



ELECTRIC POWER
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International Offsets: The potential role of the energy sector

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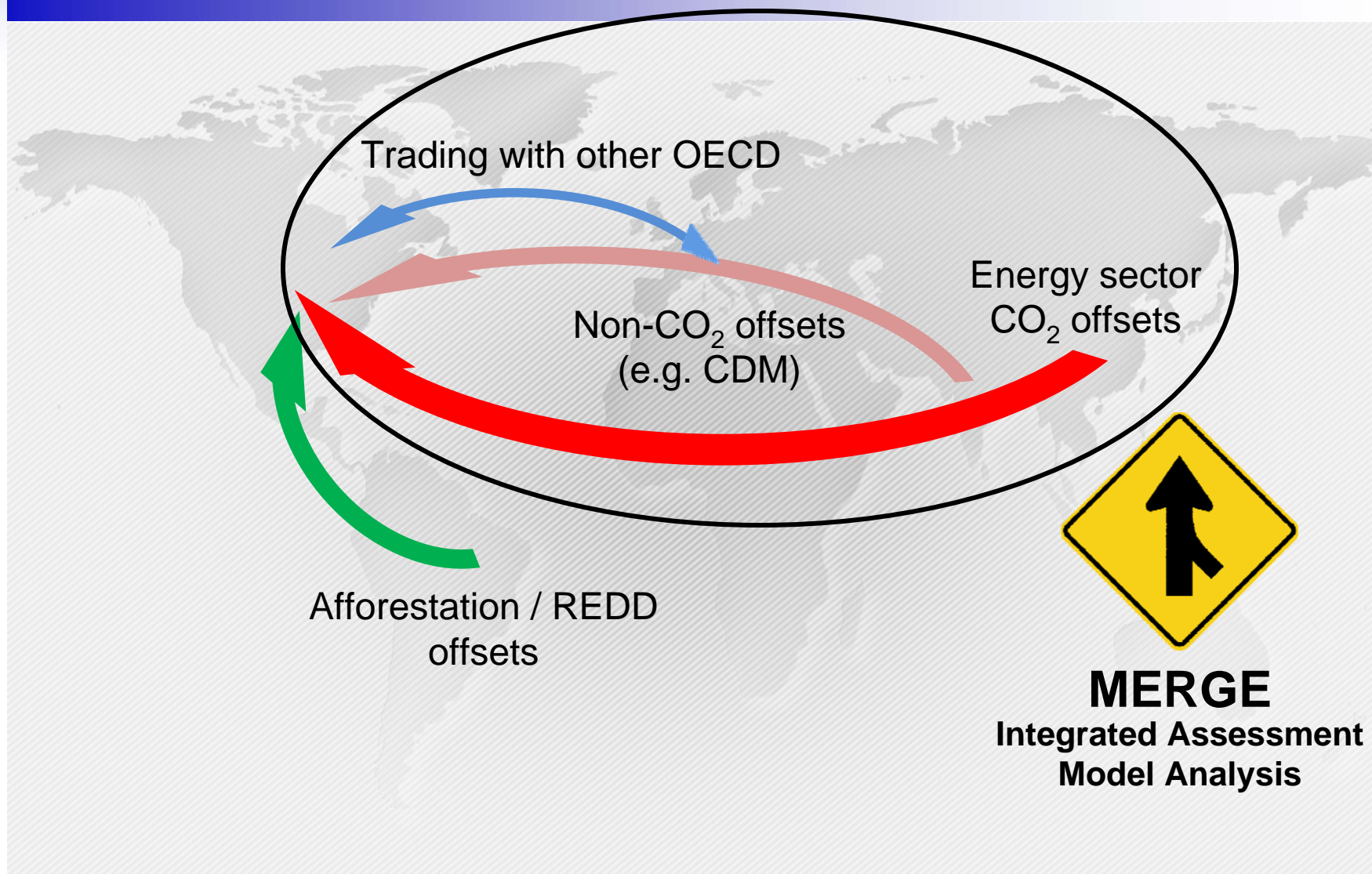
Washington, DC

