

Klimarådet.

Complicated

The Inflated EU Emissions Trading System

Frederik Silbye – Danish Council on Climate Change



The Danish Council on Climate Change

- Founded in 2014
- 7 council members
- 8 staff members of the secretariat
- Advises the Danish government on how to achieve climate targets



Does national policy help the climate?

“The supply of allowances in the ETS is fixed. That is, the emissions in the system are also fixed, so national climate policy within the ETS sectors will not help the climate.”



The economists



The NGOs

“The ETS does not work. The carbon price is too low and the allowance surplus too big. Without a major ETS reform, we have to rely on national policy.”

The rules of the ETS are simple

- For every emitted ton of CO₂, an installation within the ETS must surrender an allowance
- Surrendered allowances are cancelled
- New allowances are issued each year at a declining rate
- Some new allowances are auctioned, others are allocated cost-free
- Allowances are tradable
- Allowances can be banked for later use

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Game changer:
The market stability reserve (MSR)

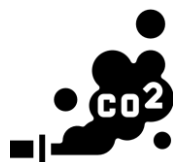
ETS facts



Covers the 28 EU Member States plus Iceland, Liechtenstein and Norway



Covers approximately 11,000 power stations and manufacturing plants as well as civil aviation within the ETS countries



Covers the greenhouse gases carbon dioxide (CO₂), nitrous oxide (N₂O), and perfluorocarbons (PFCs)

