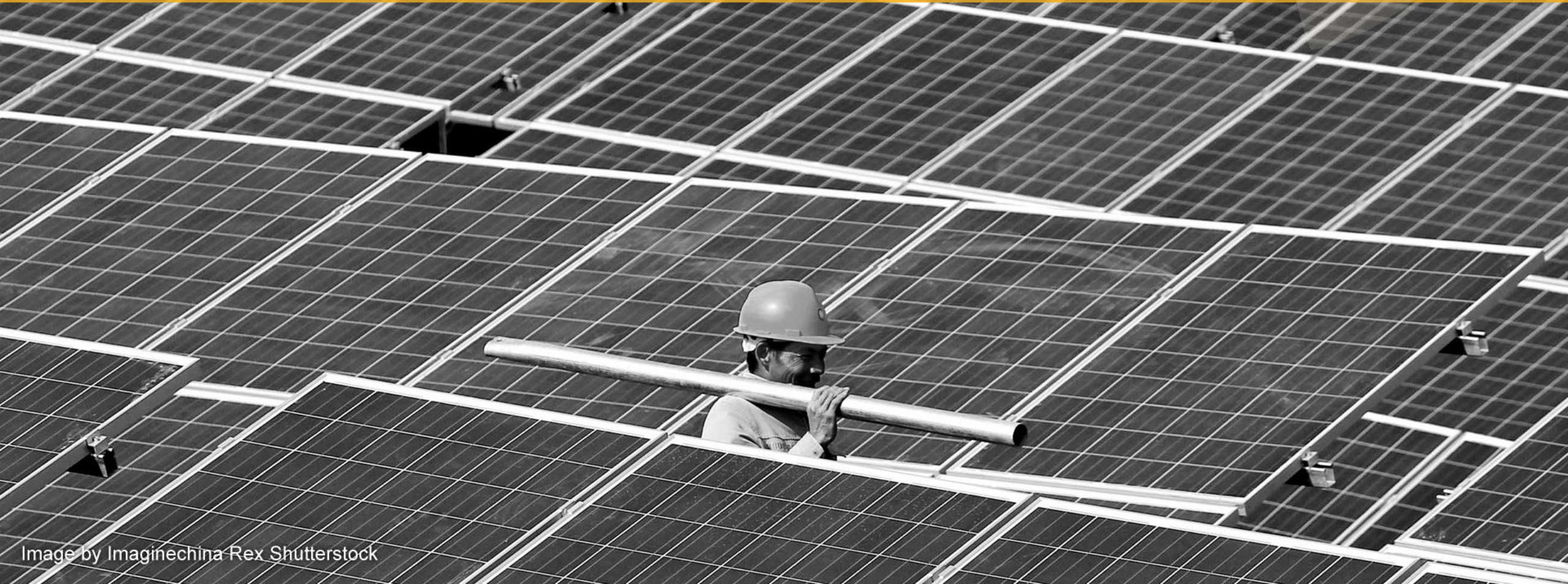
Short-term:

- UK utilities expected to reduce total hedging (in EUAs) from ~100m in 2017 to ~35m in 2030
- UK utilities end 2018 locked-in: 85m EUAs for 2019/20 of which we expect 25-30m coming to market
- Industrials to add another ~30m Brexit-related supply
- Bearish risk approx €1/t-€2/t if released Q1 2019

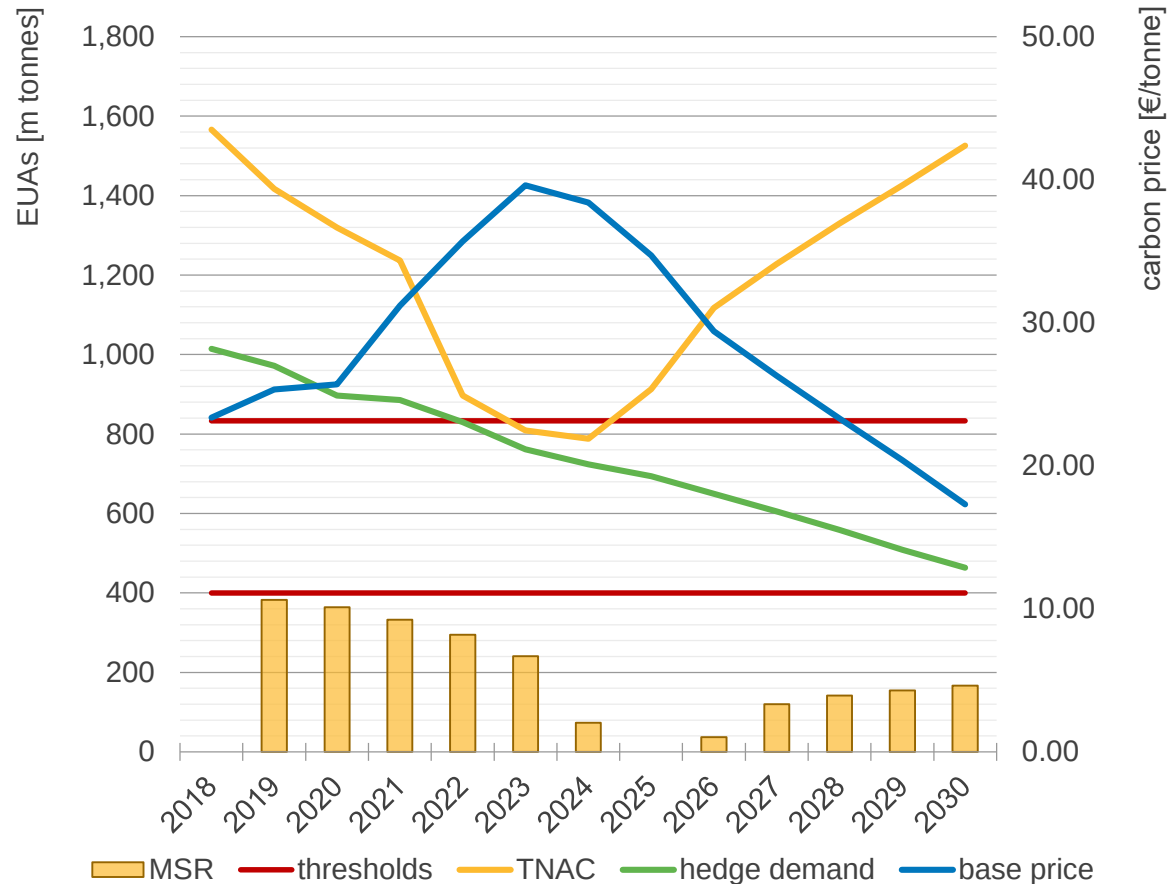
Long-term

- Net long position removed from the market
- But – implications for parameters like MSR