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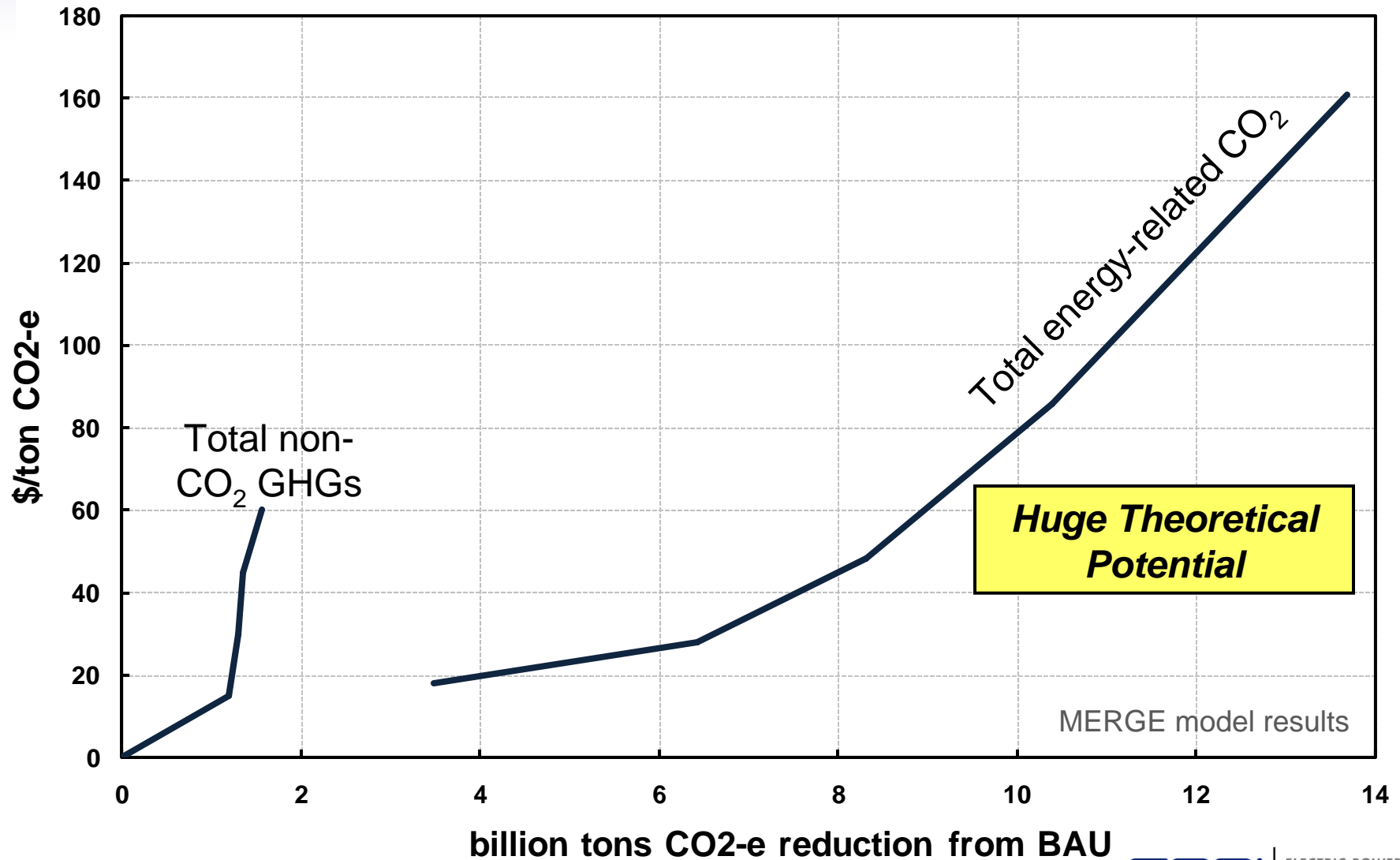
Summary of key points

- Under Waxman-Markey bill, energy-related offsets are admissible through a sectoral mechanism
- Energy-related CO₂ abatement in non-OECD is **abundant** and **cheap**, but many **institutional barriers** exist near-term
- In long-term, as support for **global stabilization** efforts broadens, non-OECD countries will become less willing to export cheap abatement options
- Is there a **window of opportunity** for offsets?

