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The European Emissions Trading Scheme
Where are we?

Electricity Policy Research Group at the University of Cambridge
EPRG Winter Research Seminar 2006

Cambridge, 15 December 2006

Dr. Felix Chr. Matthes

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The EU ETS
Where do we stand?

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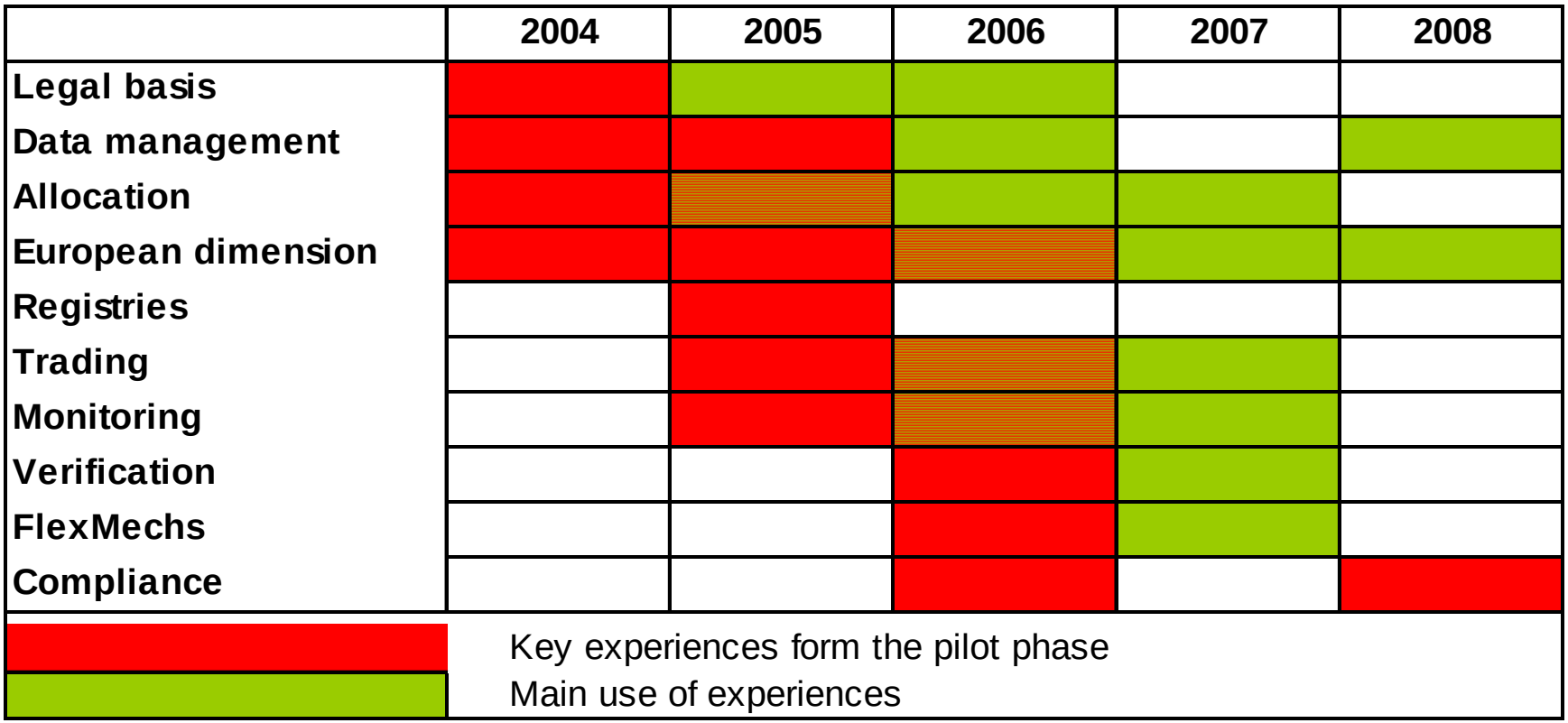
- **Phase 2005-2007 is the pilot phase**
- **Goal of the pilot phase: Raising experiences and prepare adjustments of the scheme**
- **Crucial issue: Buy-in or lock-in**