The market stability reserve – room for review



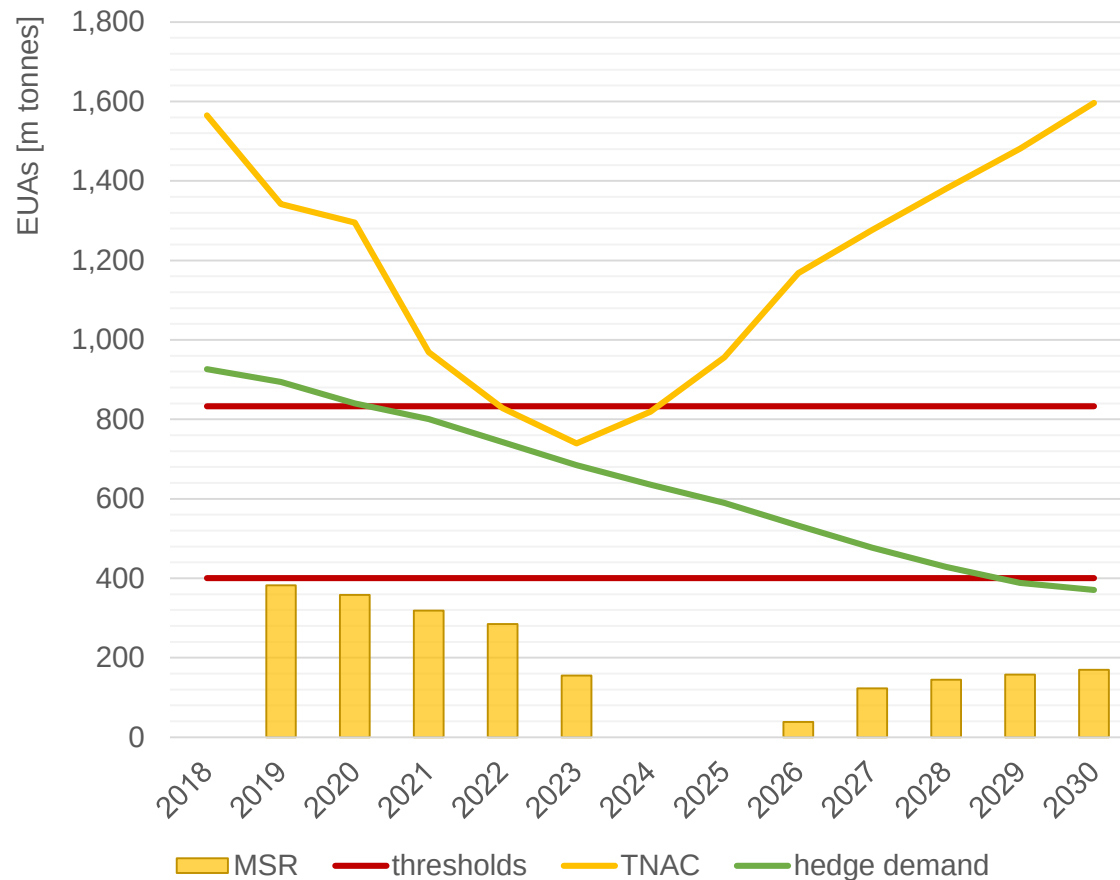
Our base case analysis



Source: ICIS

- Market to be squeezed in early TP4
- This will trigger significant emission reductions in power and industry
- Decreasing base emissions reduce hedge demand significantly
- MSR goes back to 12% and demand decreases (lower base emissions)
- Triggered abatement increases TNAC
- MSR is not capable to reduce over-supply at the same speed