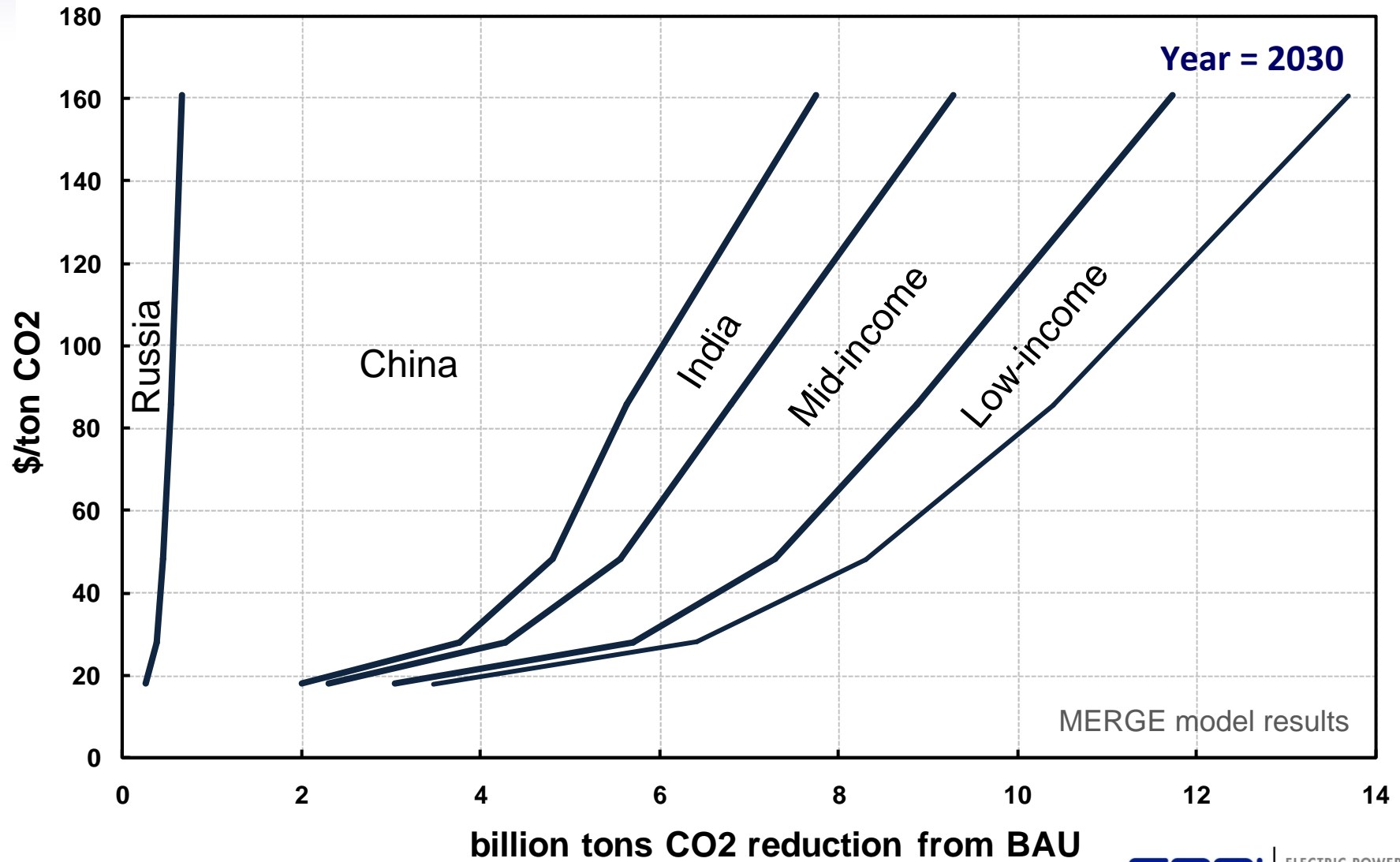
Sources of International Compliance



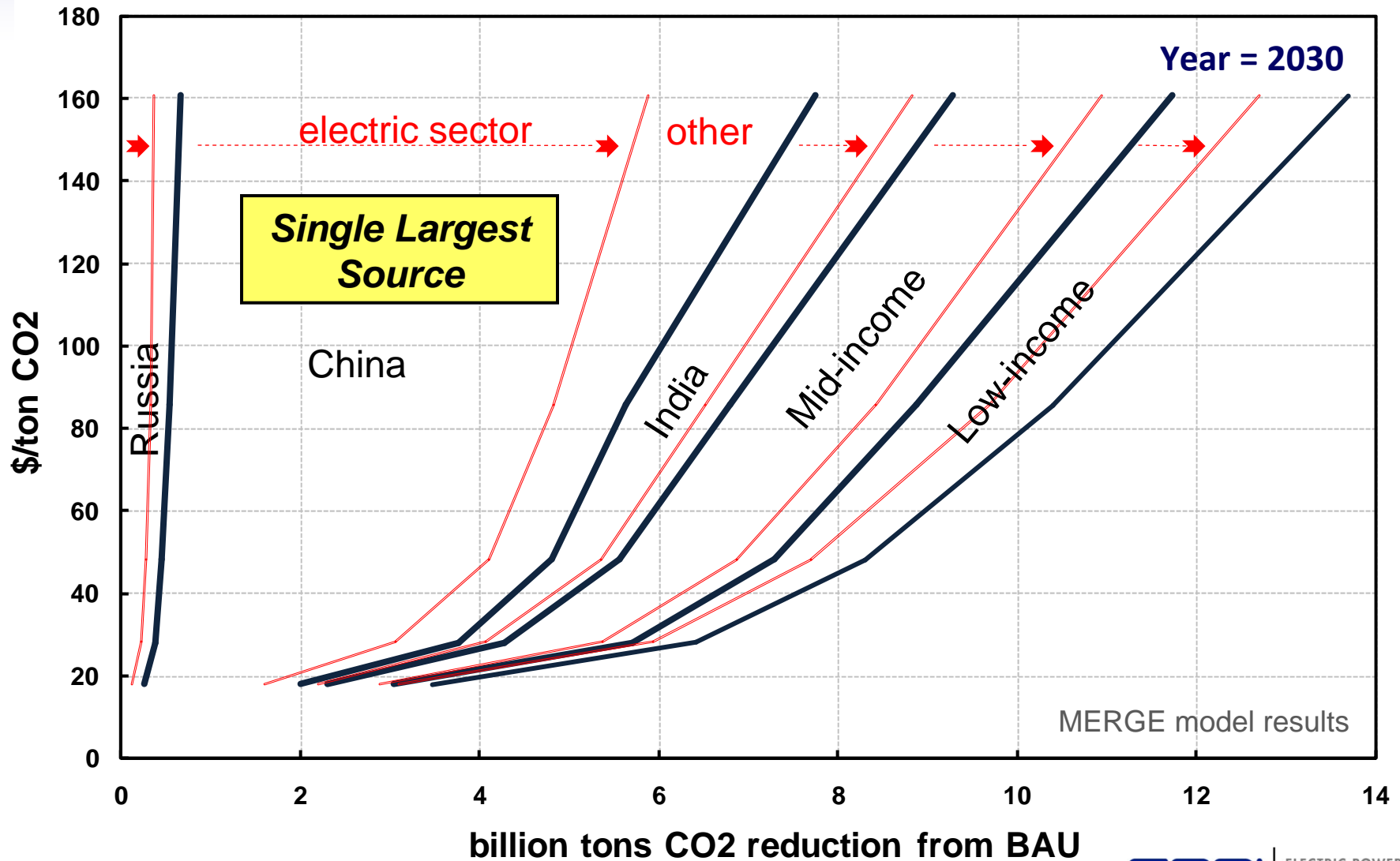
Non-OECD Abatement Opportunities in 2030