An EU scheme – a single EU price
EUA price determinants by April 2006

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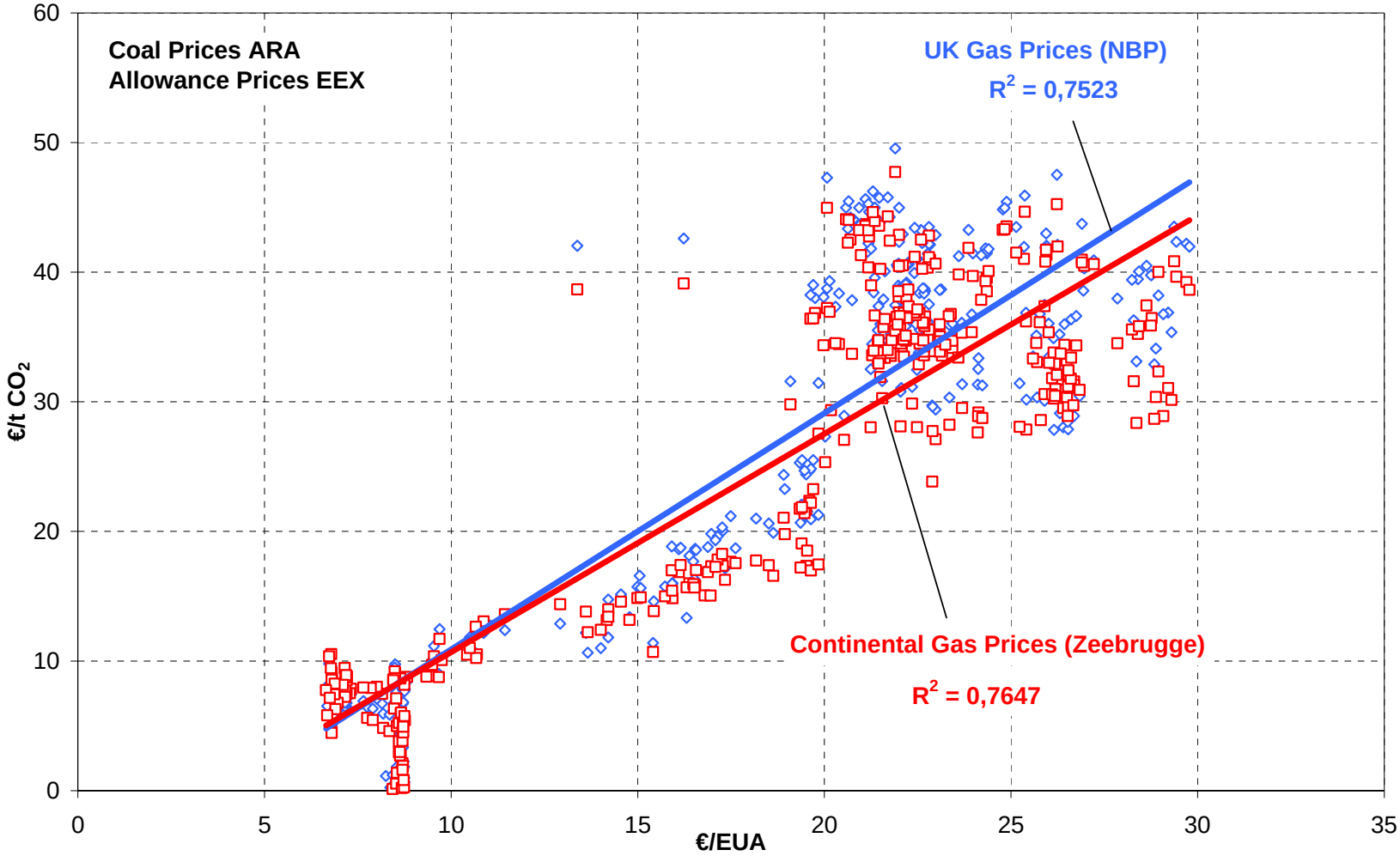