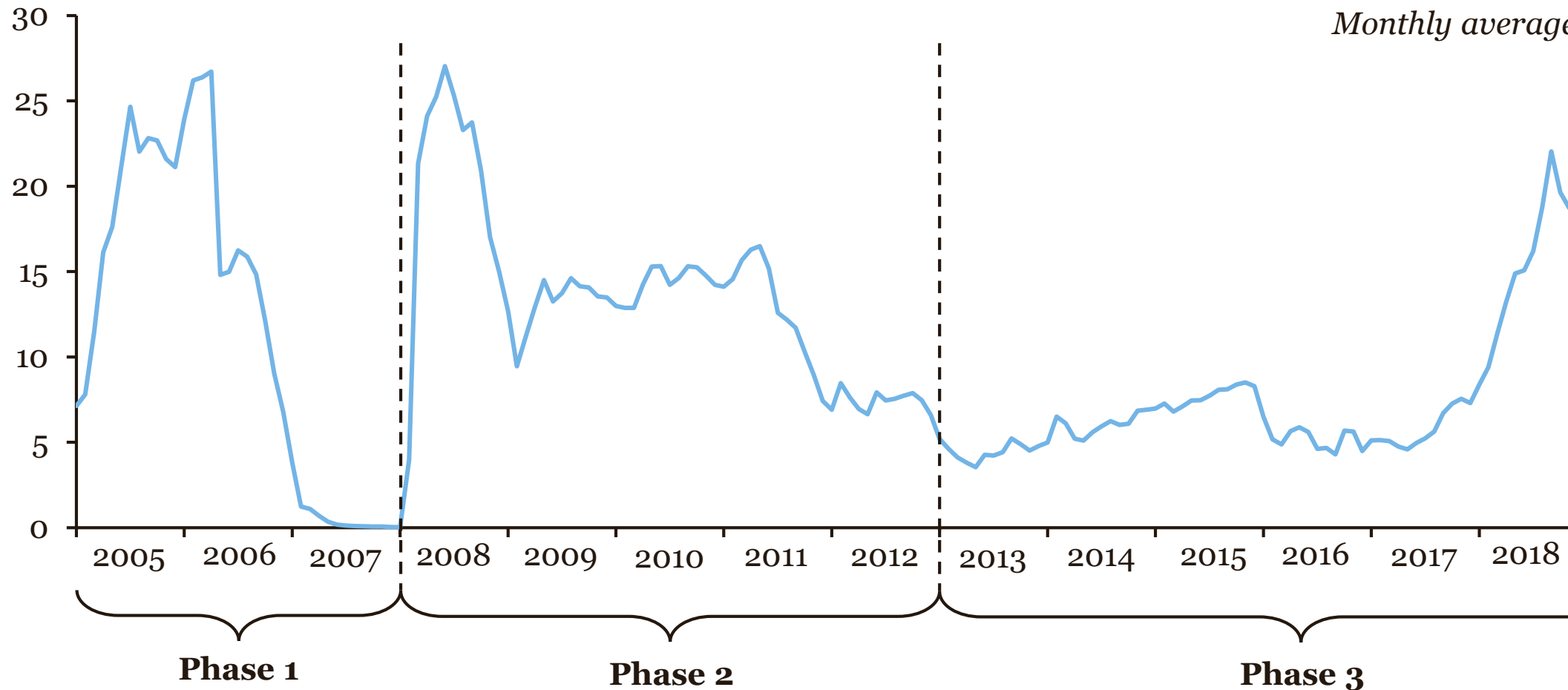


Around 45% of total EU greenhouse gas emissions are regulated by the ETS