Energy-related CO₂ abatement by region



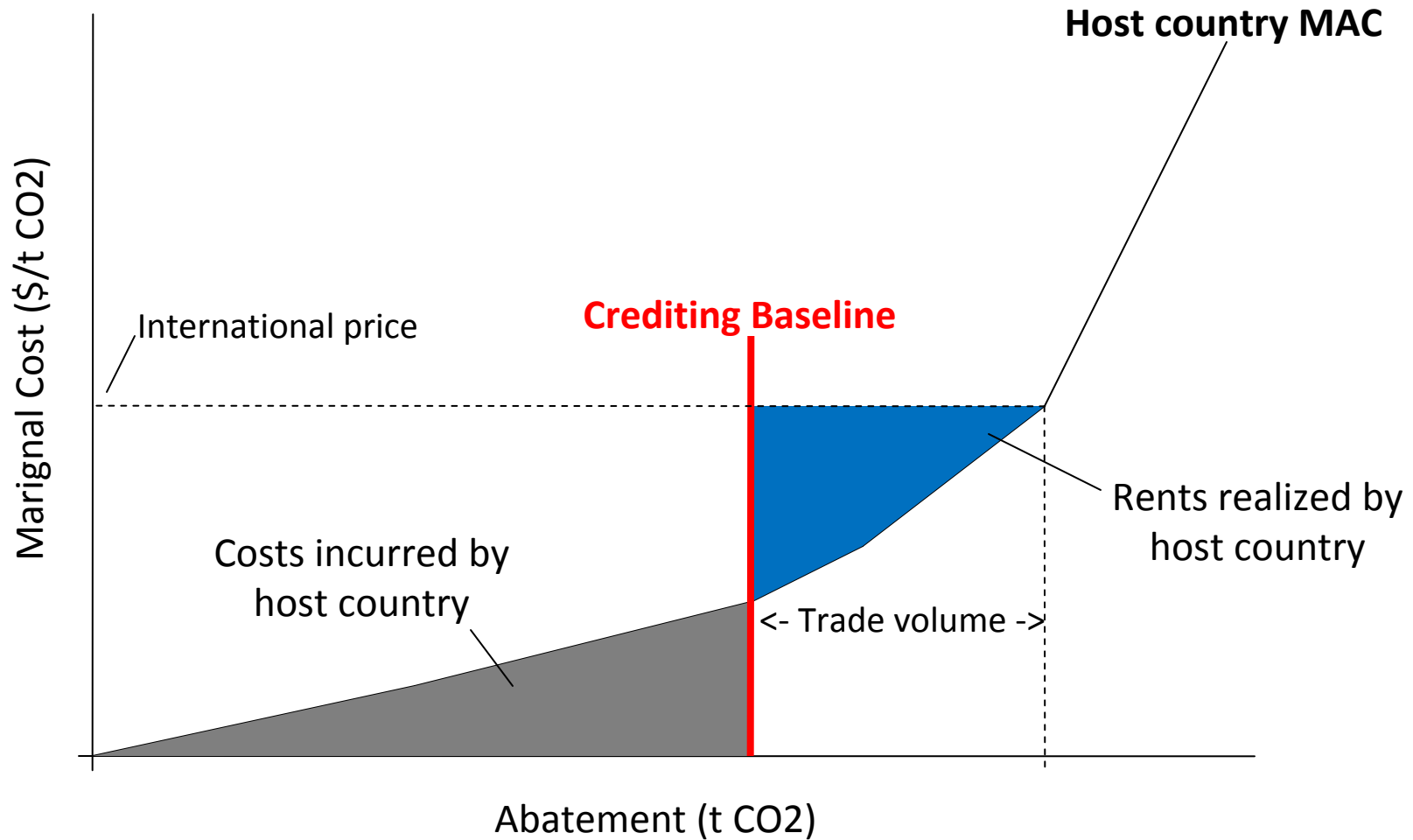
70% Of Abatement Occurs In Electric Sector



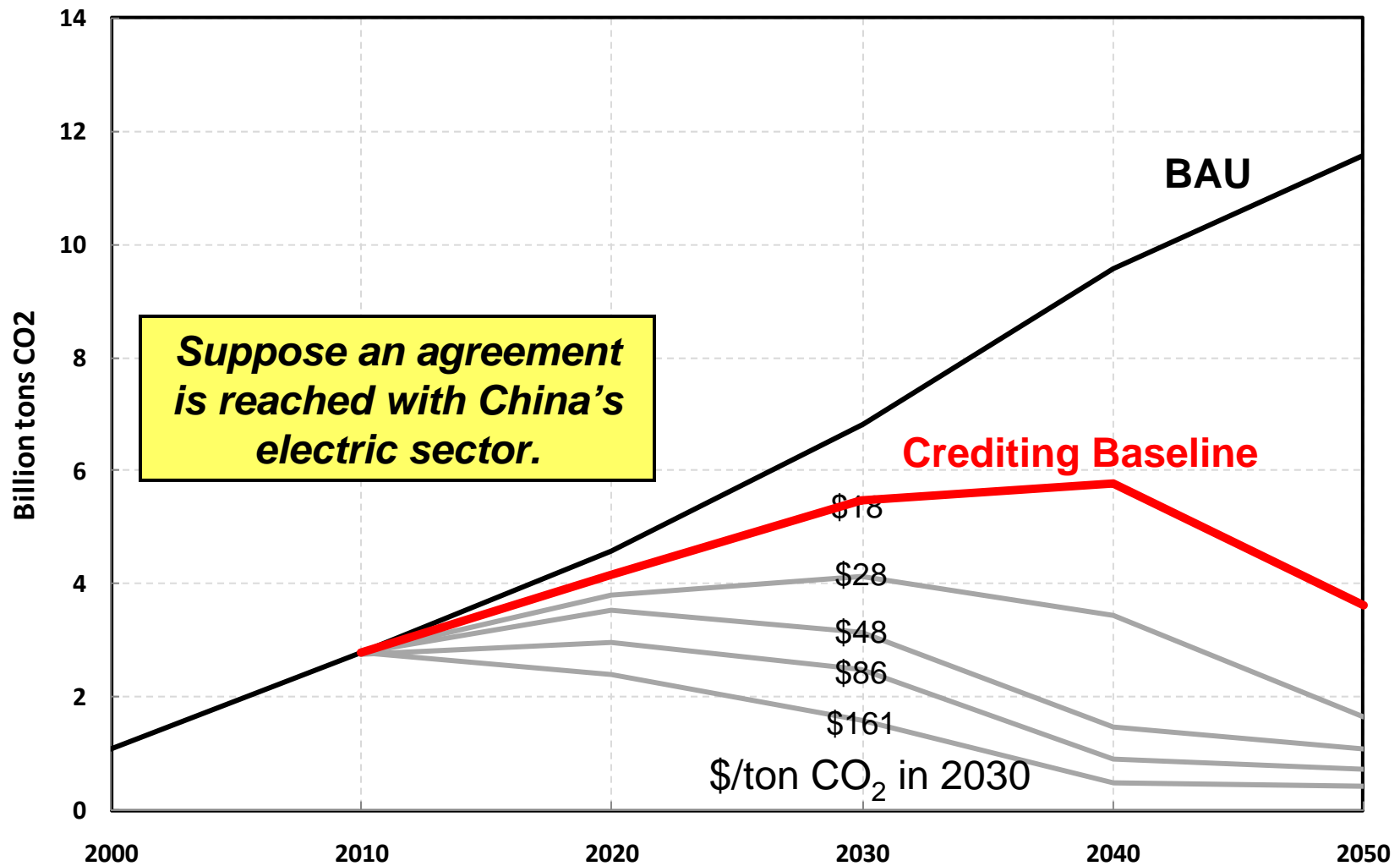
What are the institutional barriers?

