POTSDAM INSTITUTE FOR CLIMATE IMPACT RESEARCH

Mercator Research Institute on
Global Commons and Climate Change

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Why should we care about the ETS price in 2030 and beyond?

Prof. Dr. Ottmar Edenhofer

30 November 2022, Brussels

Leibniz Association

Outline

1. The EU's pathway to climate neutrality*
2. Europe in the grip of the polycrisis
3. ETS today and beyond 2030
4. Takeaways

* Speaking as Chair of the European Scientific Advisory Board on Climate Change

The EU‘s pathway to climate neutrality

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The European Scientific Advisory Board on Climate Change

"A point of reference for the EU on scientific knowledge relating to climate change"

European Climate Law, Article 3

- **Considering latest scientific findings** relevant to the EU
- Providing **scientific advice** (e.g. on EU measures, targets, budgets, and their coherence with commitments)
- Contributing to the **exchange of independent scientific knowledge**
- Identifying **actions and opportunities** to achieve **European climate targets**
- Raising **awareness on climate change** and its impacts, and stimulating **dialogue and cooperation** between scientific bodies within EU

Europe in the grip of the polycrisis*

*Disclaimer: not speaking on behalf of the European Scientific Advisory Board on Climate Change

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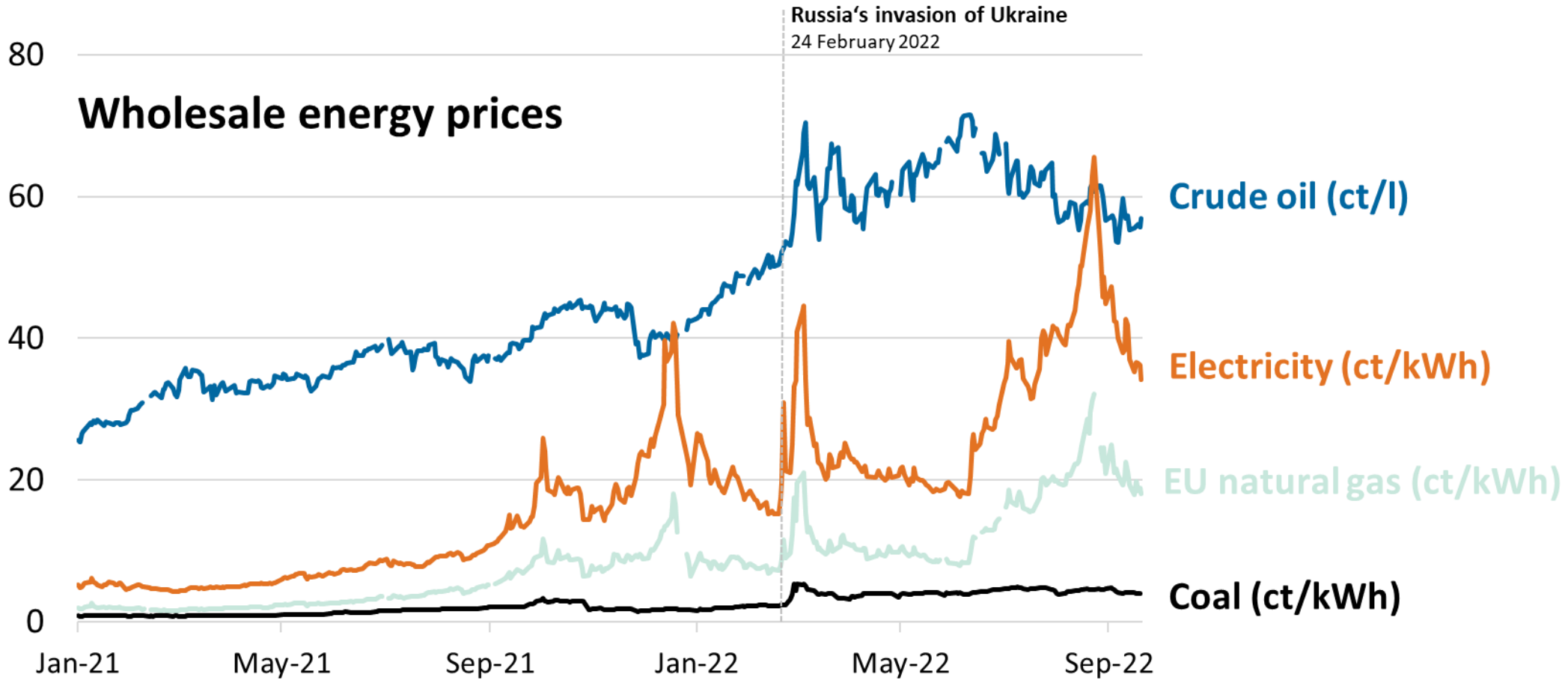
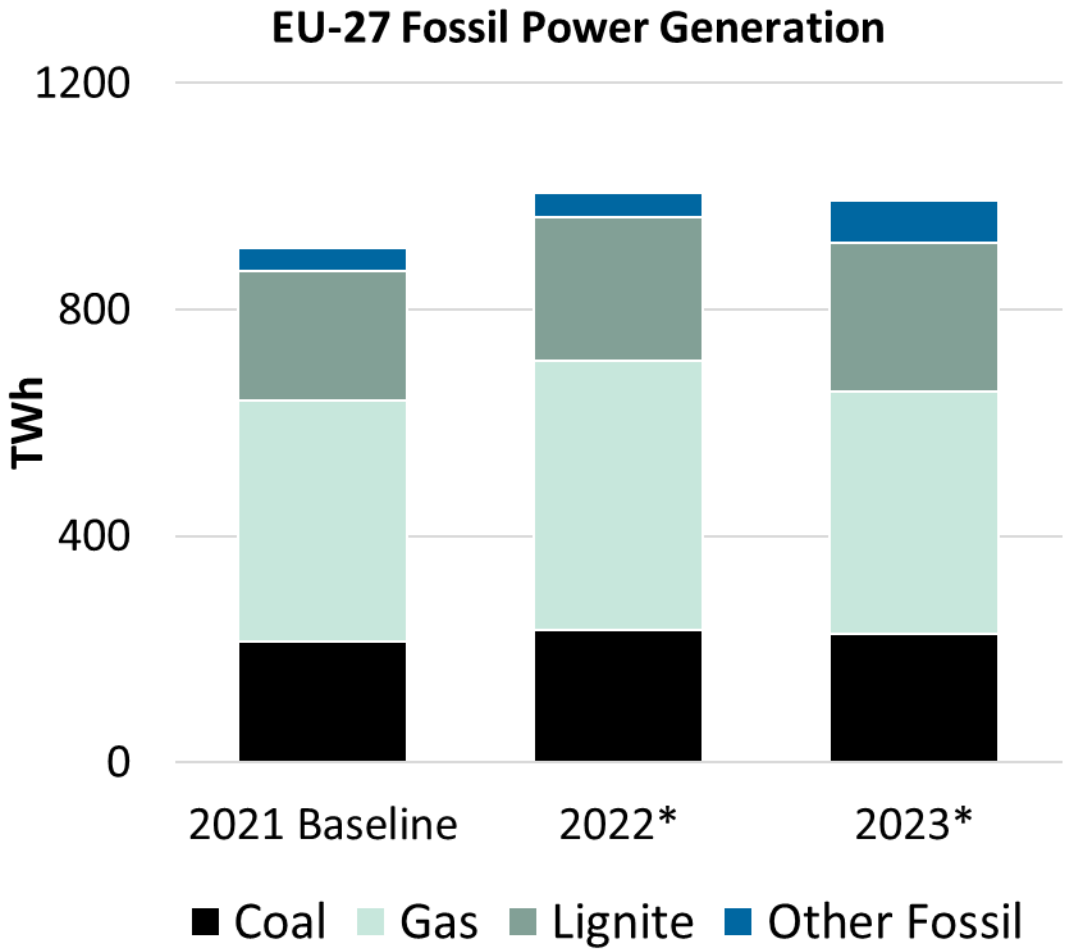
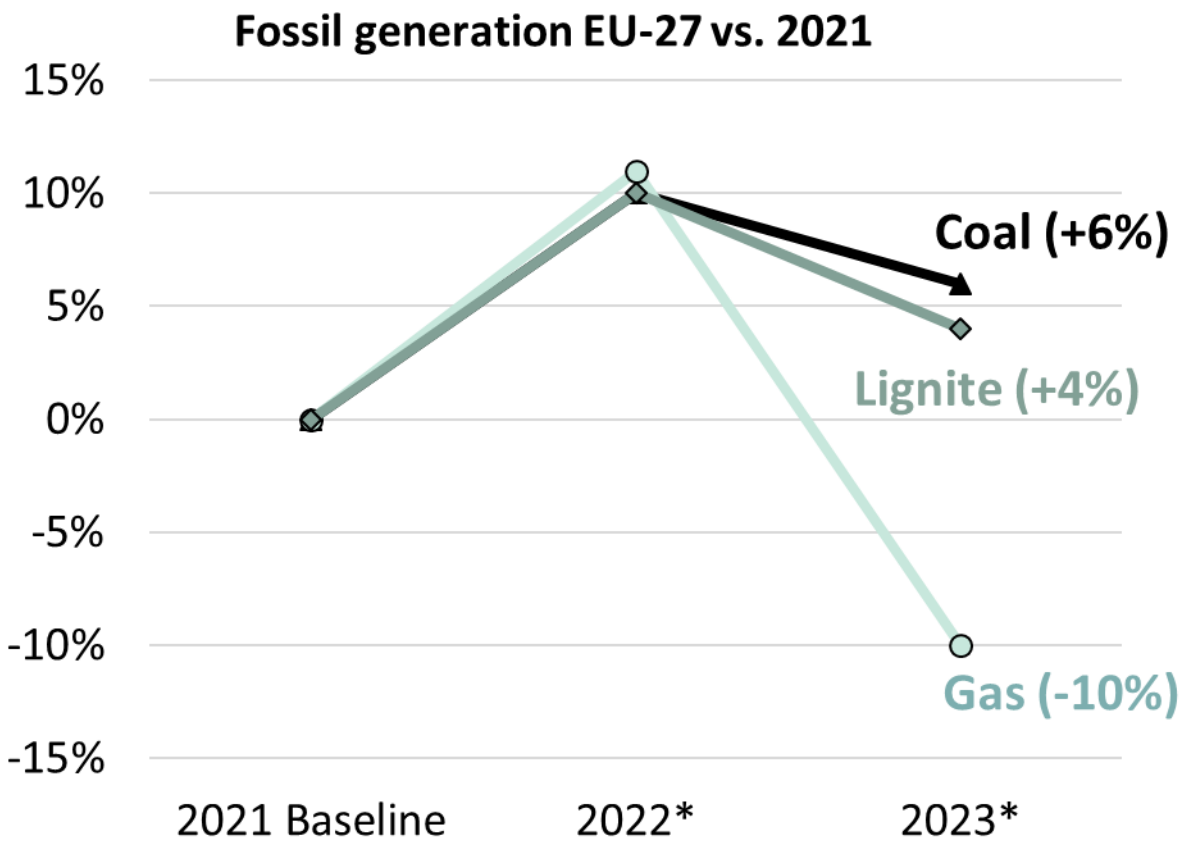
The energy crisis has revived the coal market