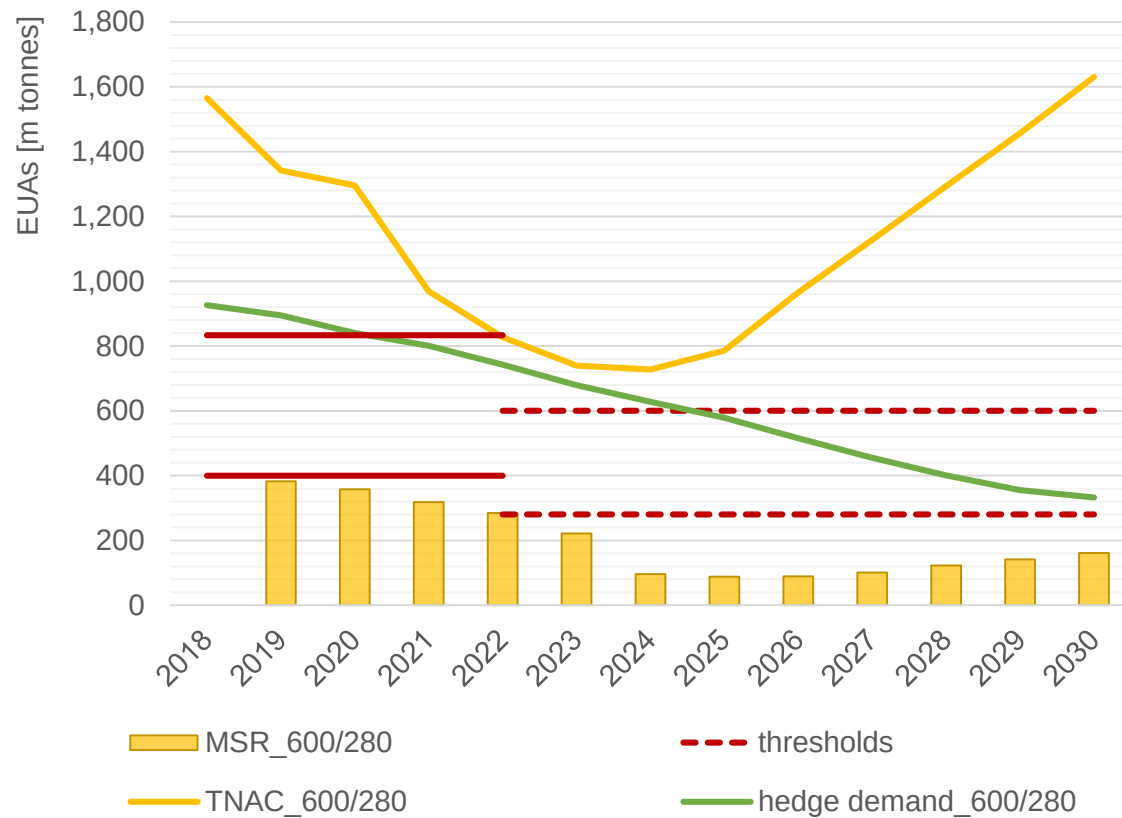
The MSR in the context of coal phase-outs all over Europe: 50% less coal in Europe than BAU



Source: ICIS

- Basics
 - 50 GW less than BAU coal capacity
 - 375 TWh less generation than BAU
 - 50% back-filled by gas, rest by RES (investment needed)
 - Roughly 225m tonnes emission cuts
- Hedge demand reduces by 90m EUAs in 2030
- Surplus increases by 70m EUAs
- Prices will be more pressured and tend lower

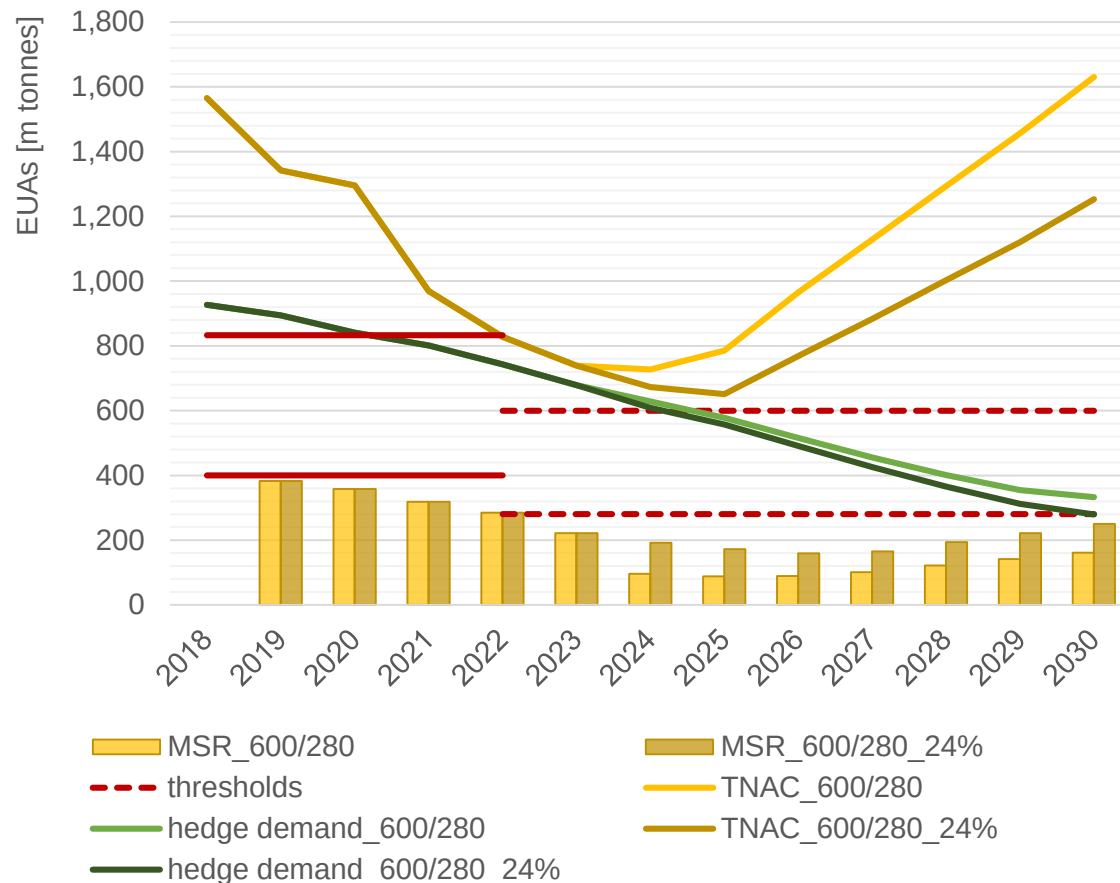
Consequences for the MSR parameter discussion



- ▶ MSR parameters can be amended with review
- ▶ Two potential scenarios
 - ▶ Reduce thresholds (600, 280 Mt)
 - ▶ MSR continues to trigger allowances during all years
 - ▶ MSR withdraws 235m allowances more cp to 833/400 thresholds
 - ▶ TNAC remains on lower pathway