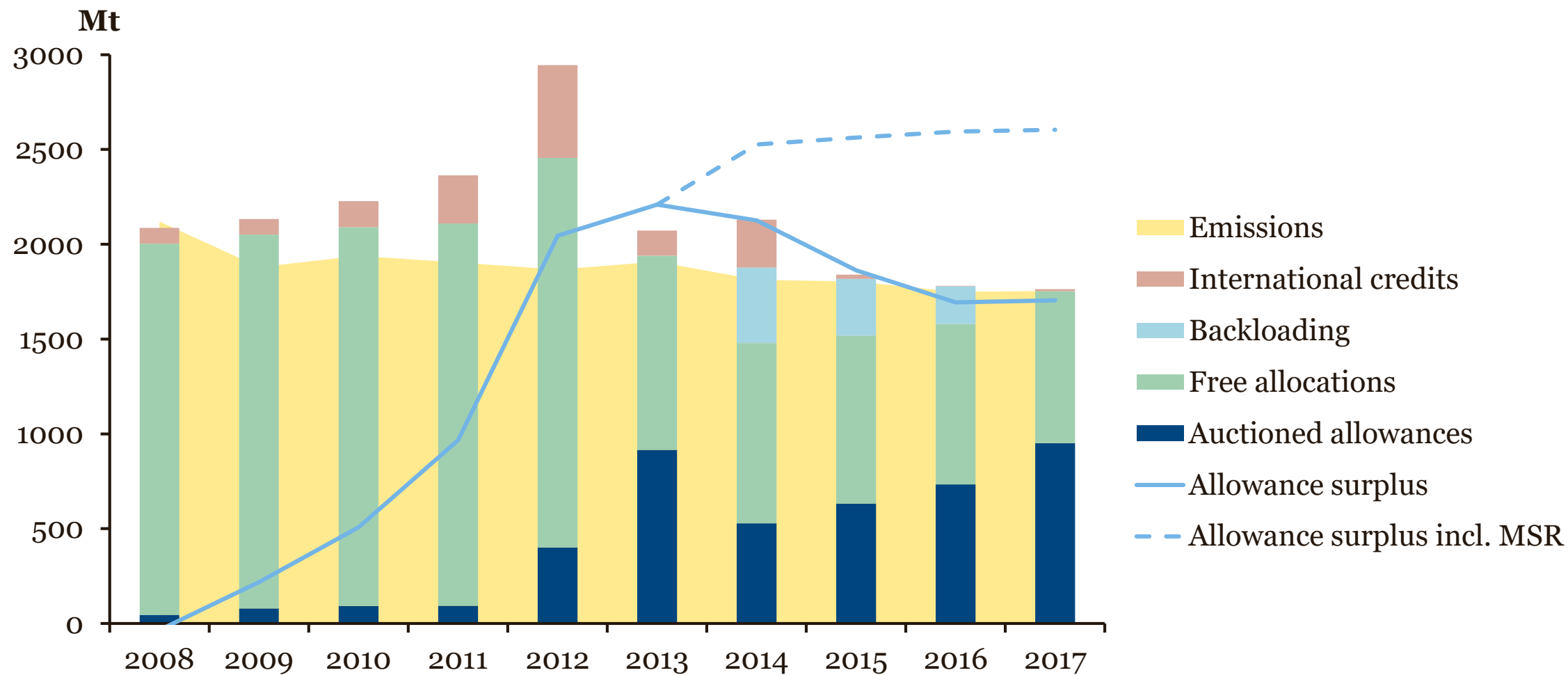
Allowance prices since 2005

EUR per ton

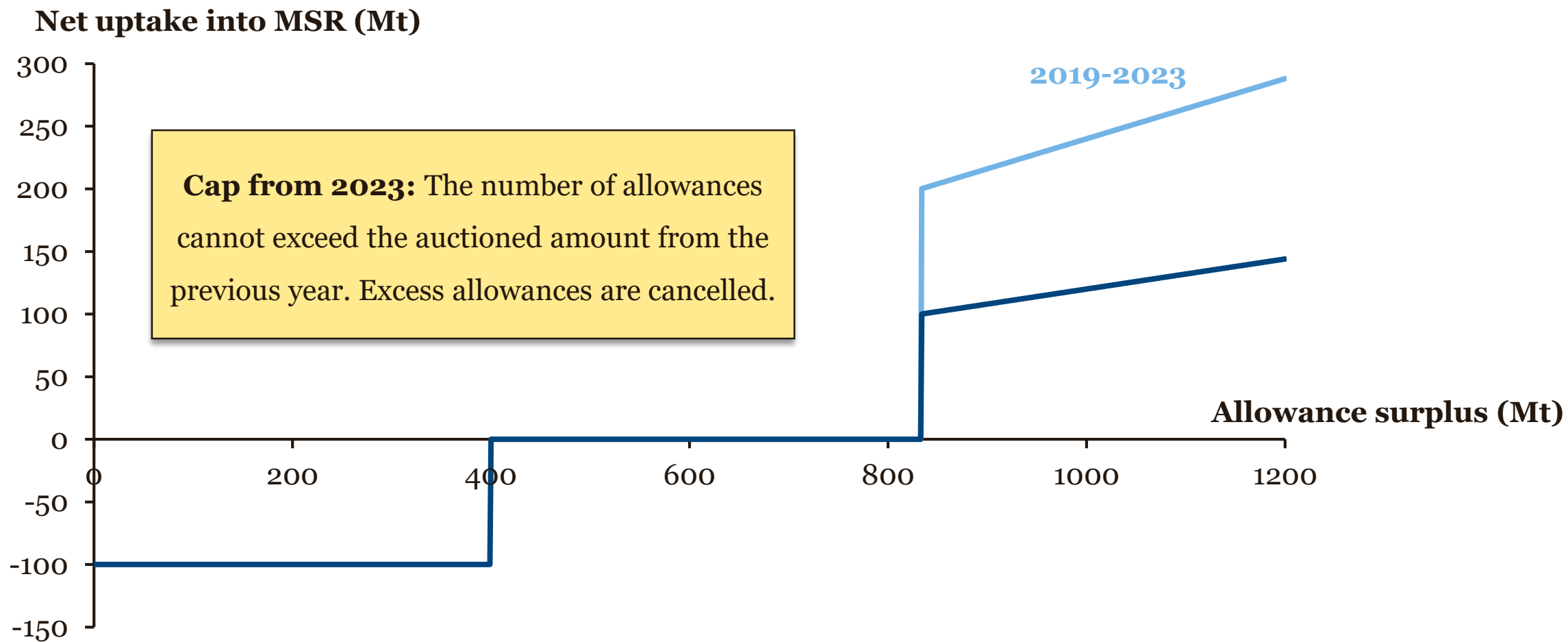