- Energy-related offsets must come from a capped **sector** in a **participating country** under a **qualifying agreement**
- Cap must be **below BAU**; only reductions beyond the cap can be sold as offsets, market mechanisms are unclear
- **Electric sector** is by far the largest sector (in terms of low-cost abatement), with **China** by far the largest country
- Would China accept an electric-sector cap linked to the US trading system? Or would it undertake its own policy?

Host Country Economics of Crediting Baseline



China's Electric Sector Emissions

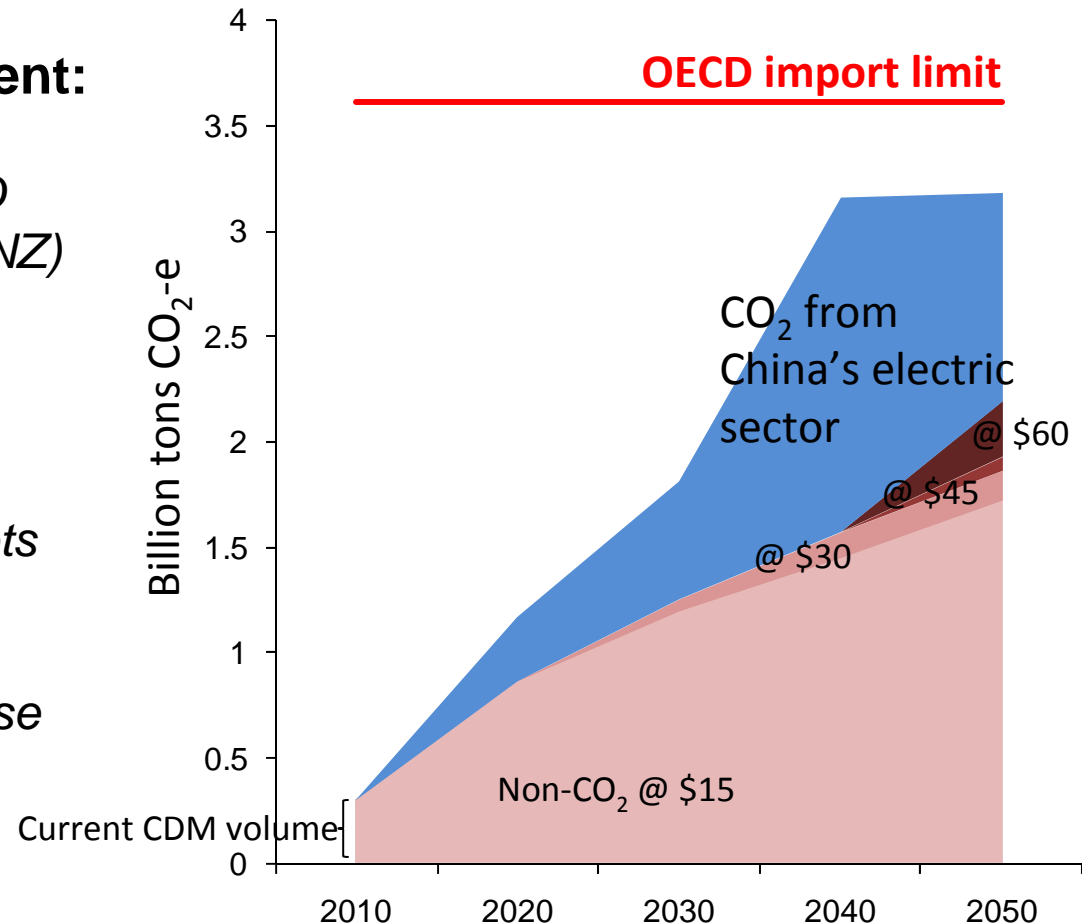


Offset transfers from Non-OECD to OECD

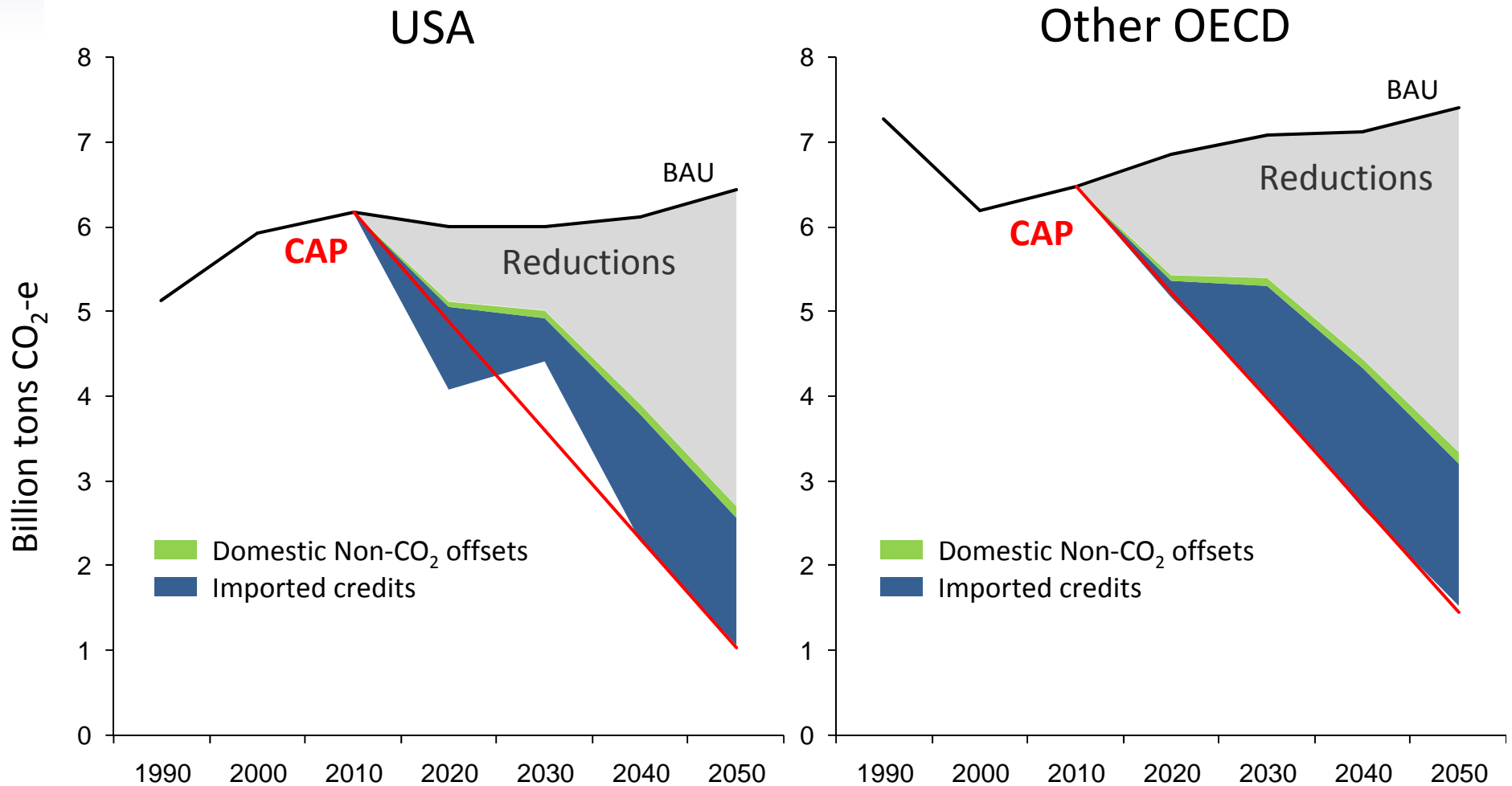
International policy environment:

- 80% below 1990 by 2050 in OECD (USA + EU + Japan + CANZ)
- W-M scale offset provisions in all OECD countries
- Expanding CDM for non-CO₂ offsets from non-OECD
- Energy offsets from capped Chinese electric sector only

If institutional barriers are overcome, supply could become substantial.



Compliance in OECD with Cap on China Elec.