Development of wholesale energy prices until 23 September 2022 for: Crude Oil (Brent), Coal (API2, Rotterdam), Natural Gas (Dutch/TTF) and Electricity (Phelix Baseload). Each front month.
Source: Independent Chemical and Energy Market Intelligence

EU coal revival puts pressure on EU ETS

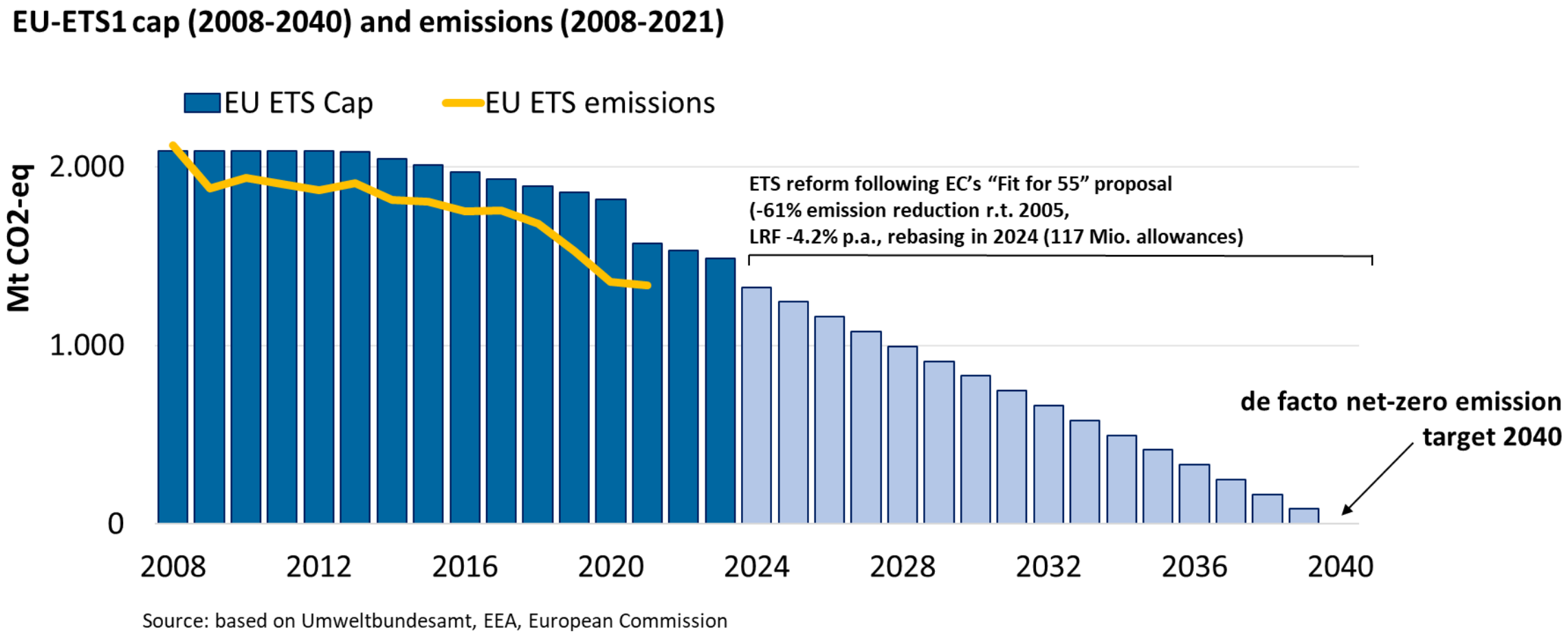




Source: ICIS Power Analytics - Q3 2022 - Base scenario
* predicted

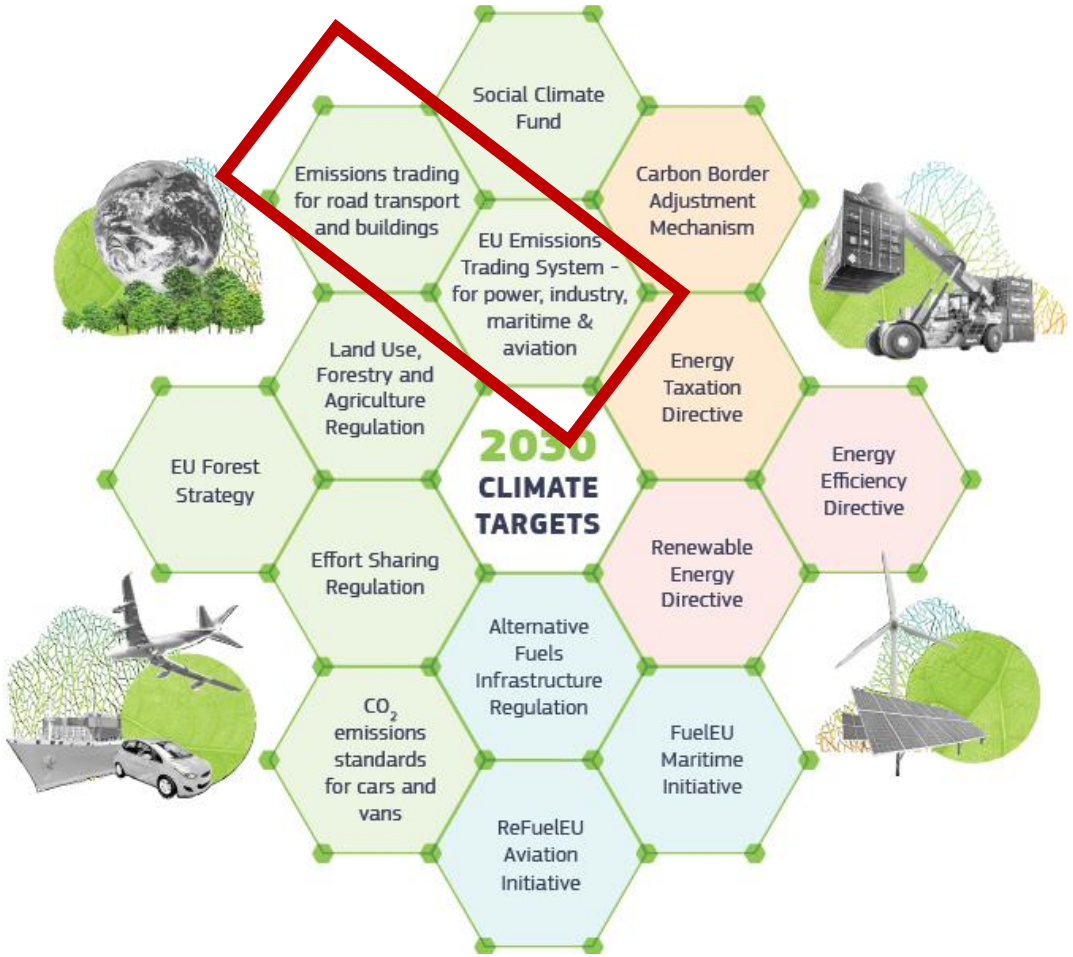