Source: ICIS

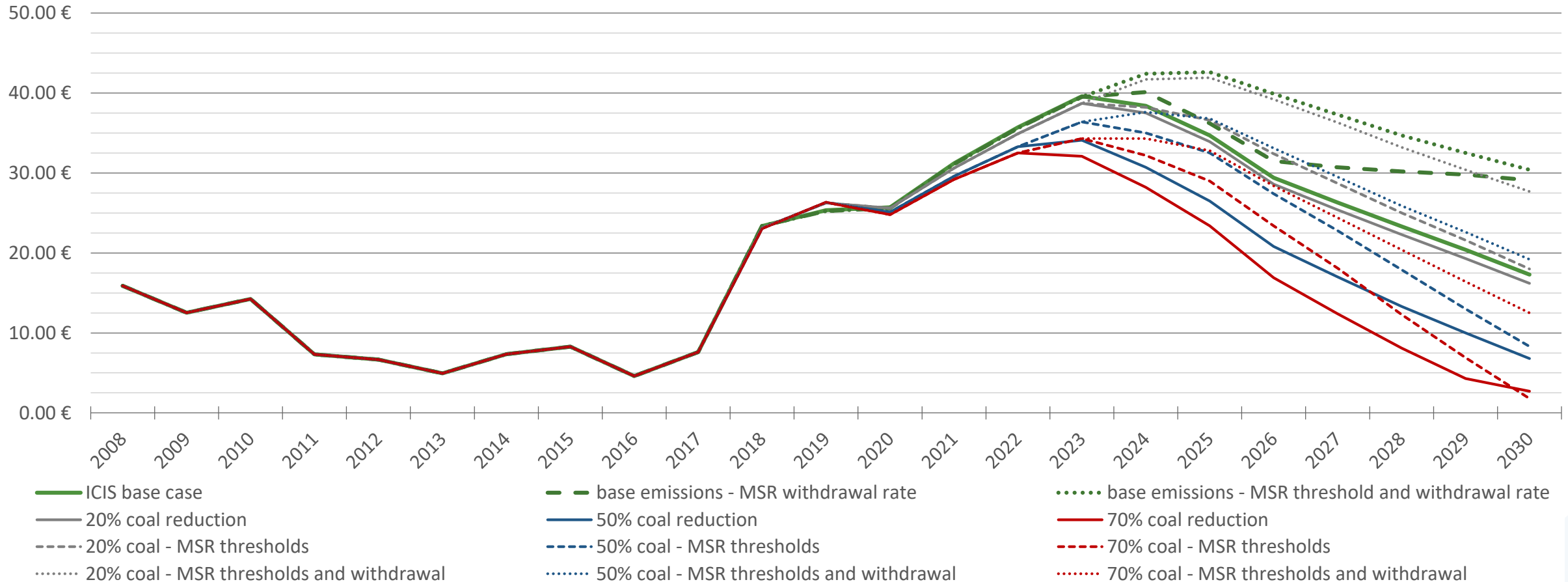
Consequences for the MSR parameter discussion



- ▶ MSR parameters can be amended with review
- ▶ Two potential scenarios
 - ▶ Reduce thresholds (600, 280 Mt)
 - ▶ Remain on 24% withdrawal rate
 - ▶ MSR continues to trigger allowances during all years
 - ▶ MSR withdraws 790m allowances more cp to old thresholds and 12% rate
 - ▶ TNAC remains on lower pathway

Source: ICIS

Price trajectories – highly assumptions-driven



Source: ICIS

Conclusion

- ➔ Changing power sector dynamics could lead to significantly lower emissions
- ➔ If we factor in the current trend towards coal phase-outs all over Europe
 - ▶ The surplus increases more
 - ▶ The hedge demand reduces more
- ➔ With lower power sector demand, TNAC increases with current MSR parameters
- ➔ According to our analysis, the MSR will not be strong enough to mitigate the surplus built-up due to lower emissions
- ➔ Less demand results in laxer market balance, lower prices
- ➔ Adjustment of MSR parameters an option to keep market tightness

ICIS Power and carbon analytics

The background of the slide features a photograph of several wind turbines silhouetted against a vibrant orange and yellow sunset sky. The turbines are positioned on the right side of the frame, with their blades slightly blurred to suggest motion. The overall aesthetic is clean and professional, with a focus on renewable energy.

Translating market developments and regulatory changes into their price impact

- ▶ Pan-European power and carbon price forecasts
- ▶ Ad-hoc scenario analysis whenever market conditions change.

Foresee risks and spot profitable opportunities. Fast.