Monthly averages



Huge surplus of allowances



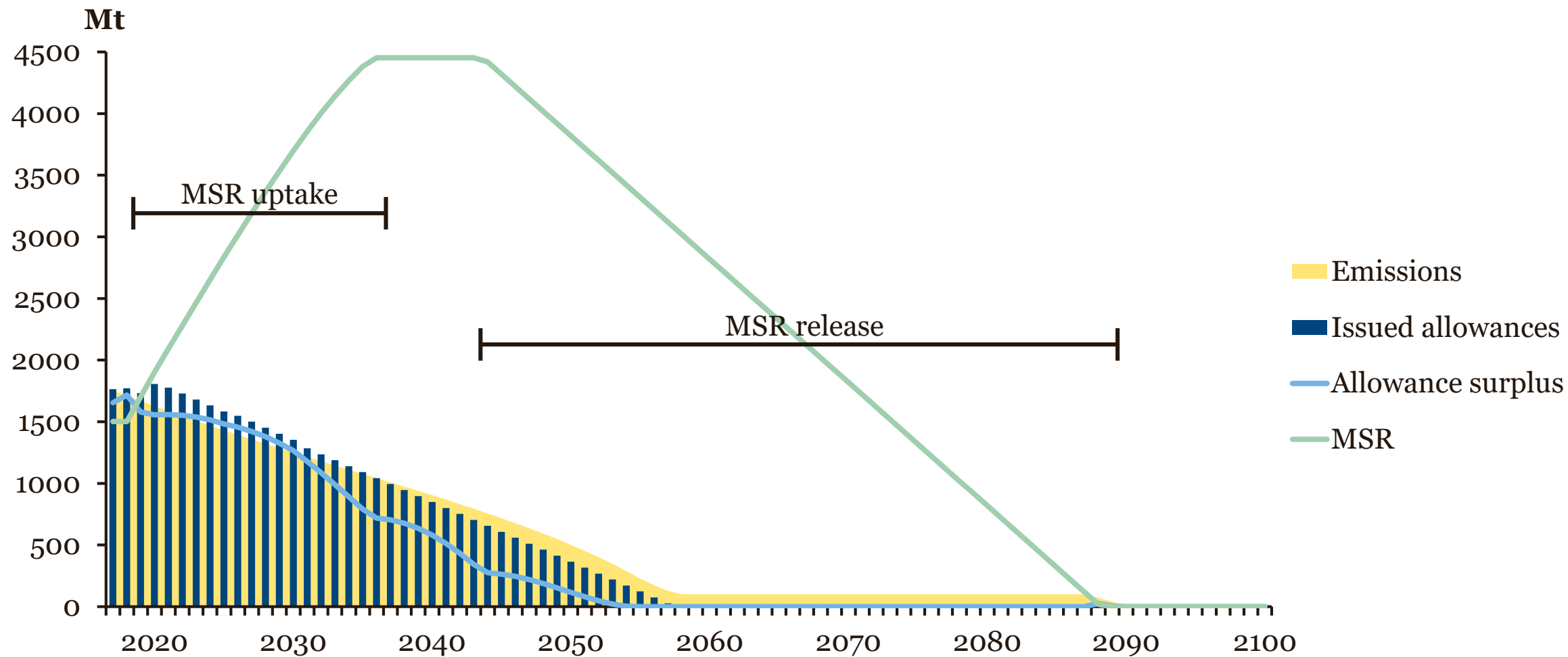
The Market Stability Reserve (MSR)