The adjusted cap: A clear path to climate neutrality*

*in combination with proposed ETS2 for road transport and buildings for around 75% of all EU GHG emissions



Source: based on Umweltbundesamt, EEA, European Commission

Not just about the cap…



Speech | 14 July 2021 | Brussels

Statement by Executive Vice-President Timmermans on delivering the European Green Deal

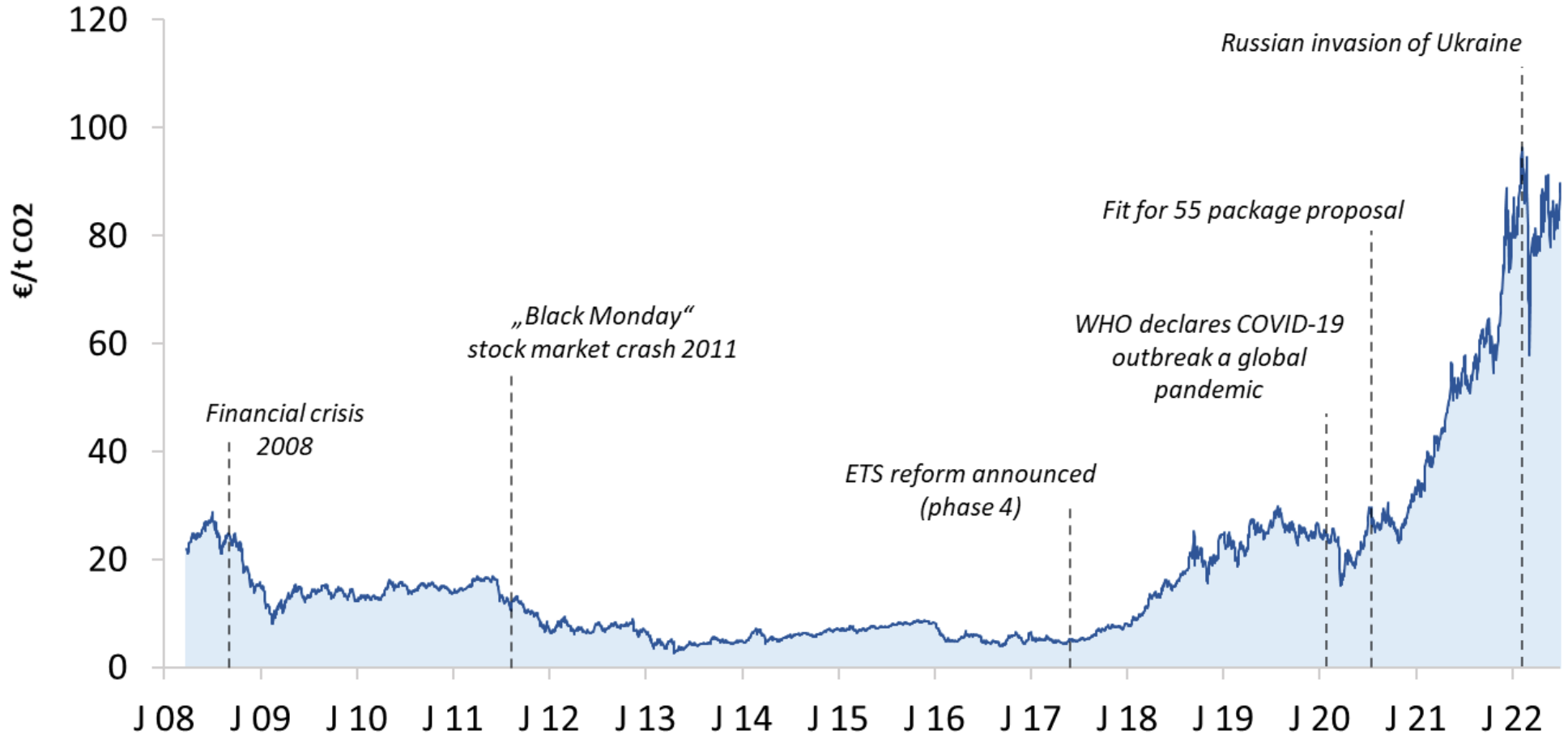
*In many ways, the **ETS is front and center to all our efforts**.*