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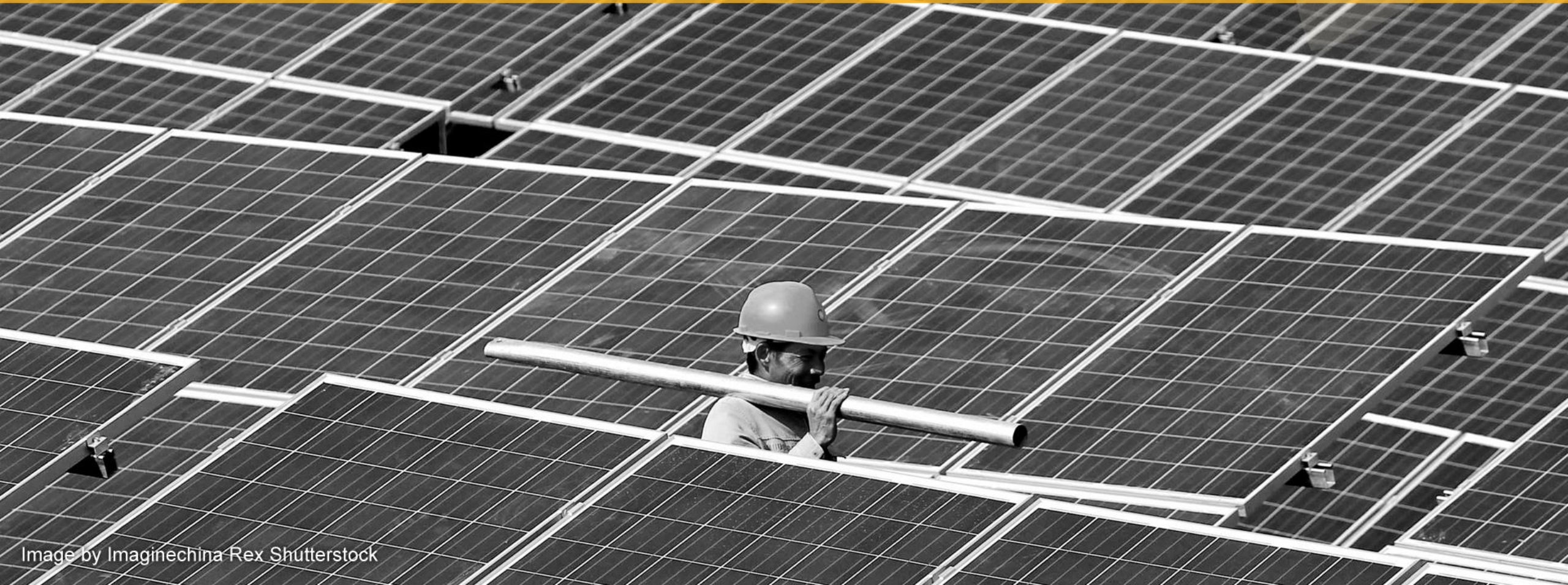
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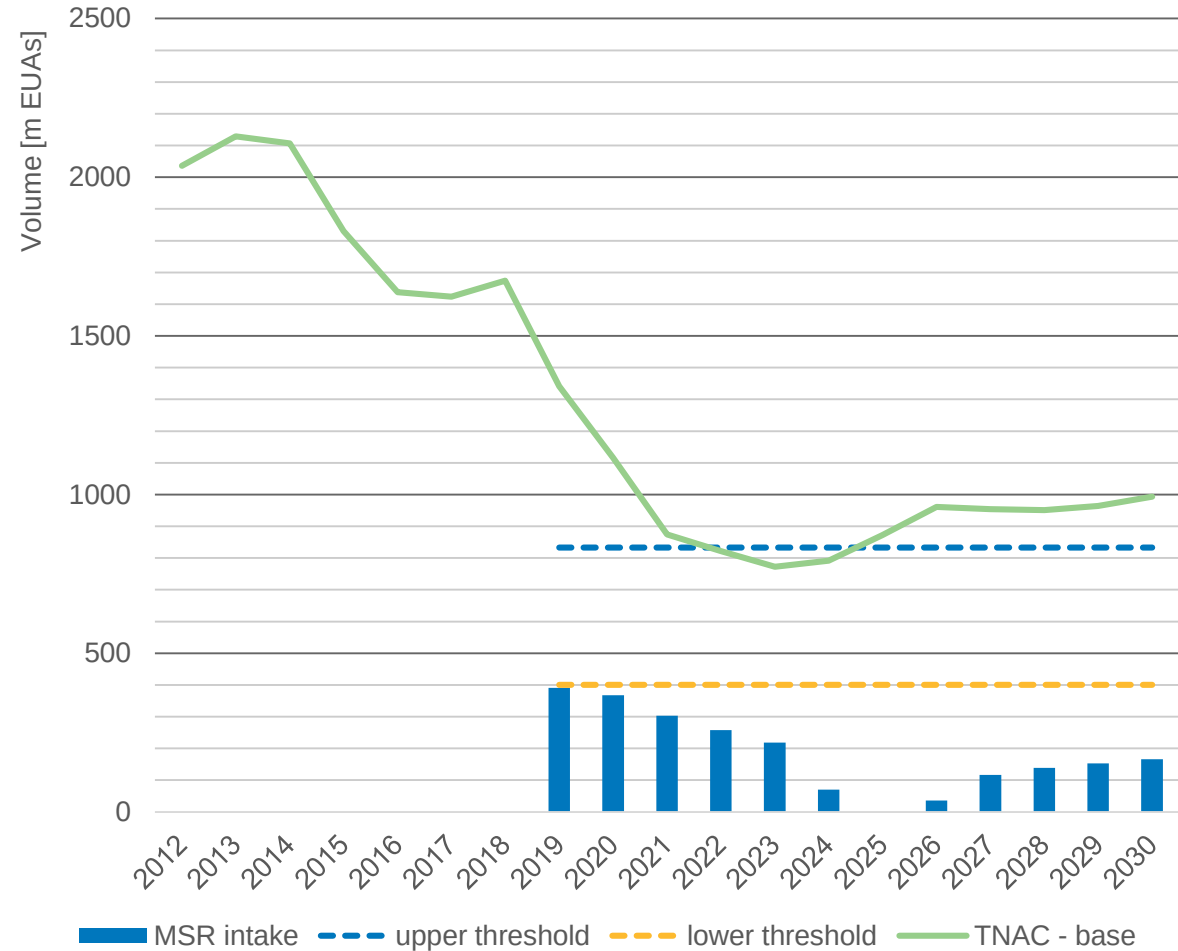
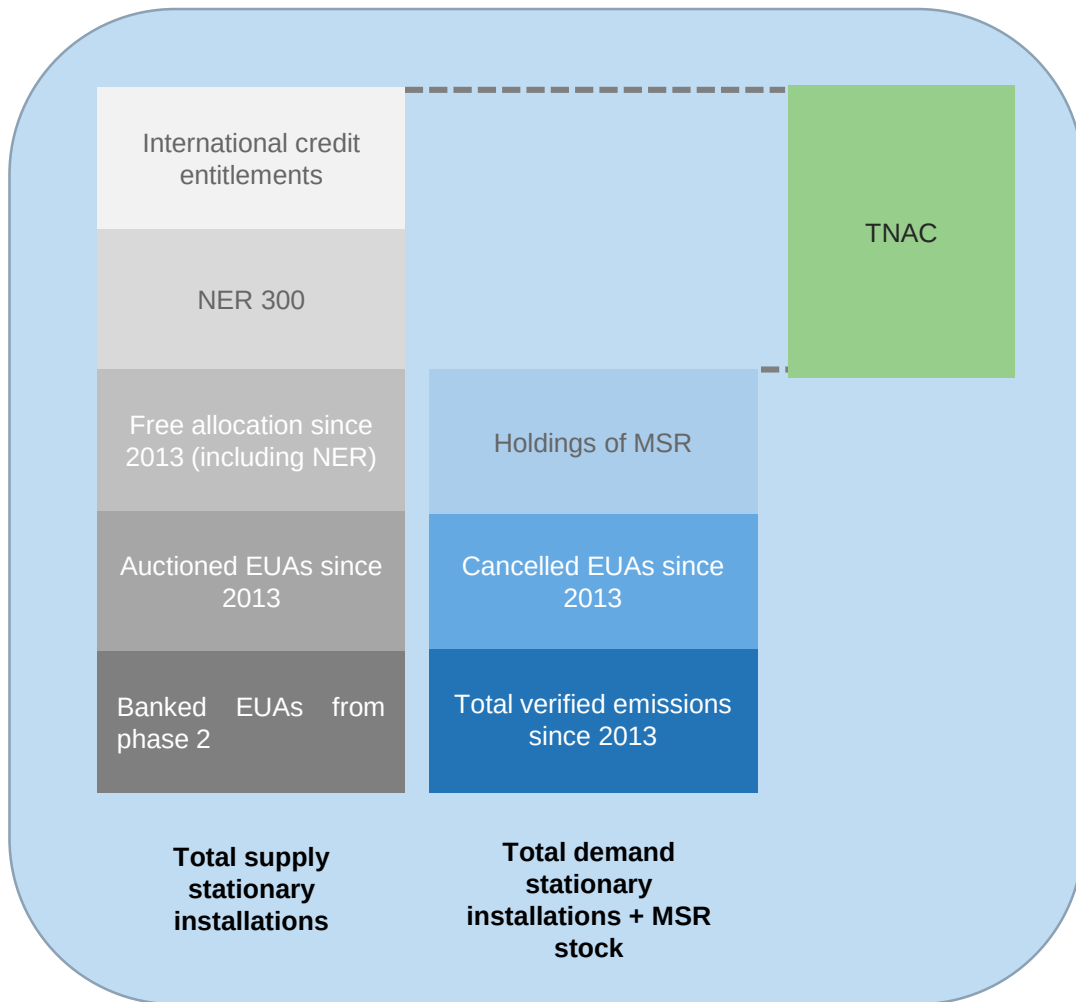
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Annex