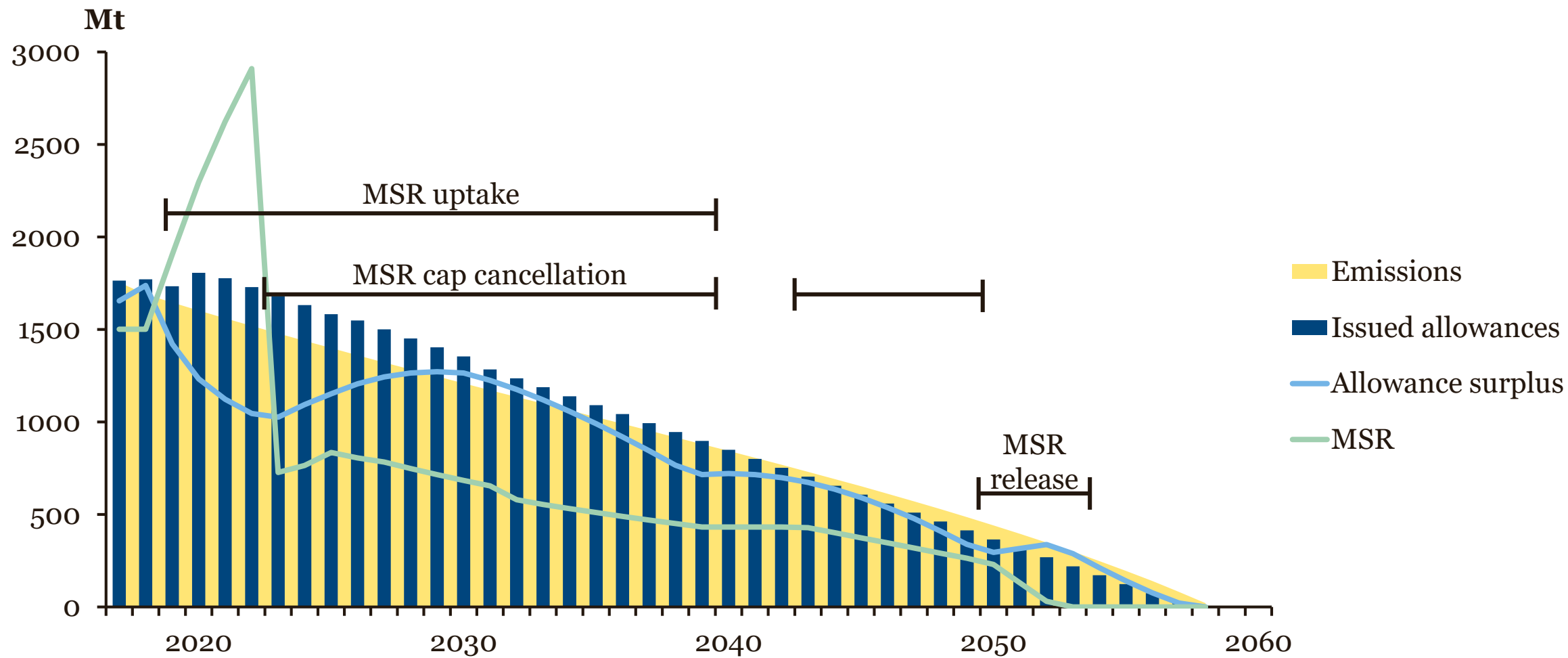
A stylized model of the ETS

- The model forecasts the entire lifetime of the ETS
- Phase 4 rules are taken as given in all future years
- No detailed sector modelling: Emissions are a linear function of the allowance price
- 7 – 10 per cent required return by investors → determines price path