- *With its **cap on emissions**, it is a proven and effective tool to bring down emissions.*
- *It gives a **price signal** to industry to switch to cleaner production, it drives innovation.*
- *It **generates revenues** for redistribution and reinvestment.*

ETS prices today and beyond 2030*

*Disclaimer: not speaking on behalf of the European Scientific Advisory Board

EU ETS1 prices are an indicator for scarcity AND (anticipated) political developments



Source: based on ICAP

The cap is a policy lever. But for decarbonization action prices matter

1. Expectation of investors: achievement of 2030 targets depends on current investments

2. Revenue sources for green investments at the national and EU level (e.g. CCfDs)

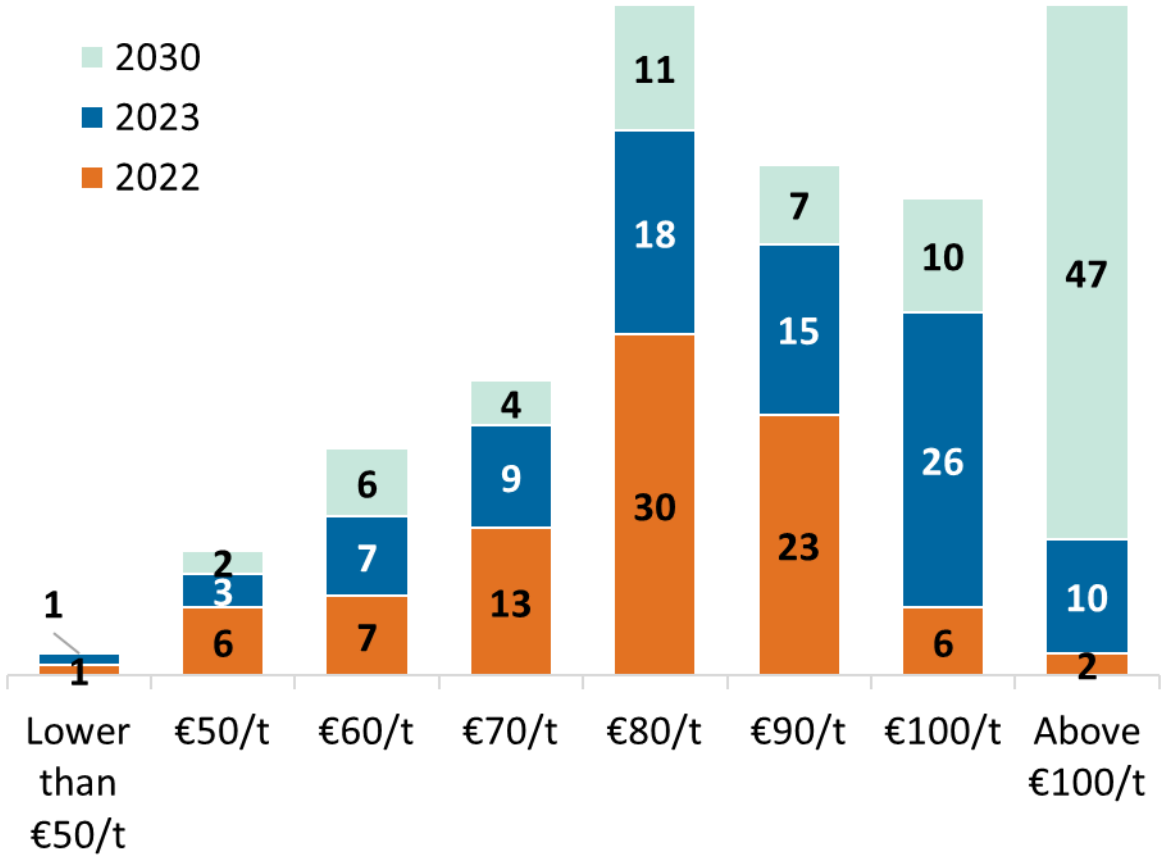
3. Need to manage the arising politics of high carbon pricing

