

Panel discussion 1: State of development of the ETS market and outlook

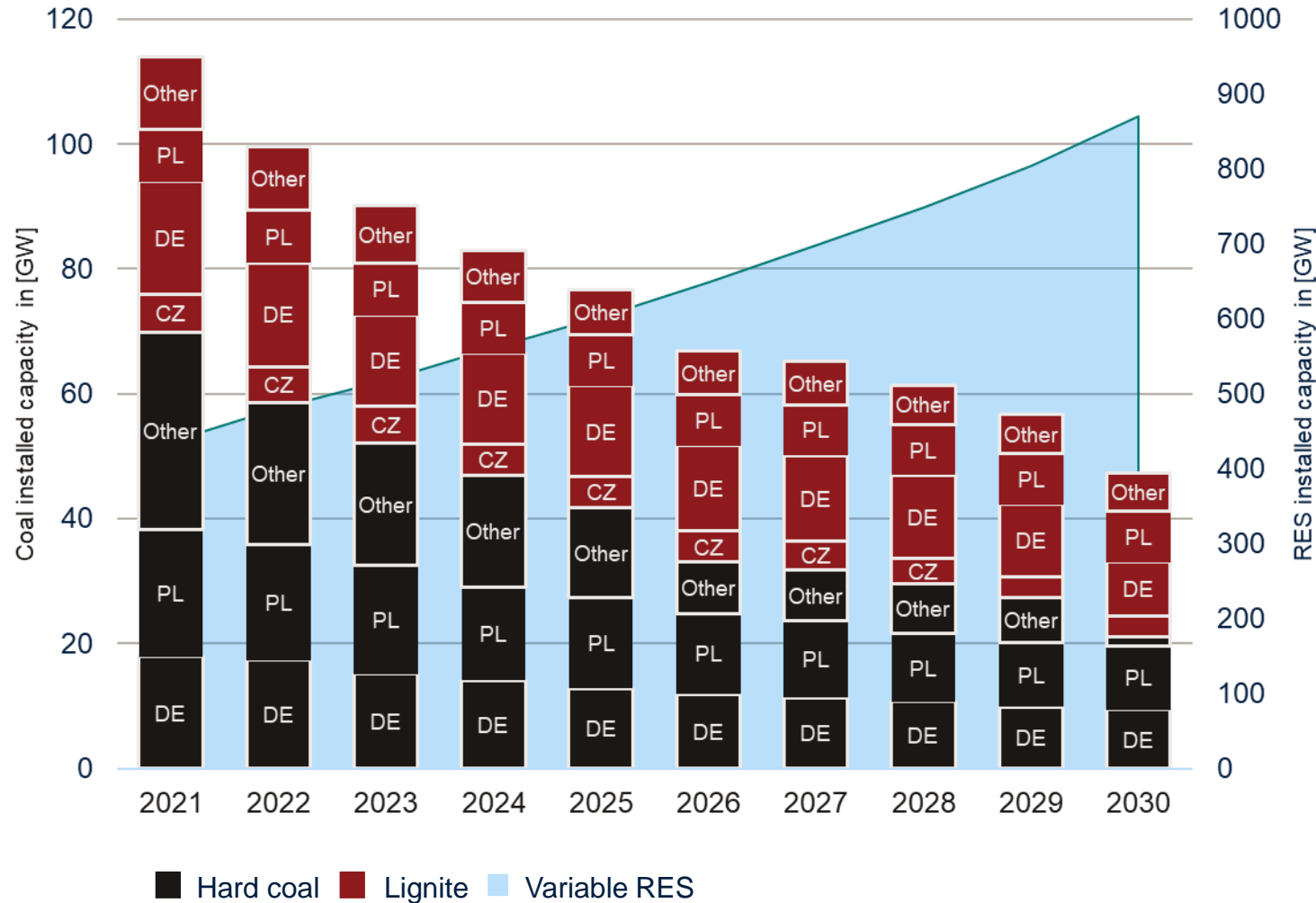
MSR in context: Coal phase out implications and MSR functioning in a time of crisis

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EU coal-phase out landscape 2021-2030