An EU scheme – a single EU price
More uncertainties since May 2006

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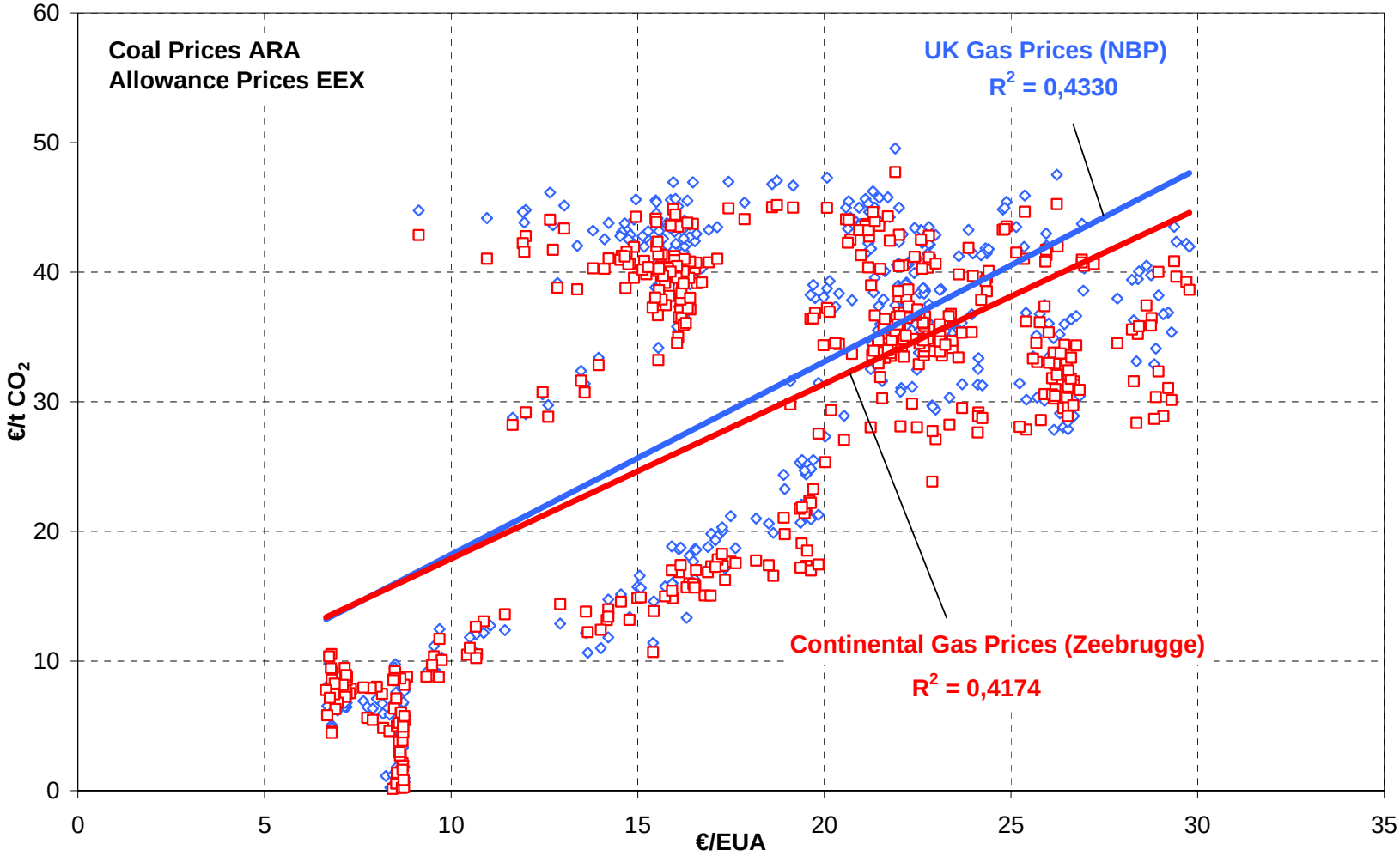

Caps for Phase 2
Closing the Kyoto gap?