➢ **There is a need (i.e. high information value) of knowing in advance how prices will evolve through 2030 and beyond**

1. Expectations drive investment (but how strongly?)

Fig. 1.4. Price expectations: Expensive EUAs

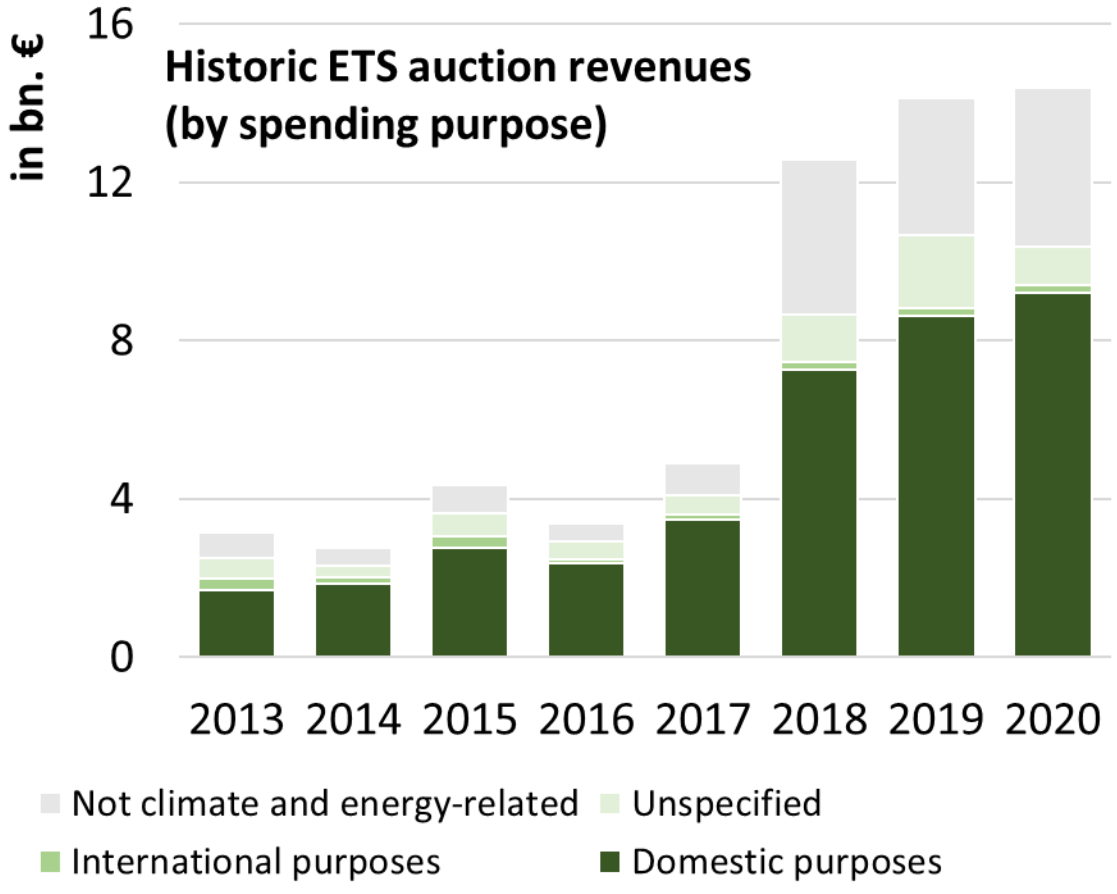
"What do you think will be the average annual price of EUAs in 2022, 2023 and 2030?" (in %)