By 2030

- Coal capacity down 77 GW
- RES capacity x 2

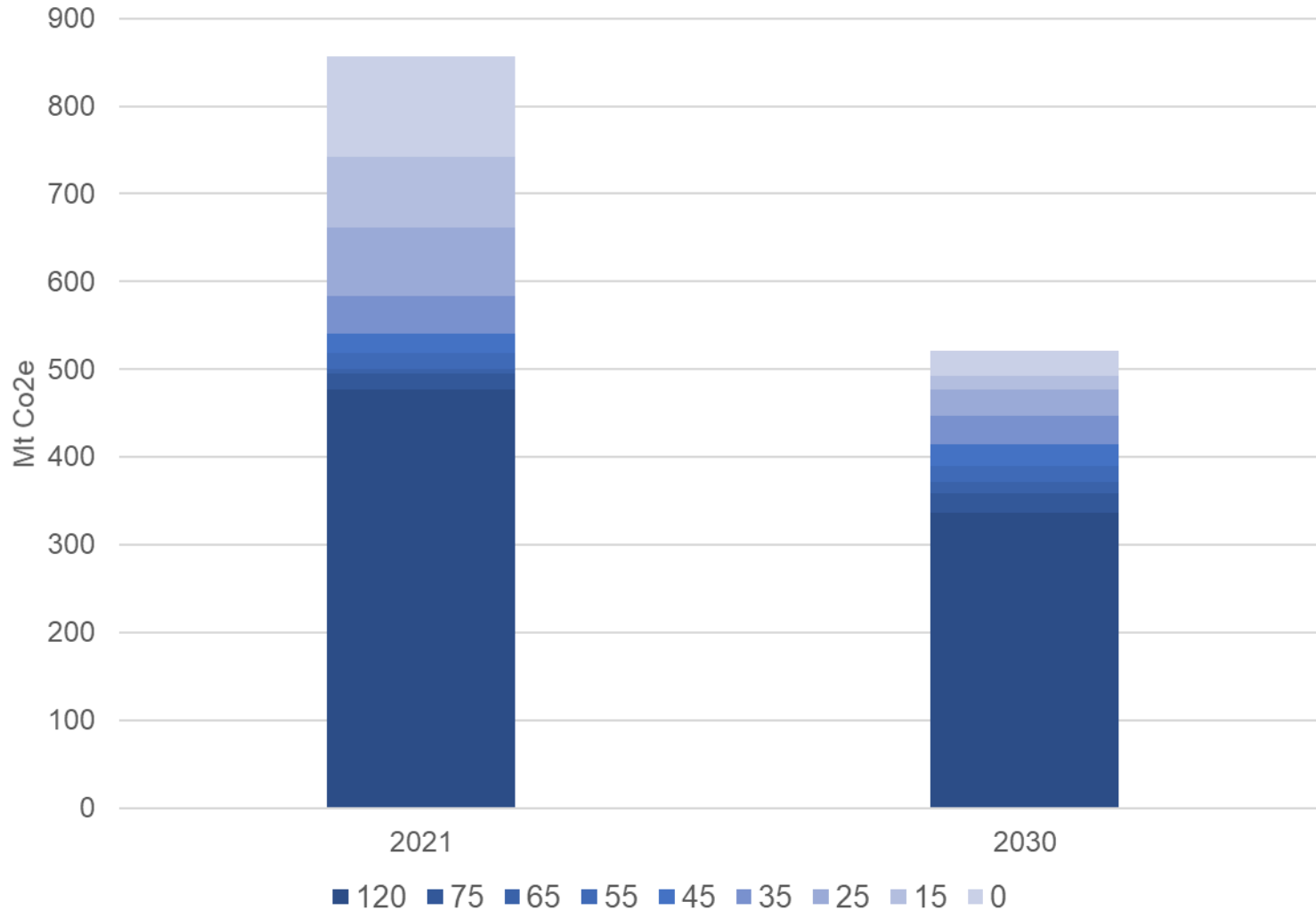
KEK TAKEAWAYS

- National policies driving lignite and coal out
- EU power stack CO₂ intensity heavily reduced

MARKET IMPACT

- Reduced CO₂ intensity = Reduced power fuel switch potential (lignite > Coal > gas)

Power fuel switch evolution 2021-2030



In 2021

- Pre-coal phase out, power sector has high fuel switch fire power <€45 EUA price

In 2030

- Overall fuel switch potential massively reduced

KEK TAKEAWAYS

- National policies have reduced the power sector ability to balance the EU ETS
- Industry abatement must step in, in large scale

MARKET IMPACT

- Risk of highly sensitive EUA price

Summary



EU Power landscape

- Coal phase-out
- Reduced power sector fuel switch
- Reduced EUA market balancing capacity
- Increased EUA price sensitivity
- **High volatility risk**

Current MSR withdrawal rate

- Fixed (24%/12%)
- Independent from MSR upper threshold target
- **Rigid and somehow disconnected from market realities**