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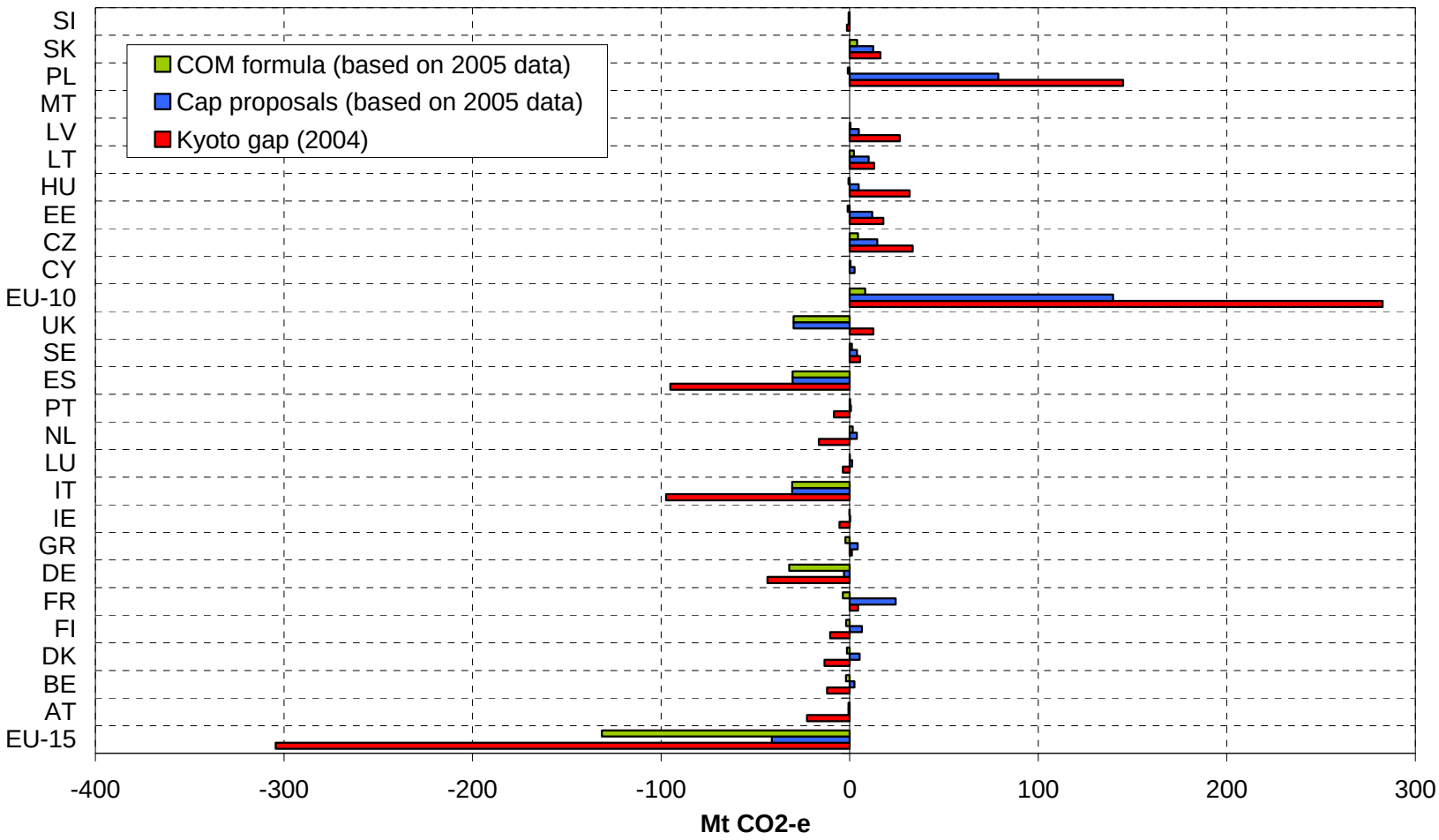

The challenge of allocation
Ensure incentives from the scheme

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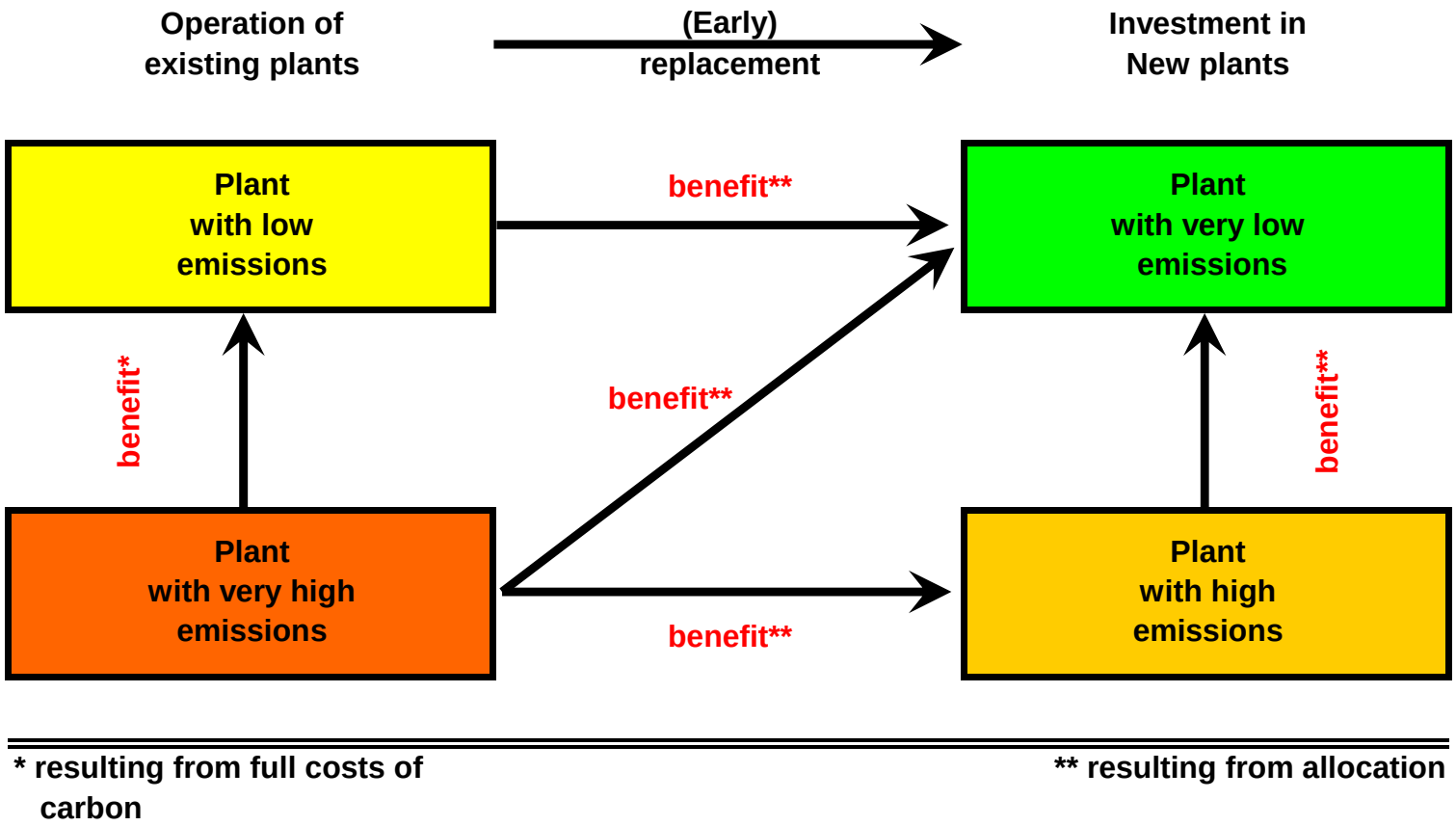