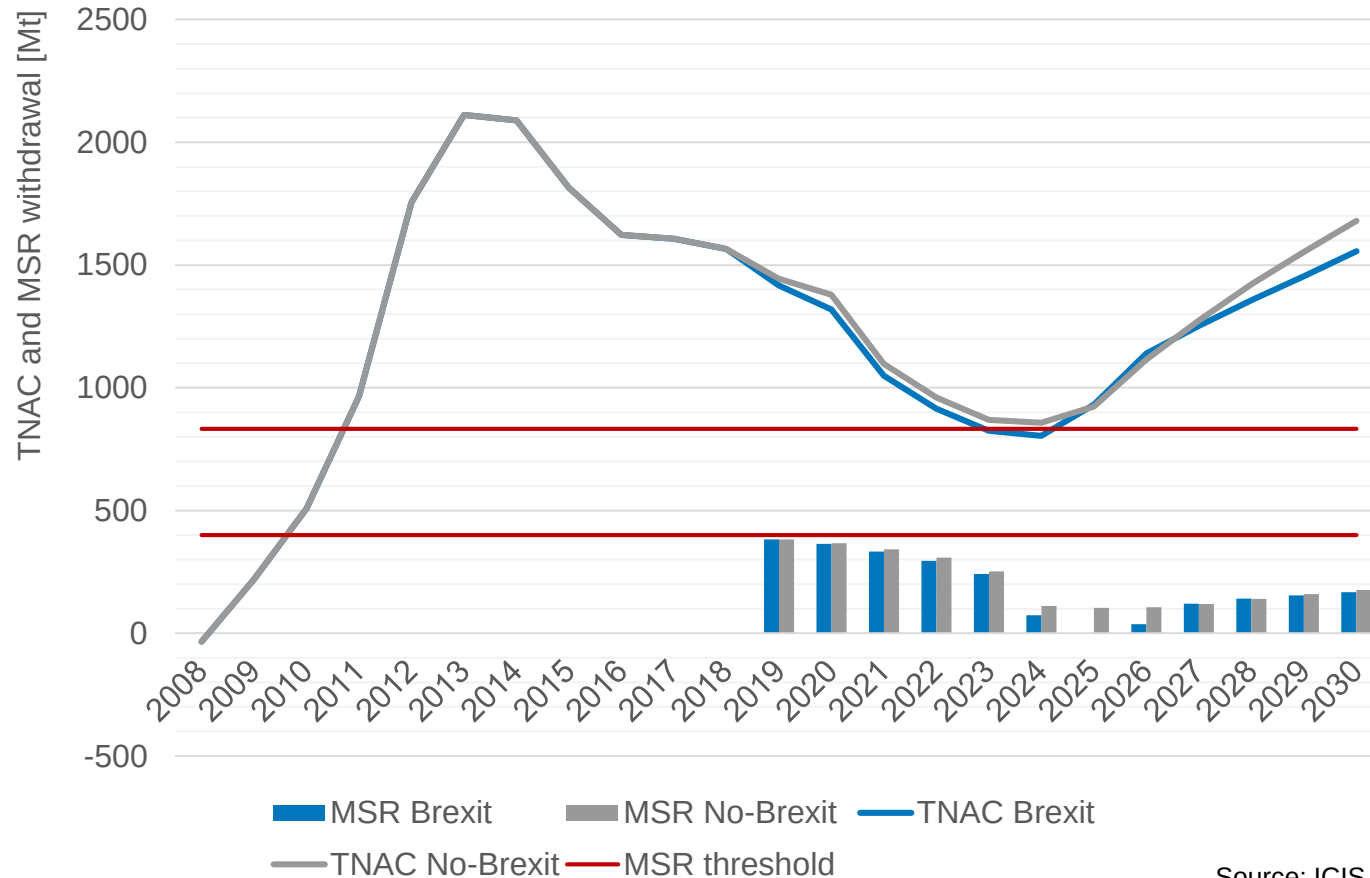


The Basics of the MSR



Source: ICIS

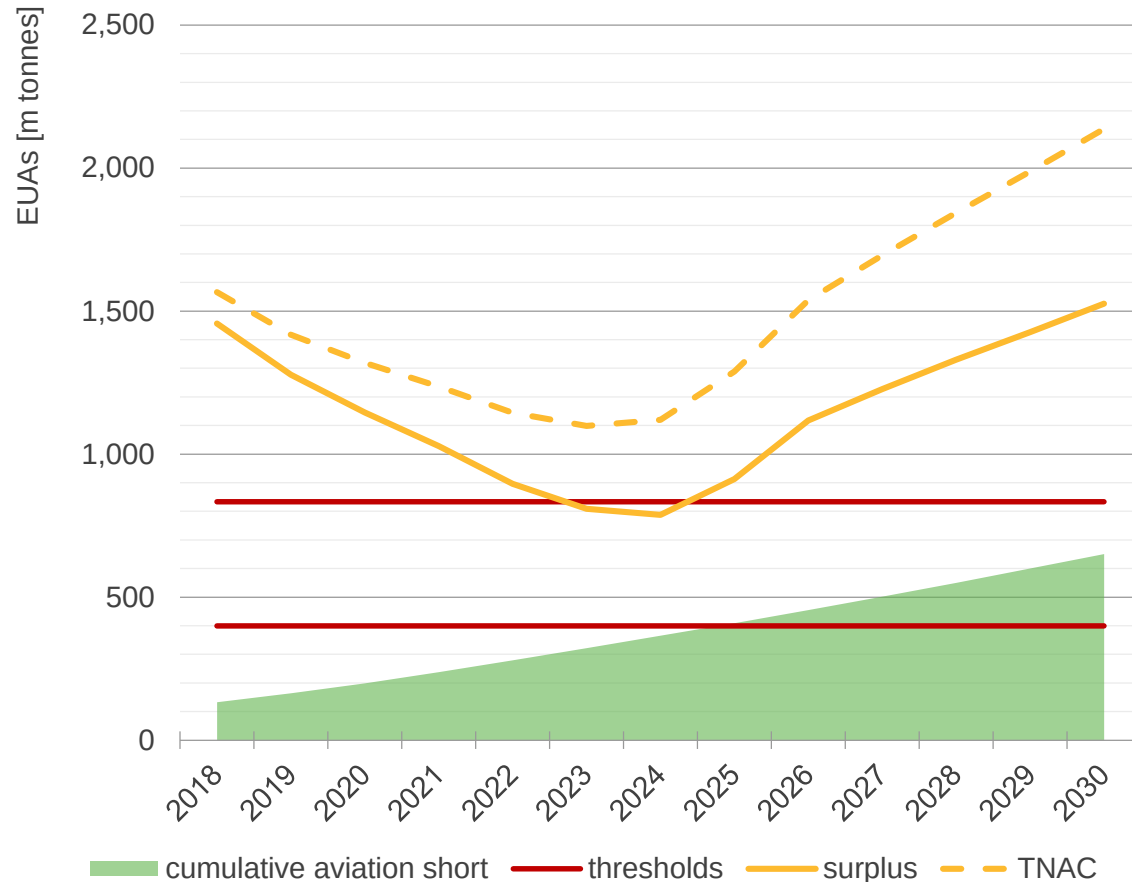
Risk that market stability reserve operation is affected by Brexit



Source: ICIS

- ▶ Removing UK as net emitter reduces TNAC