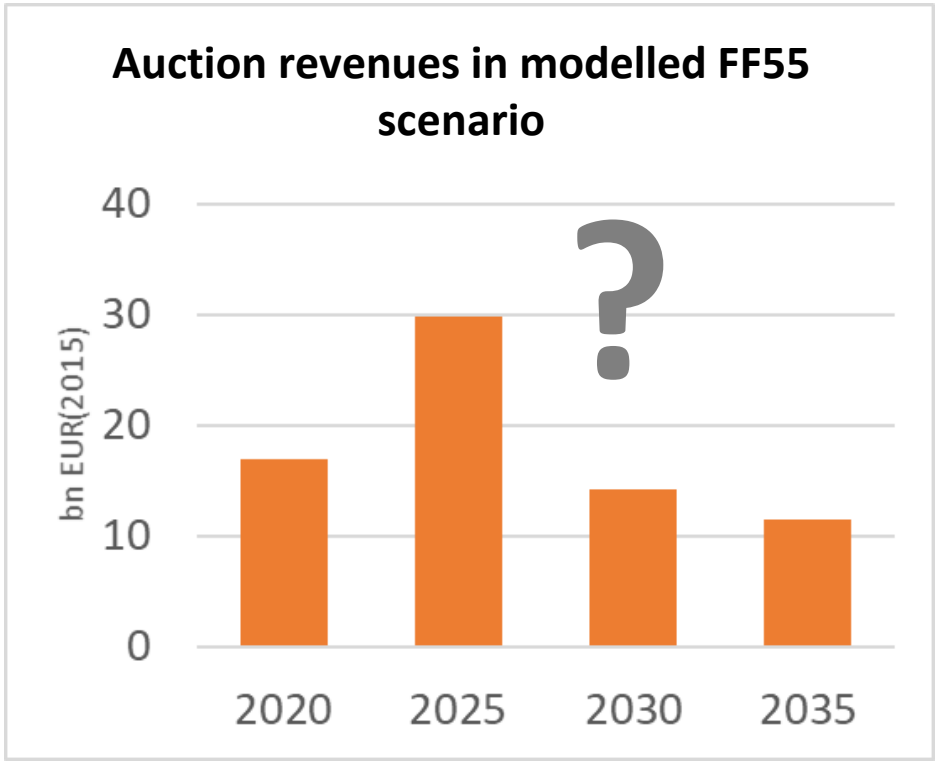
Source: Refinitiv Carbon Market Survey (2022)

- **Investments** triggered not by current prices, but **expectation of future prices**
- **Expectations differ** widely
  - › investments differ, risk taking matters
- The **higher the expectation**, the more likely **2030 target** will be **achieved**

2. Revenues will peak with advancing decarbonization, but when and how much?

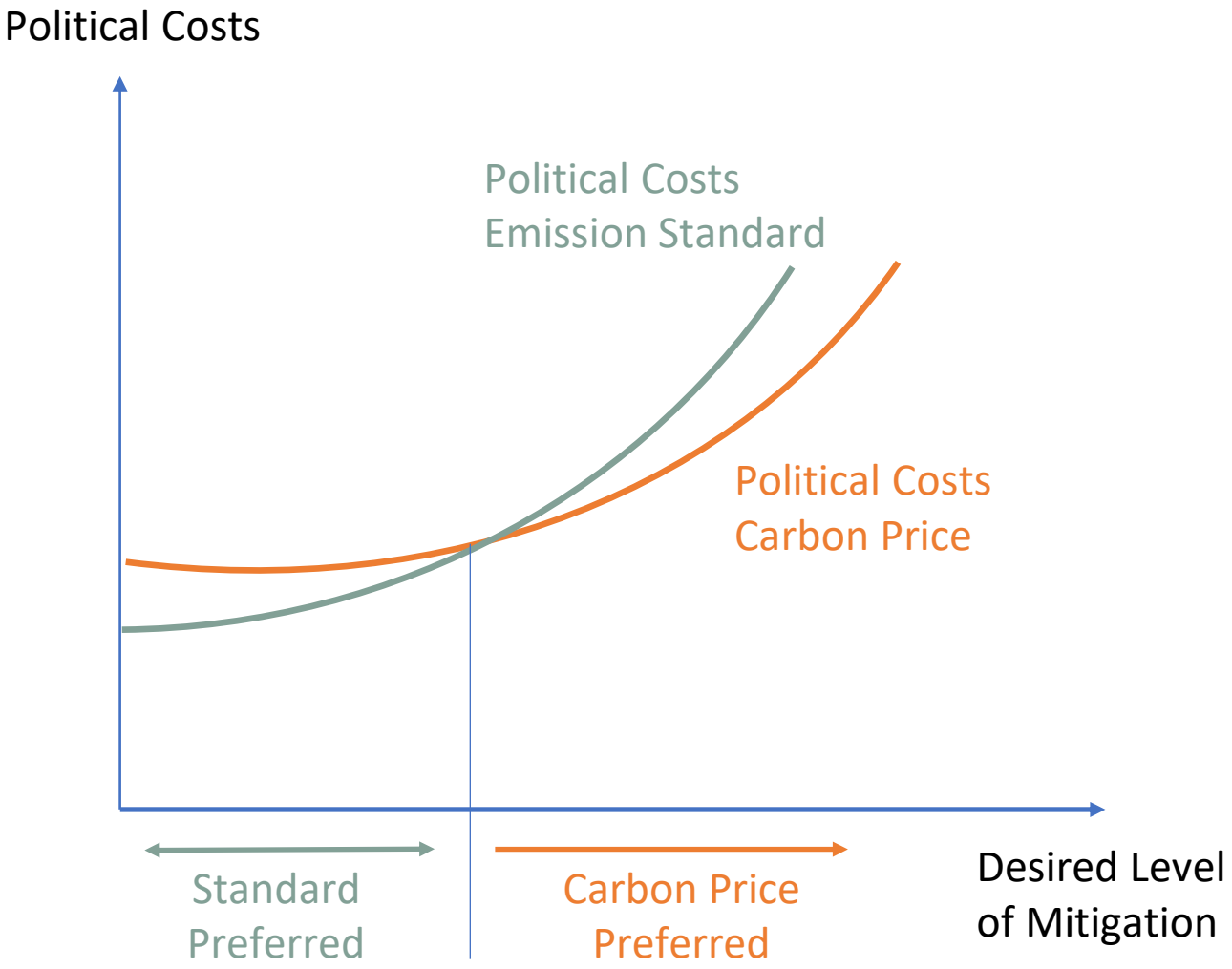


Source: based on EEA (use of ETS auctioning revenues)