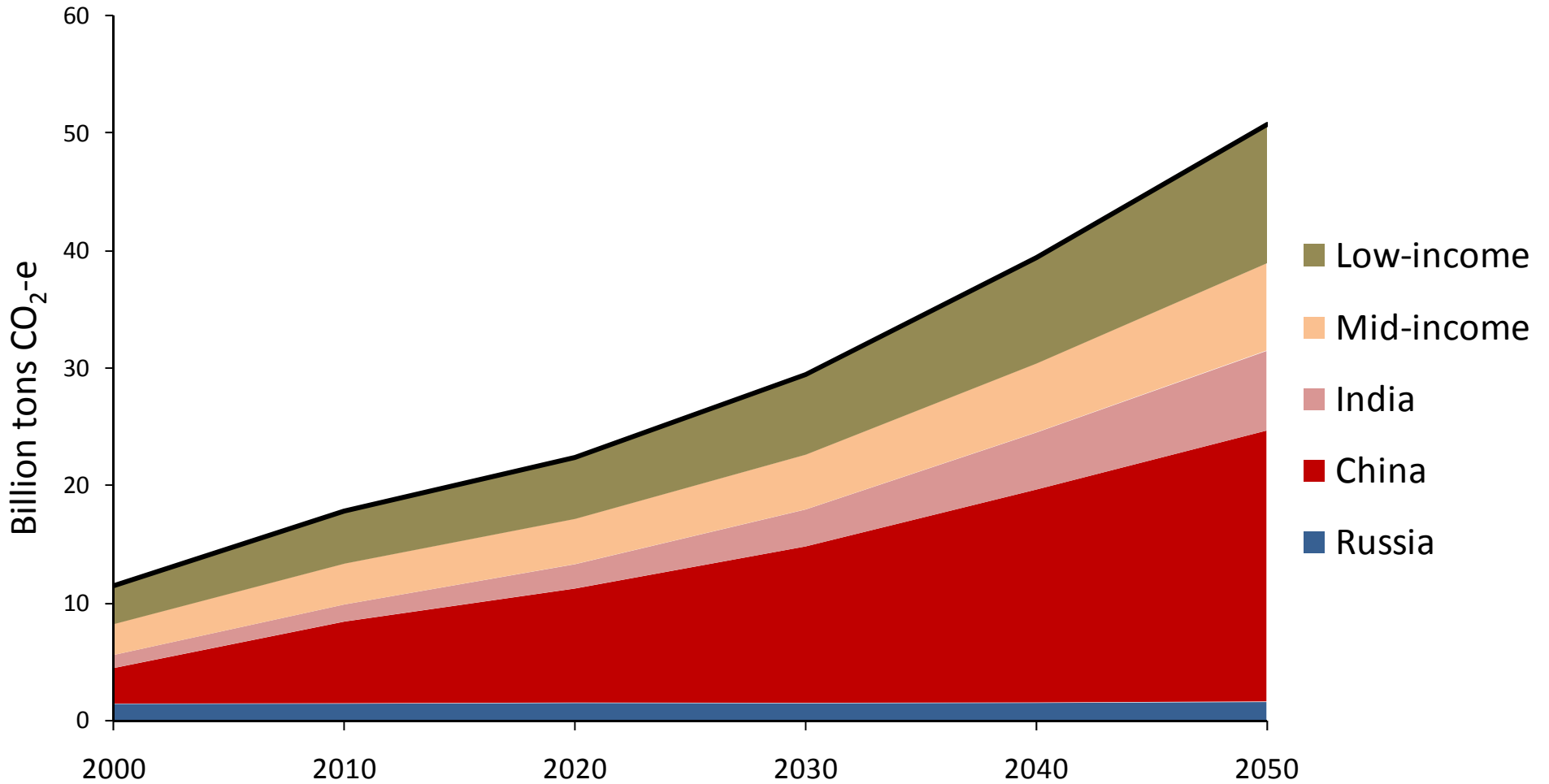


Impact of longer term targets

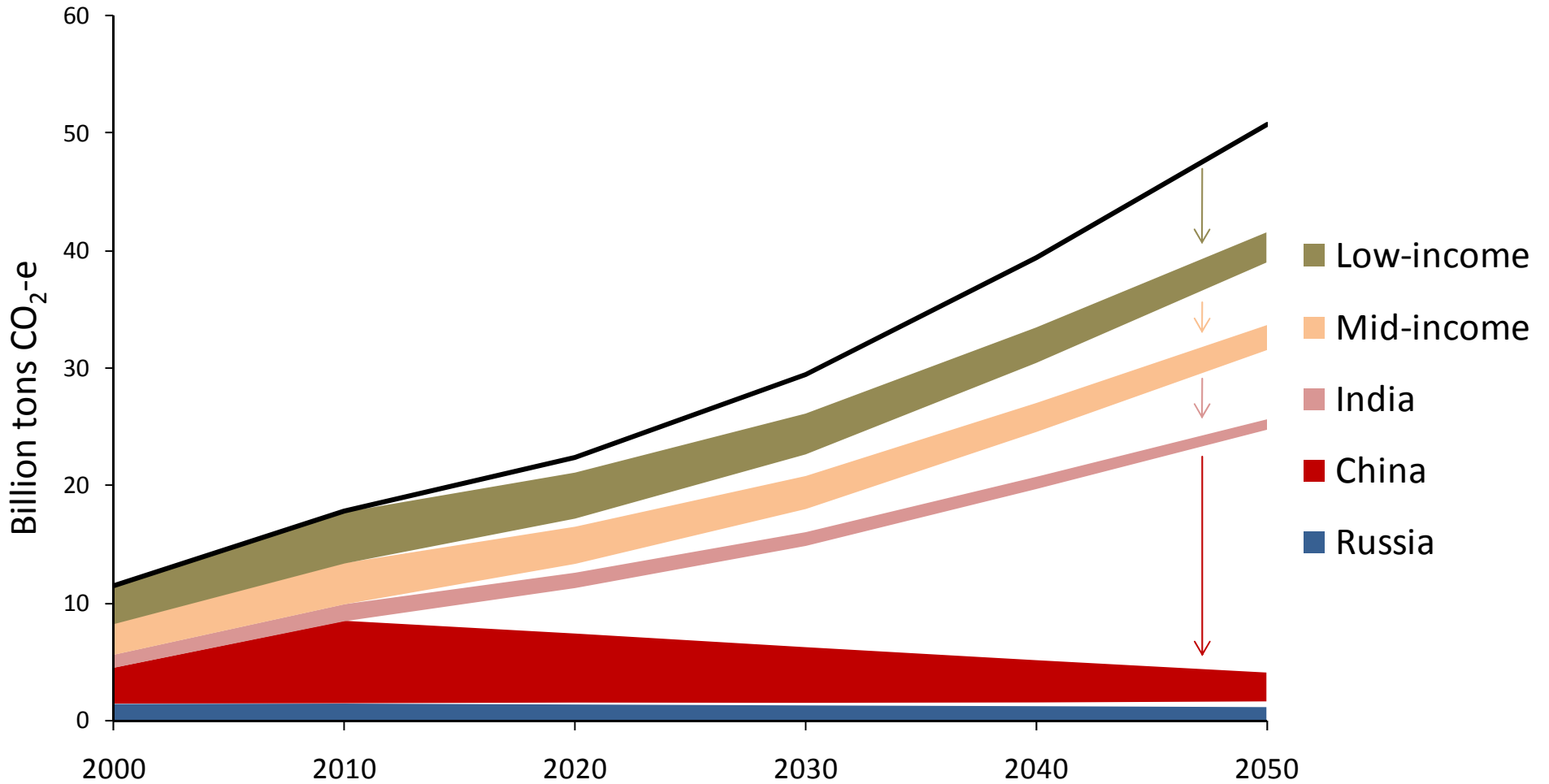
- To achieve commonly discussed stabilization targets, **all** major developing countries **must participate**
- Currently, targets are “**aspirational**” only, but they could become a reality in the future
- Consider G8 leaders’ goal for an emissions path to 2050 consistent with a **2°C temperature target**