New entrant allocation
Effects on long-term CO_2 levels

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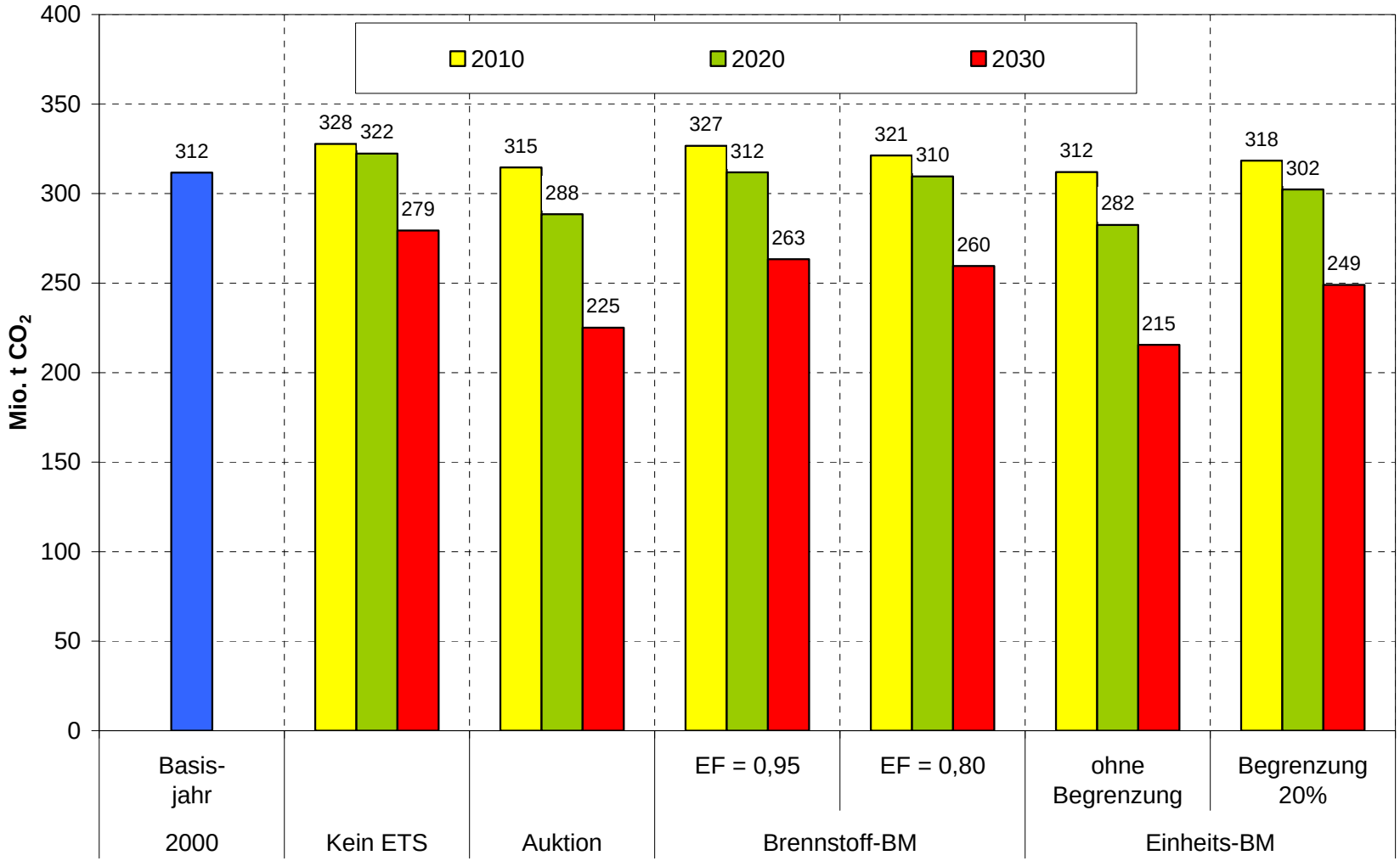