- ▶ MSR gets triggered less and for fewer years in case of Brexit
- ▶ Sensitivity of TNAC around upper threshold

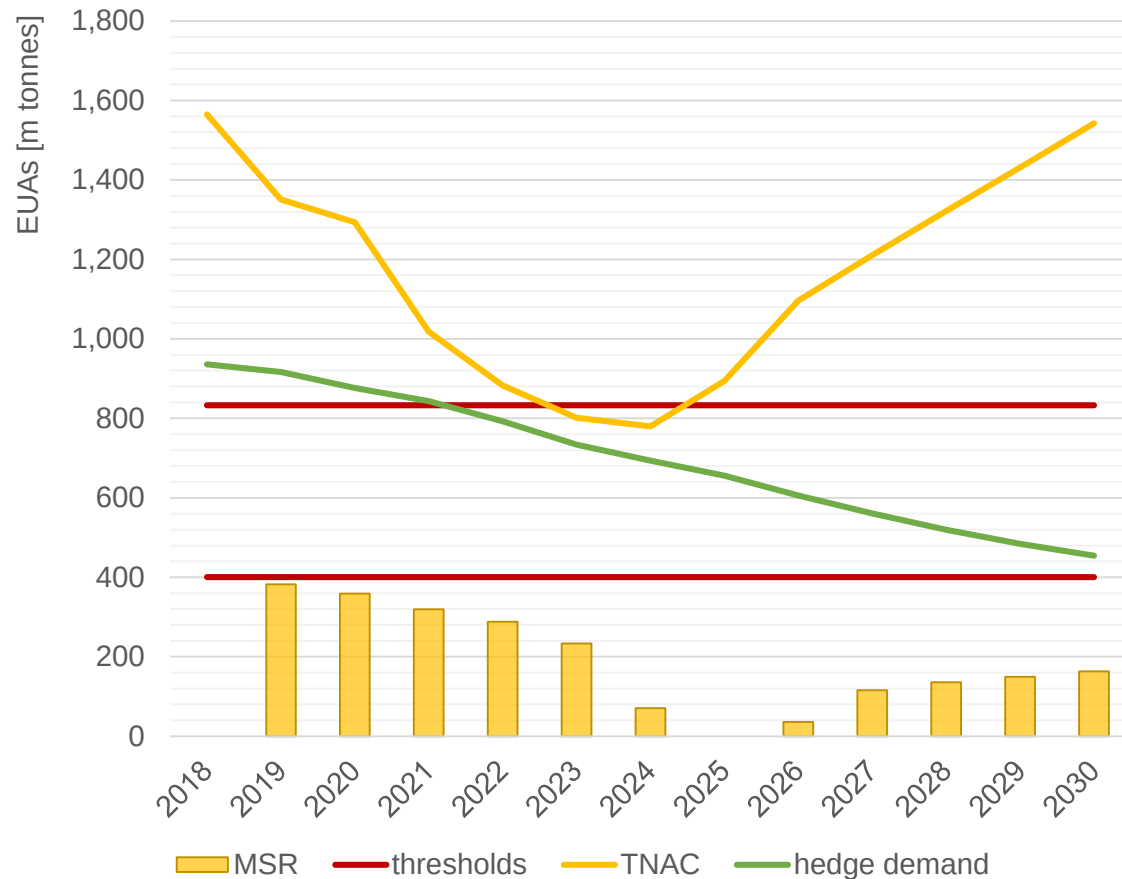
One key bit needs to be taken into account: the TNAC is not the available surplus



