

Financing the Next Industrial Revolution

Global Investments for Climate and Energy Security

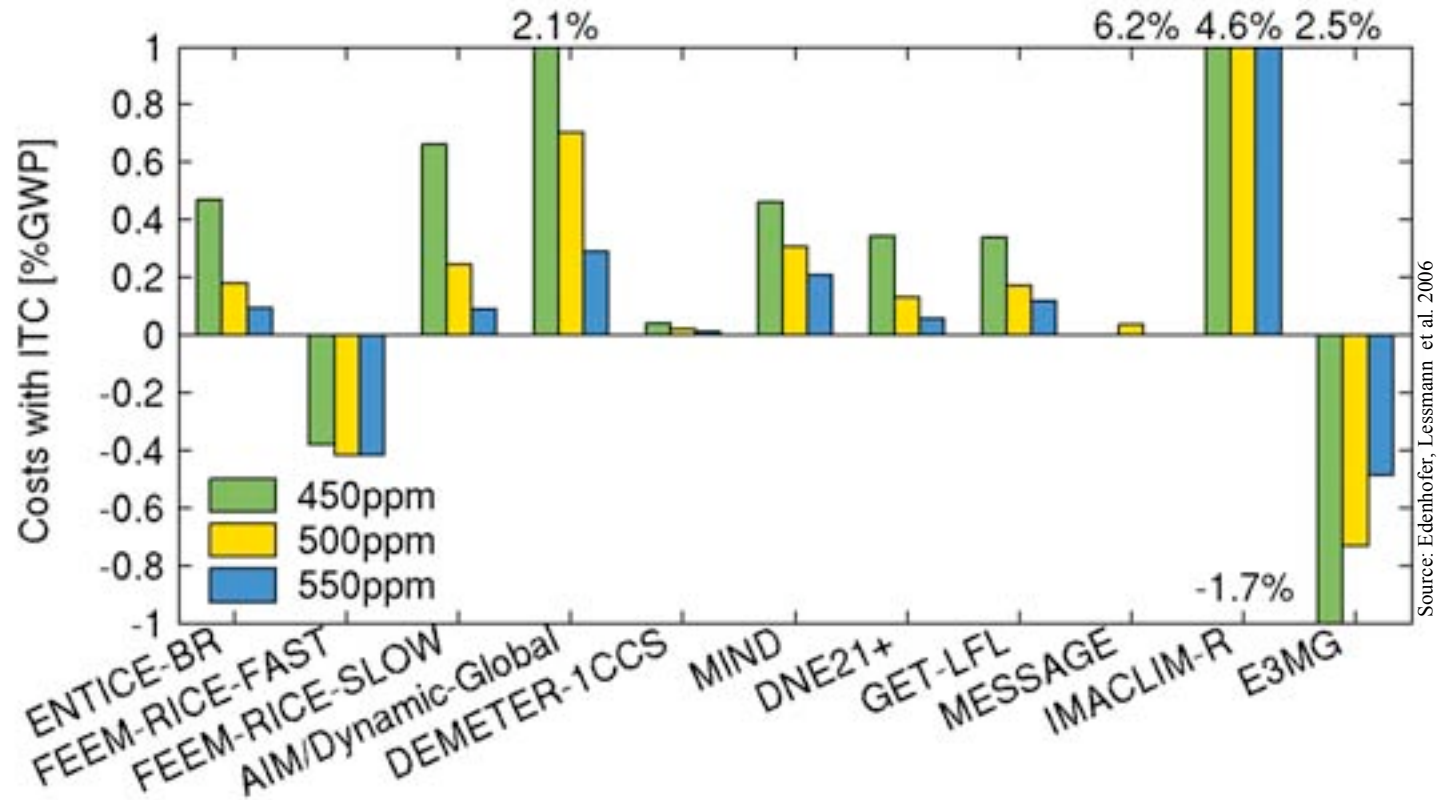
Prof. Carlo C. Jaeger



Relevant Investment Flows

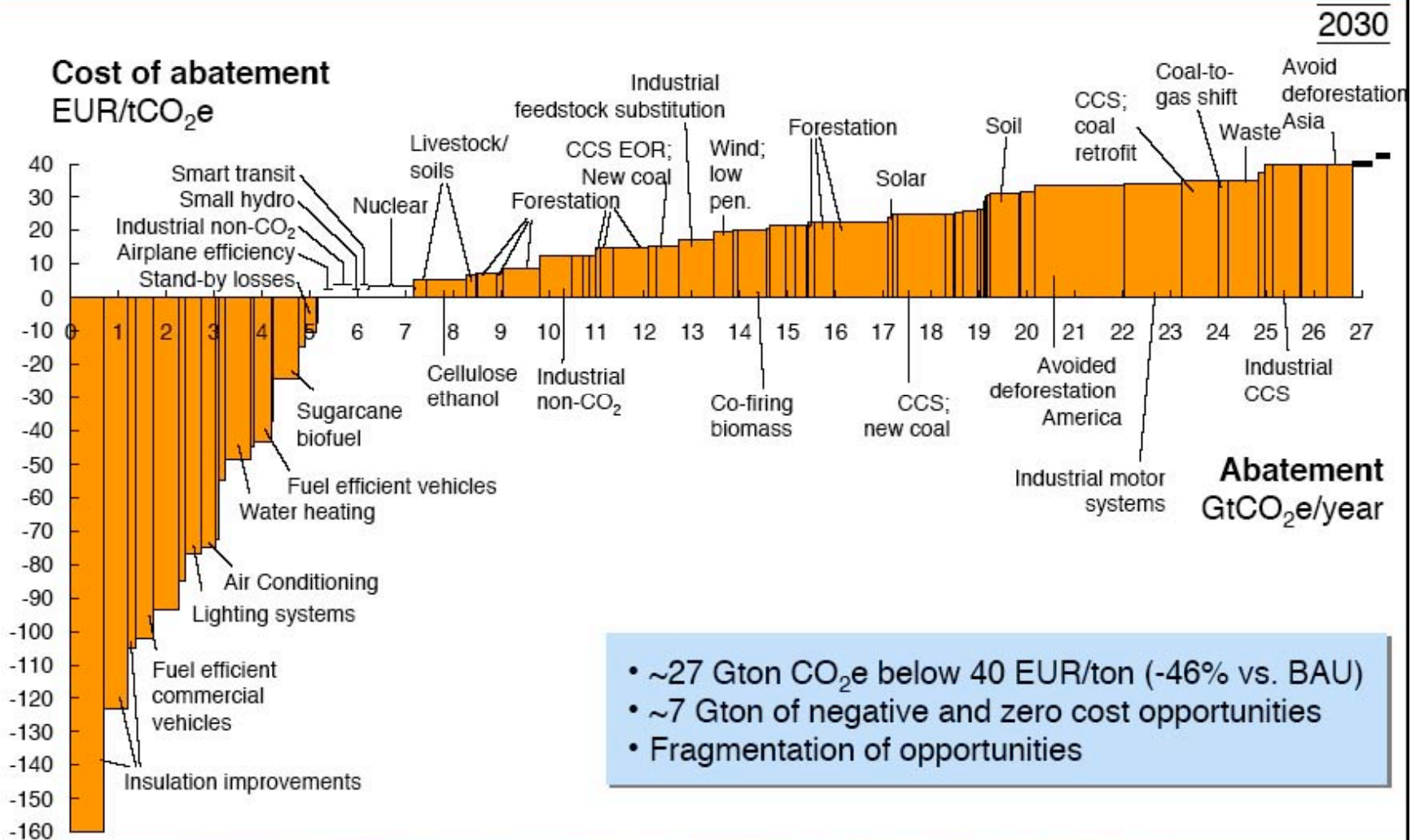
- Global GDP: ca. 40 Trillion €
- Global Annual Investments: ca. 8 Trillion €
- Investments of about 4 Trillion € shape patterns of energy use
- Investments of about .5 Trillion € shape patterns of energy production
- **How can these investment flows be induced to change course?**