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New entrant allocation
Economic and competition distortions

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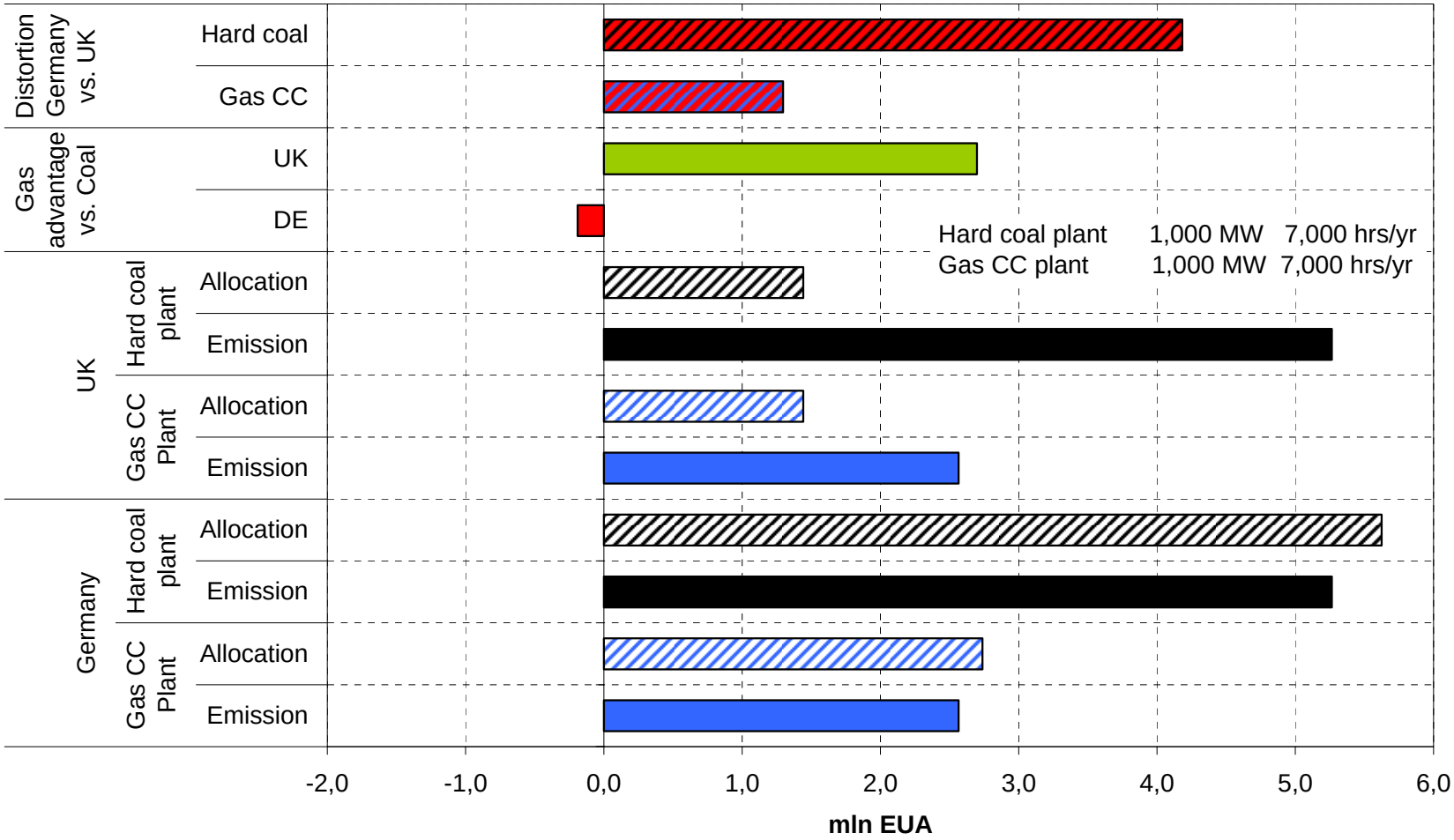