Source: ICIS

- Due to the exclusion of EUA compliance by the aviation sector, the TNAC is higher than the available surplus
- Leads to overestimation of market surplus
 - Higher MSR outtake
 - In case aviation shortfall >400 Mt, lower threshold obsolete
 - Higher threshold nearly impossible to undercut
 - But: CORSIA effect
- We expect this to be changed and incorporate a TNAC equal to the surplus in our analysis from 2022 onwards

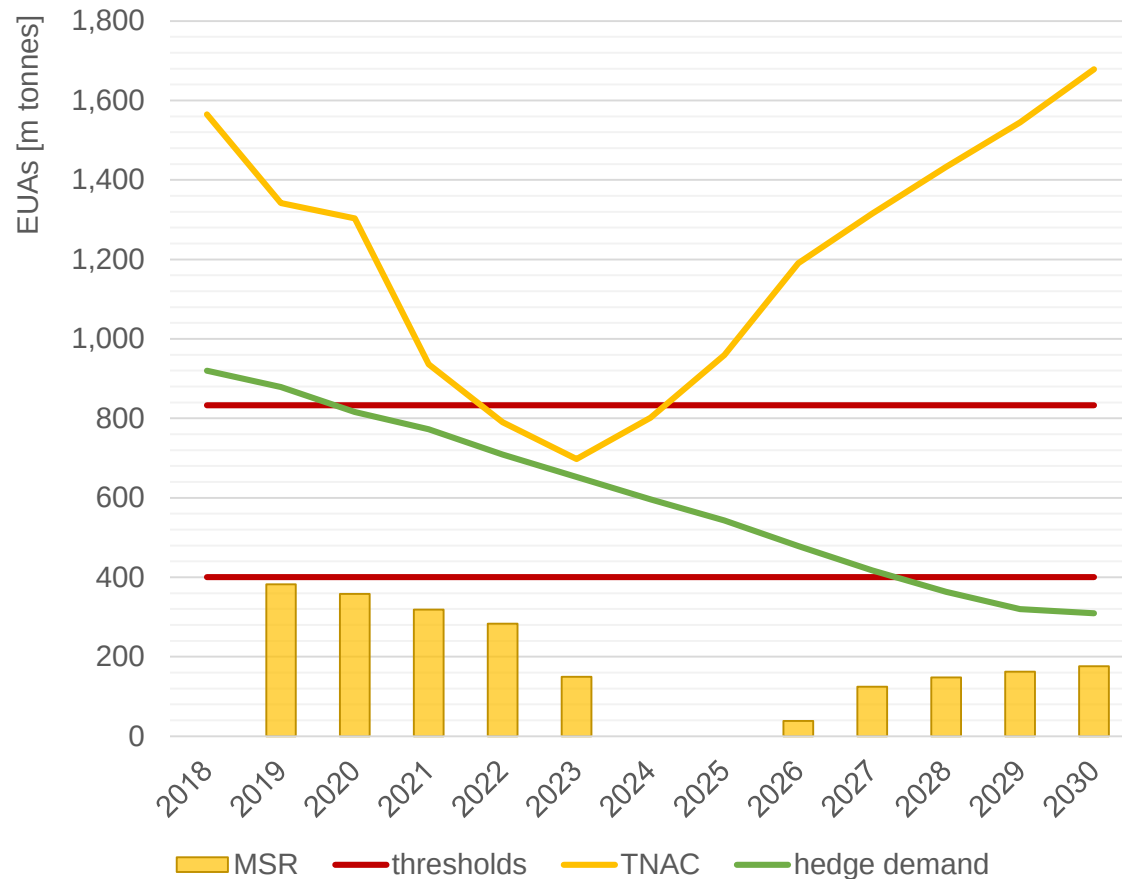
The MSR in the context of coal phase-outs all over Europe: 20% less coal in Europe than BAU



Source: ICIS

- Basics
 - 20 GW less than BAU coal capacity
 - 150 TWh less generation than BAU
 - 50% back-filled by gas, rest by RES
 - Roughly 90m tonnes emission cuts
- Hedge demand reduces by 10m EUAs in 2030
- Surplus increases by 15m EUAs
- Prices will be more pressured and tend lower

The MSR in the context of coal phase-outs all over Europe: 70% less coal in Europe than BAU



Source: ICIS

- Basics
 - 70GW less than BAU coal capacity
 - 525TWh less generation than BAU
 - 50% back-filled by gas, rest by RES (investment needed)
 - Roughly 315m tonnes emission cuts
- Hedge demand reduces by 150m EUAs in 2030
- Surplus increases by 153m EUAs
- Prices will be more pressured and tend lower