Model forecast before recent reform

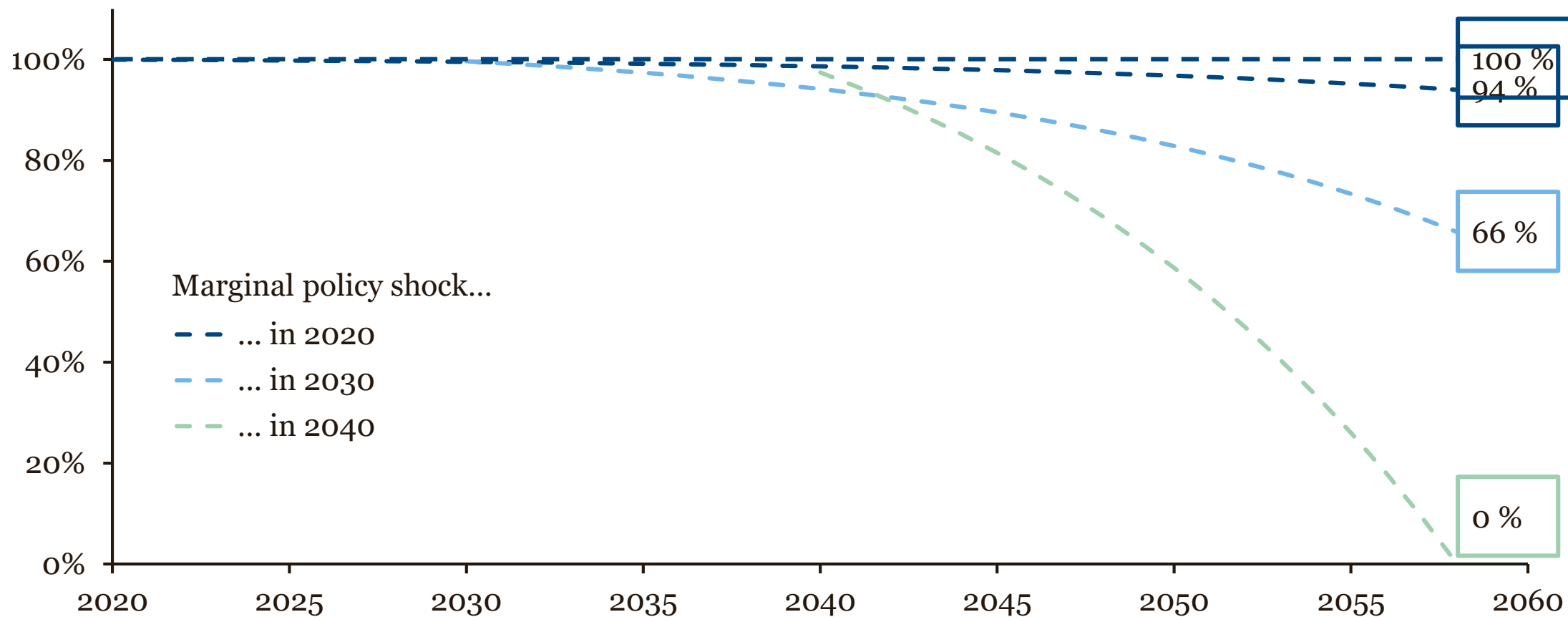


Model forecast after recent reform



Effect of national reduction of emissions

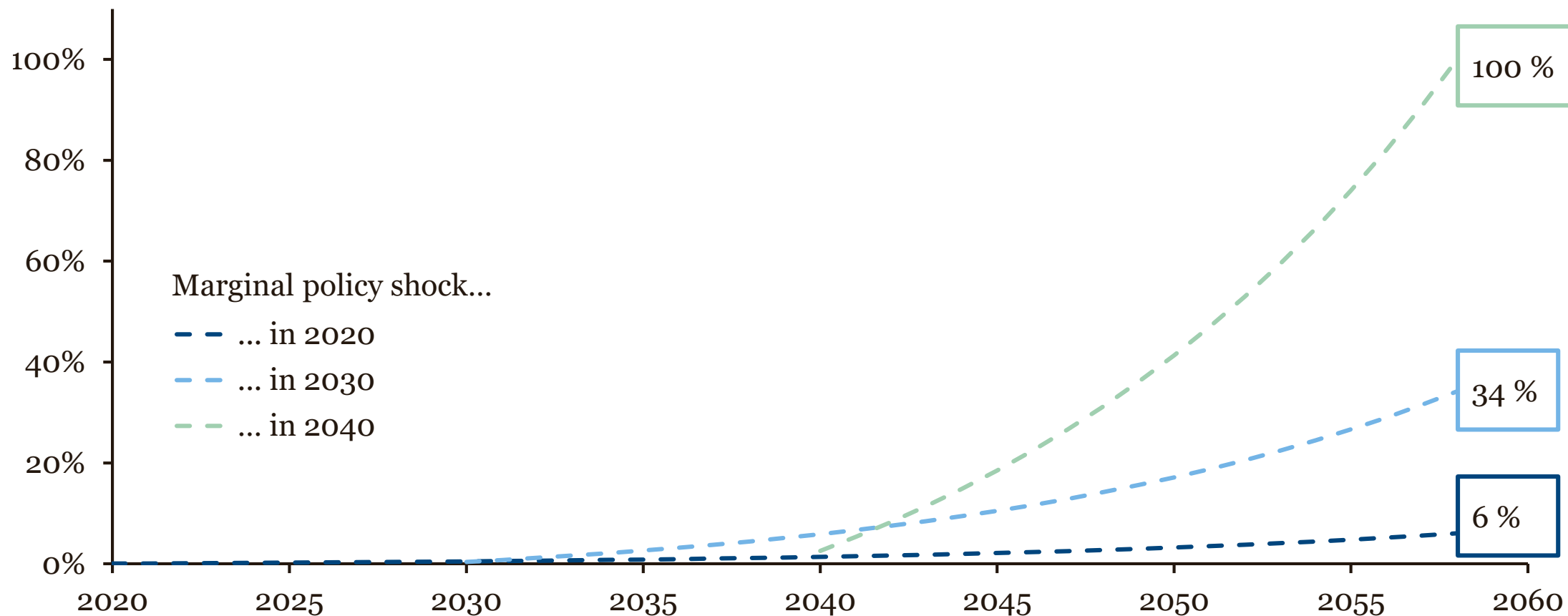
Accumulated reduction of emissions*



* As a percentage of the initial reduction of emissions