Effects from new entrant allocation and pass-through of CO_2 costs

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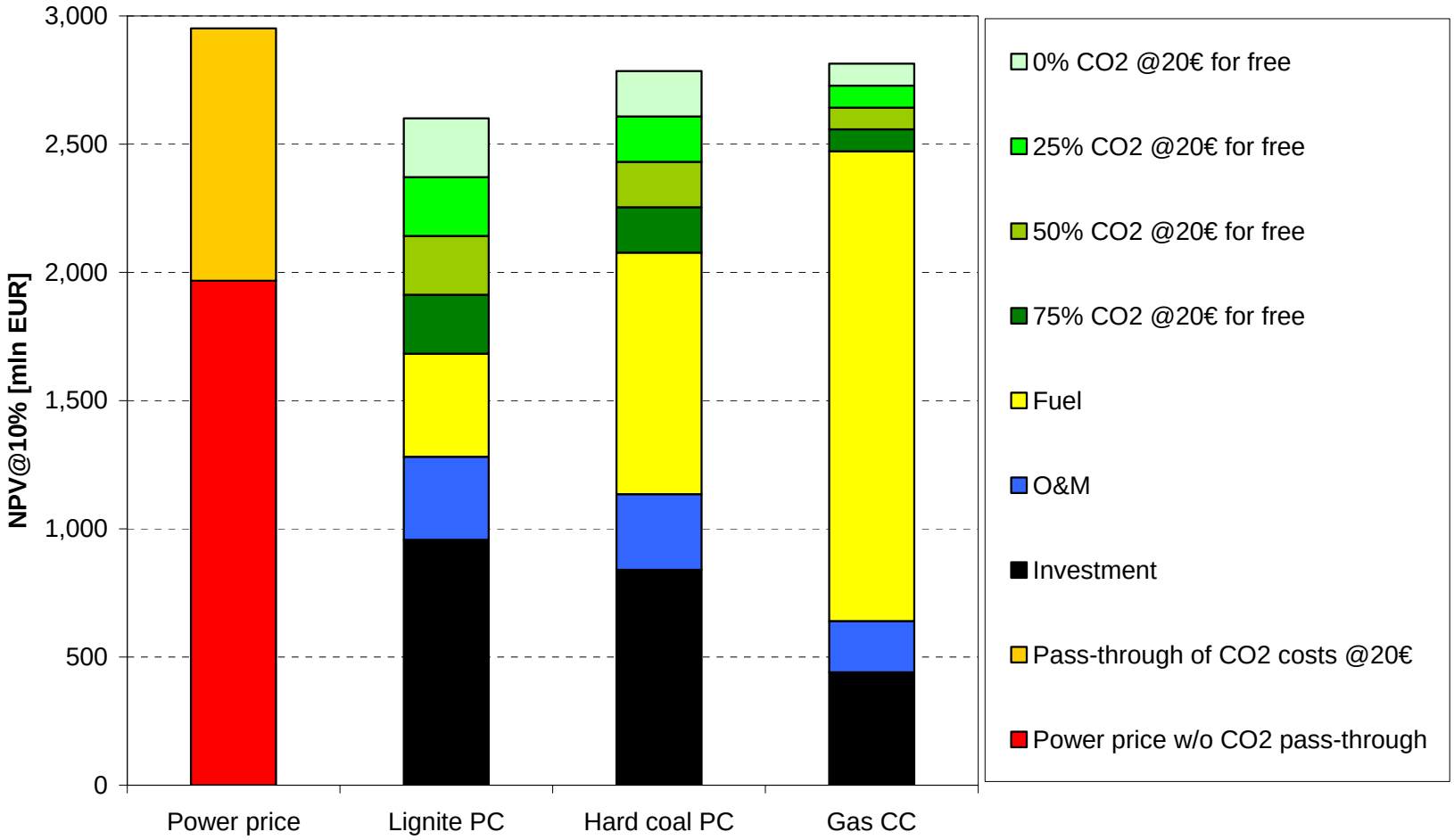