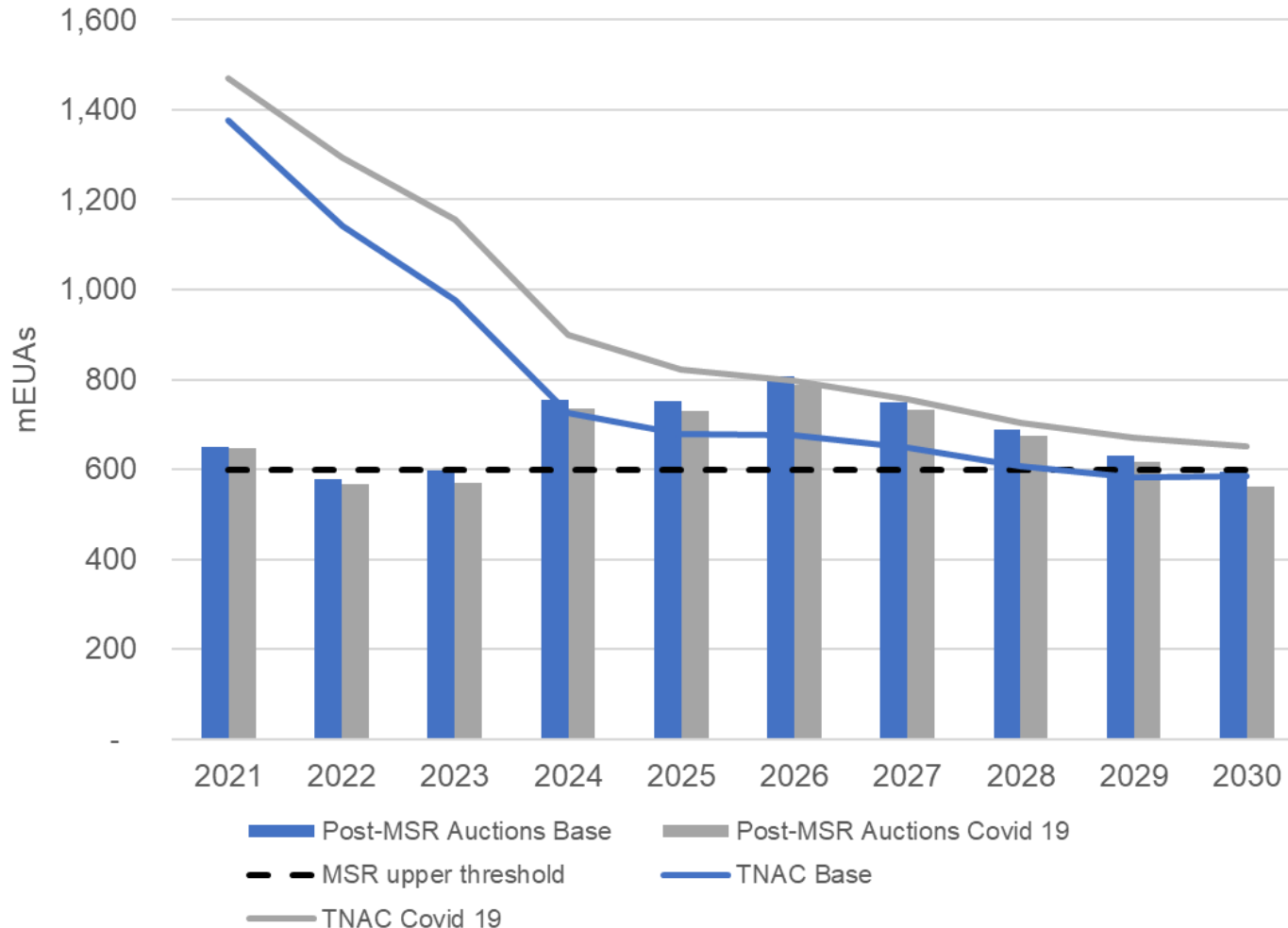
Market Risk

- MSR keeps tightening the market indiscriminately
- Magnitude of impact heightened if limited industrial abatement
- **Increased market tightening in already sensitive market**

Question for policy makers

Keep the “Hammer“ rate approach?