*50% global reduction below 2000 levels +
80% below for OECD →
20% below for non-OECD*

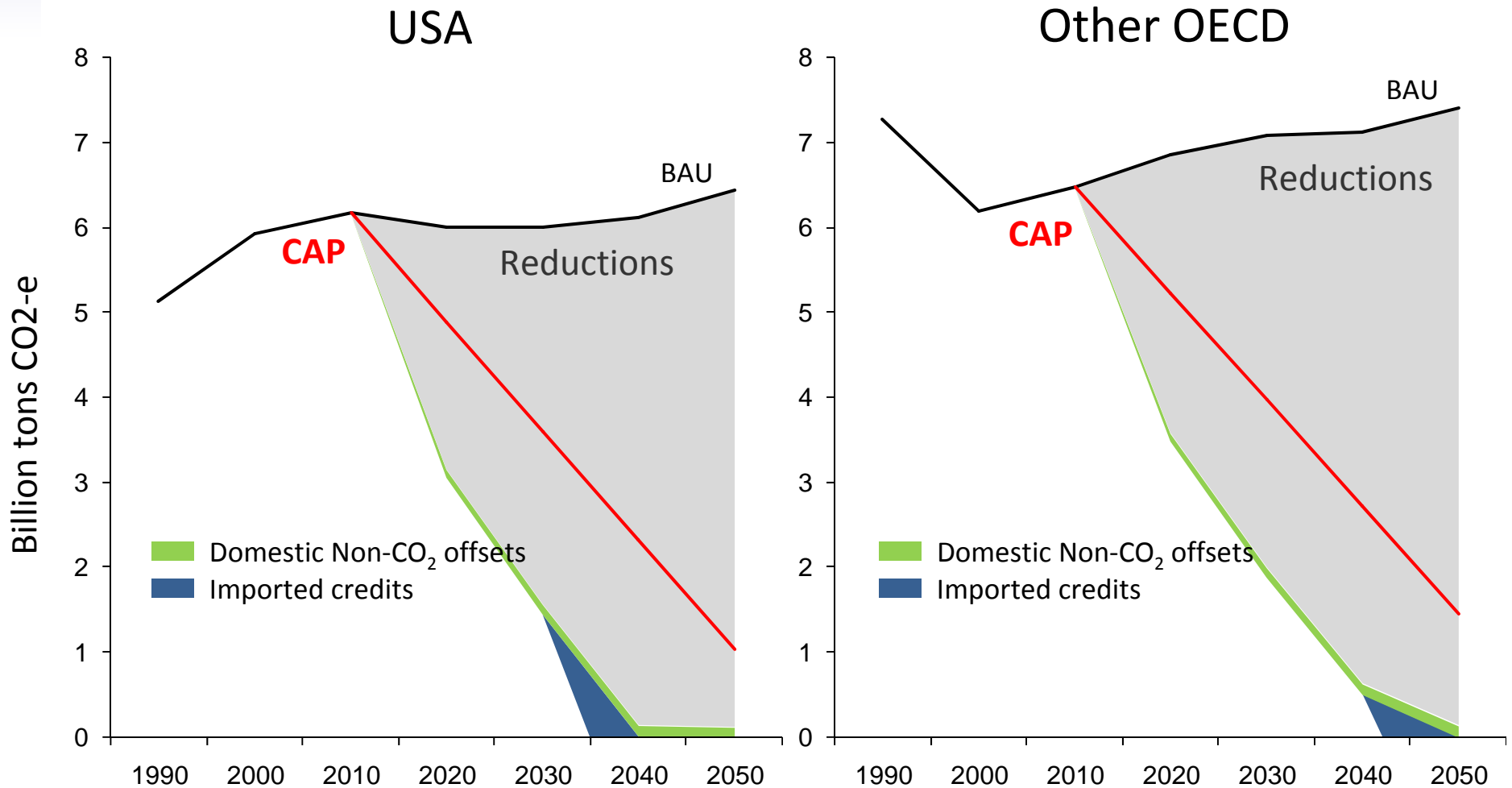
Baseline Emissions for Non-OECD



20% below 2000 = 80% below BAU in 2050



In G8 scenario, trade flows the other direction



Conclusions

- Deals on sectoral policies will be important, particularly **loose caps** on **electric sectors** in **large countries**
- Political economy behind such agreements is complex, could take **several years** to negotiate
- Even with a successful negotiation, mechanism for selling excess reductions to US compliance parties is not clear
- Ultimately, sectoral caps may be abandoned in favor of **national targets** as countries join stabilization effort