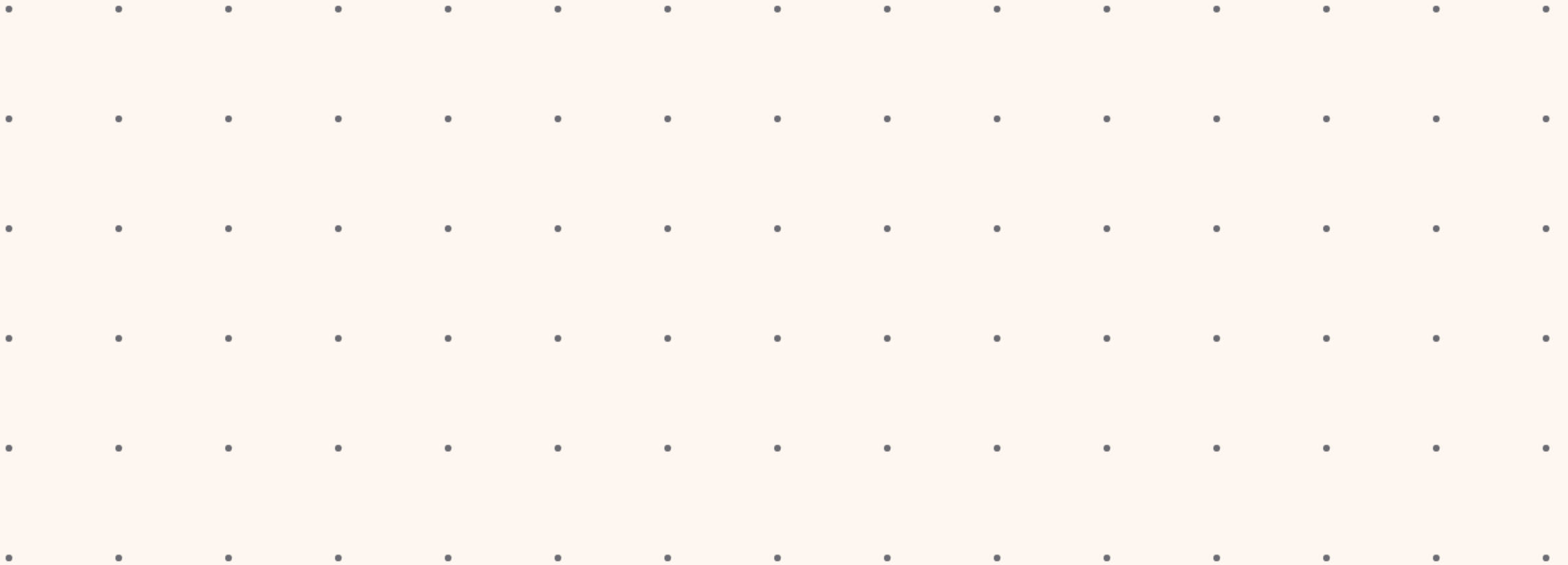
Effect of national cancellation of allowances

Accumulated reduction of emissions*



* As a percentage of the initial reduction of emissions

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Thank you