The MSR withdrawal rate in time of crisis



2021-2030

- TNAC delta lingers across TP4
- Impact on MSR on/off early TP5

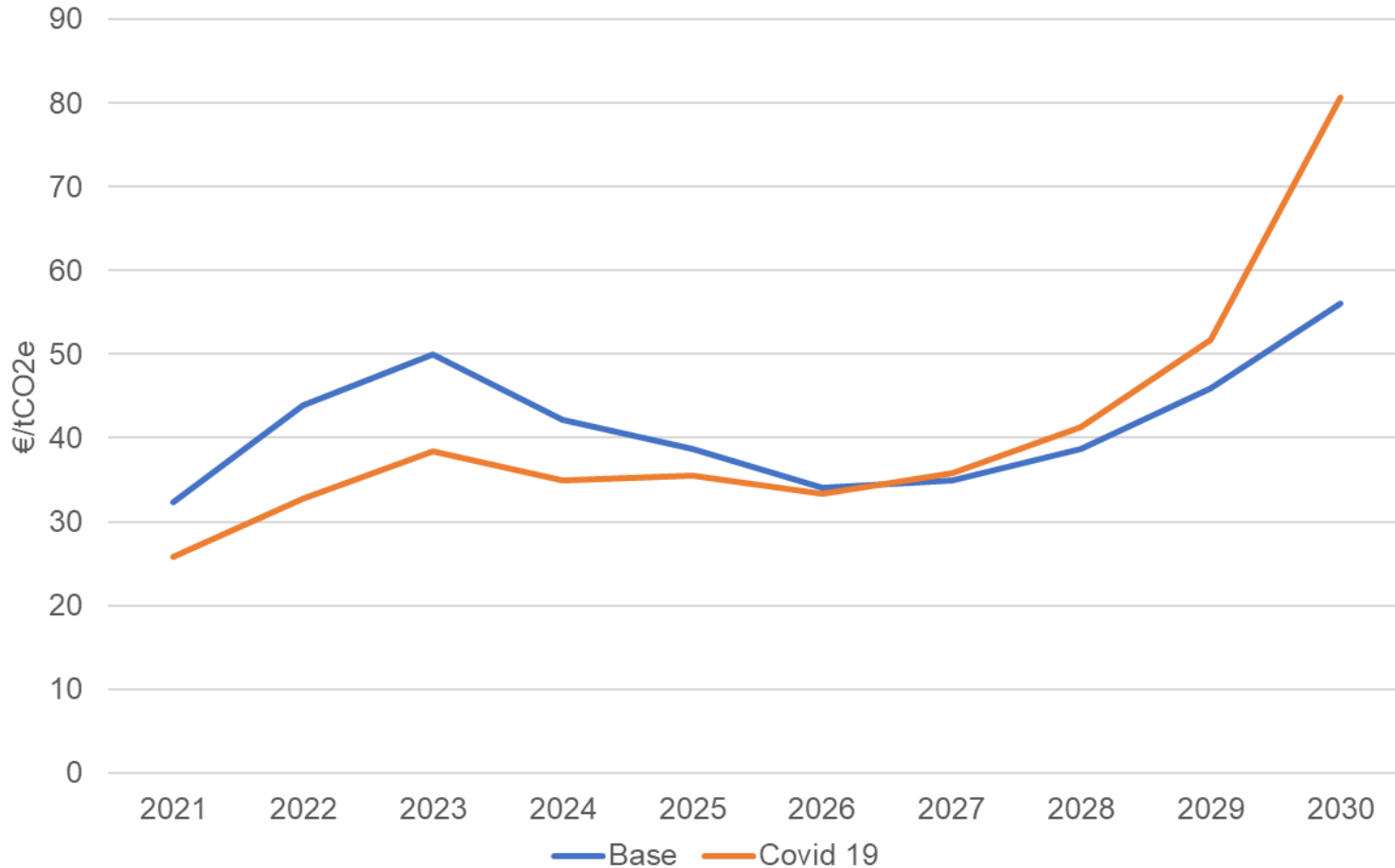
2023-2024

- 24%-12% switch weakens the MSR firepower

*Graph assumptions:

- 600m threshold, 12% rate from 2024, aviation included from 2024, 2030 target 55%

EUA price impact



MARKET IMPACT

- 6 years for EUA price to recover to Base level
- Covid 19 scenario -€6.7 average price delta vs Base 2021-2026 (peak €12 in 2023)
- EUA price crunch towards end of TP4 as less early industry abatement (and sensitive EUA price)

Summary



Potential crisis

- Less demand over mid-term (.e.g. Covid 19) or long-term (2008 financial crisis)

Current MSR withdrawal rate

- 24%-12% switch makes sense in “normal times” but is **slow work in crisis**

Market Risk

- Intertemporal inefficiencies (limited early industrial investment)
- **Potential EUA price crunch end of TP4**

Questions for policy makers

- **Mid-term: How to handle the post-2023 EUA price drop and future market shocks (e.g. Higher rates, dynamic rate, rebasing)**
- **Long-term: How to handle the risk of long-term industrial abatement shortage towards end of TP4? (e.g. dynamic rate)**