Estimates of Mitigation Costs



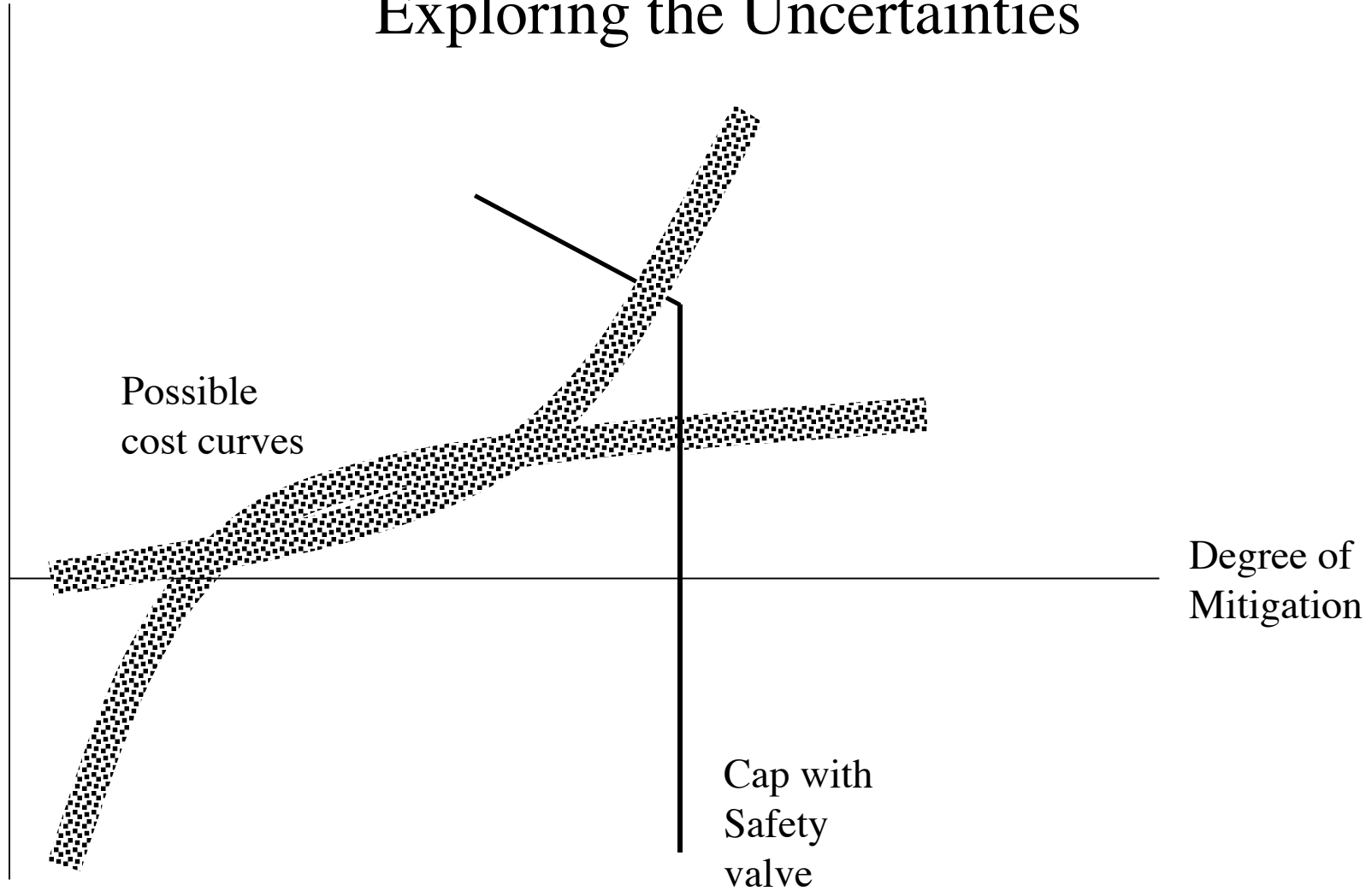
Edenhofer et al., 2006

Global cost curve of GHG abatement opportunities beyond business as usual



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Mitigation costs: Exploring the Uncertainties



Two Pitfalls

- Grandfathering emissions permits can lead to increased energy prices without serious emissions reductions.
- Attempts by government to identify the most promising technologies can lead to serious waste of taxpayers money.

Risk and Return: Key Incentives

- Carbon Prices
- R&D Subsidies
- Border Tax Adjustments
- Tax Breaks for Sustainable Investment
- Feebates

The New Role of Science

- Joint Learning by Jointly Doing
- Identify Research Questions in Stakeholder Dialogues
- Help Design Incentives and Investments
- Monitor Actual Experiences
- Assess Experiences in Stakeholder Dialogues