Source: PIK/LIMES-EU model

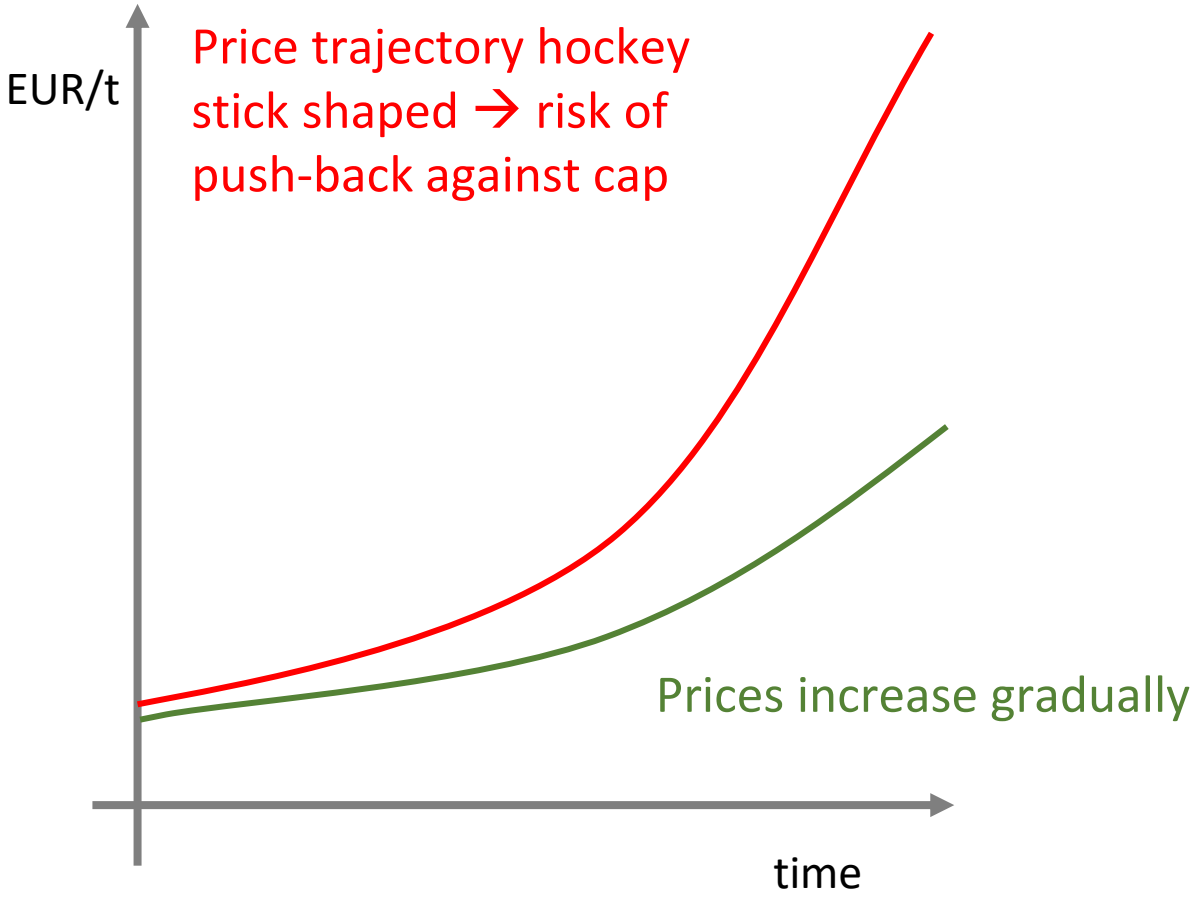
3. Carbon Pricing will become more important as ambitions increase



Source: based on M. Jakob

- An **instrument's political costs** (PC) is a function of:
  - the salience of its costs (SC)
  - mitigation costs
  - political system
- **Command and control** instruments entail lower SC, but higher mitigation costs than market-based instruments
- Hence, command and control instruments **have lower political costs for low-mitigation targets**

…but costs of climate policy are highly transparent: need to safeguard against a push-back when prices become hockey-stick shaped



Source: based on Pahle et al. (2022)

- Risk that **cap will be softened** when prices **increase too sharply**
- **Factors**: high interest rates, sluggish investments, REPowerEU frontloading, etc.
- **Safeguarding** against potential push-back through:
  - › higher price certainty (corridor)
  - › supporting investments

Takeaways

- The EU‘s pathway to **climate neutrality** must be guided by **independent and sound scientific advice**
- Despite short-term crisis interventions, **long-term climate goals must be sustained** → ETS cap plays a crucial role
- **Carbon pricing** becomes more important as **ambitions** increase
- **High information value** of analyzing future prices because:
  - › Drivers of investment
  - › Source of revenues for green investments
  - › Indicators of political costs

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Thank you for your attention!

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