The EU ETS (price signal) works
Many questions remain

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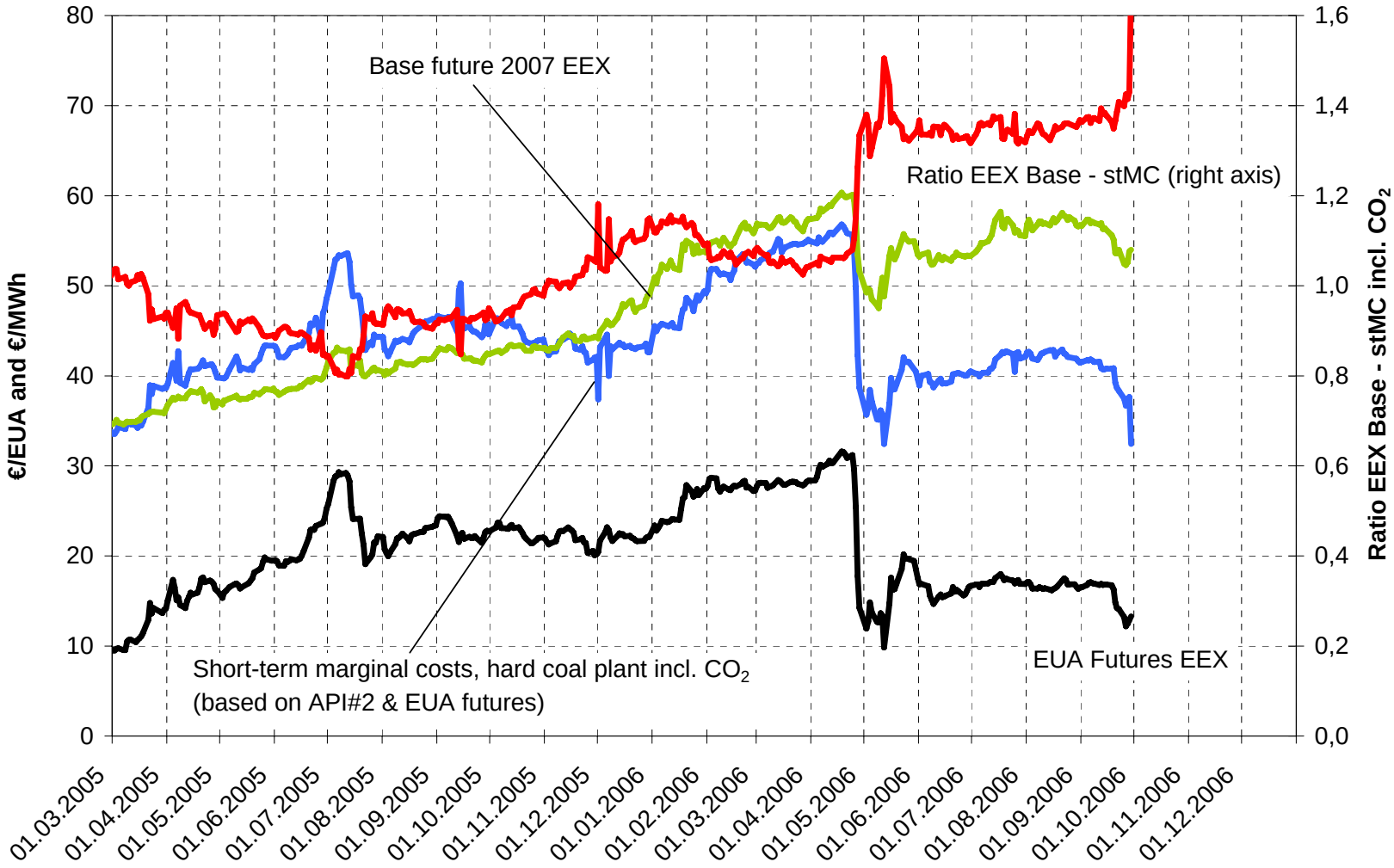

Interactions between caps, transaction costs & economic efficiency

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- Modeling exercise on the EU ETS in Germany
  - cost reduction of 250…500 mln €/a compared to other policies and measures
  - against the background of an 45 Mt/a CO_2 reduction
  - and an EU ETS coverage of about 500 Mt CO2/a
- Transaction costs
  - allocation fee (1st TP in Germany: 1.5 … 15 ct/EUA)
  - monitoring & certification (1.0 … 5 ct/t CO2)
  - trading (EEX 2.5 ct per EUA traded)
  - total of 10 ct/EUA p.a. not out of range (equals 50 mln €/a for the German ETS)
- What is the economic efficiency gain of an ETS with a 2 Mt CO2 reduction target?
  - certain minimum caps are necessary on the medium and long-term to legitimate the EU-ETS by economic efficiency gains

Some Conclusions

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- **The EU ETS works (in the main parts of the EU and after some take off problems in many countries).**
- **There is a significant price signal and there are emission reductions against the BAU without any doubt. However many questions remain. More empirical data are needed.**
- **The cap is key for environmental effectiveness:**
  - **size and consistency of the cap,**
  - **procedures of cap setting.**
- **Allocation does matter:**
  - **no ex post adjustments is important,**
  - **new entrant allocation can create major distortions (most notably for fuel or process specific free allocation).**
- **However, significant transactional costs exist.**
- **There is technological innovation induced by the EU ETS.**

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Thank you very much

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