



UNIVERSITY OF
CAMBRIDGE | Electricity Policy
Research Group



South-North cooperation on climate change

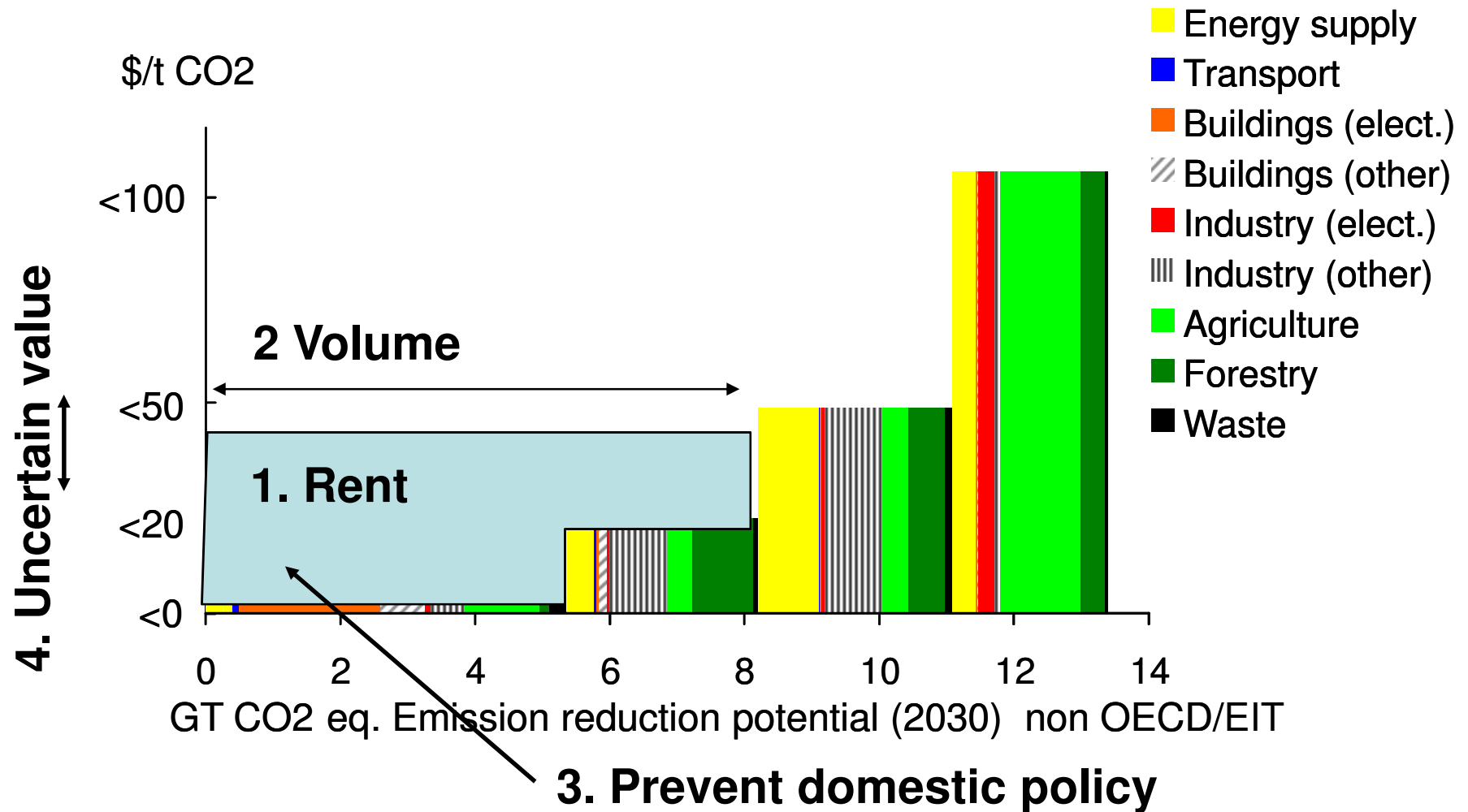
EPRG Conference, Cambridge, 15 May 2009

Karsten Neuhoff

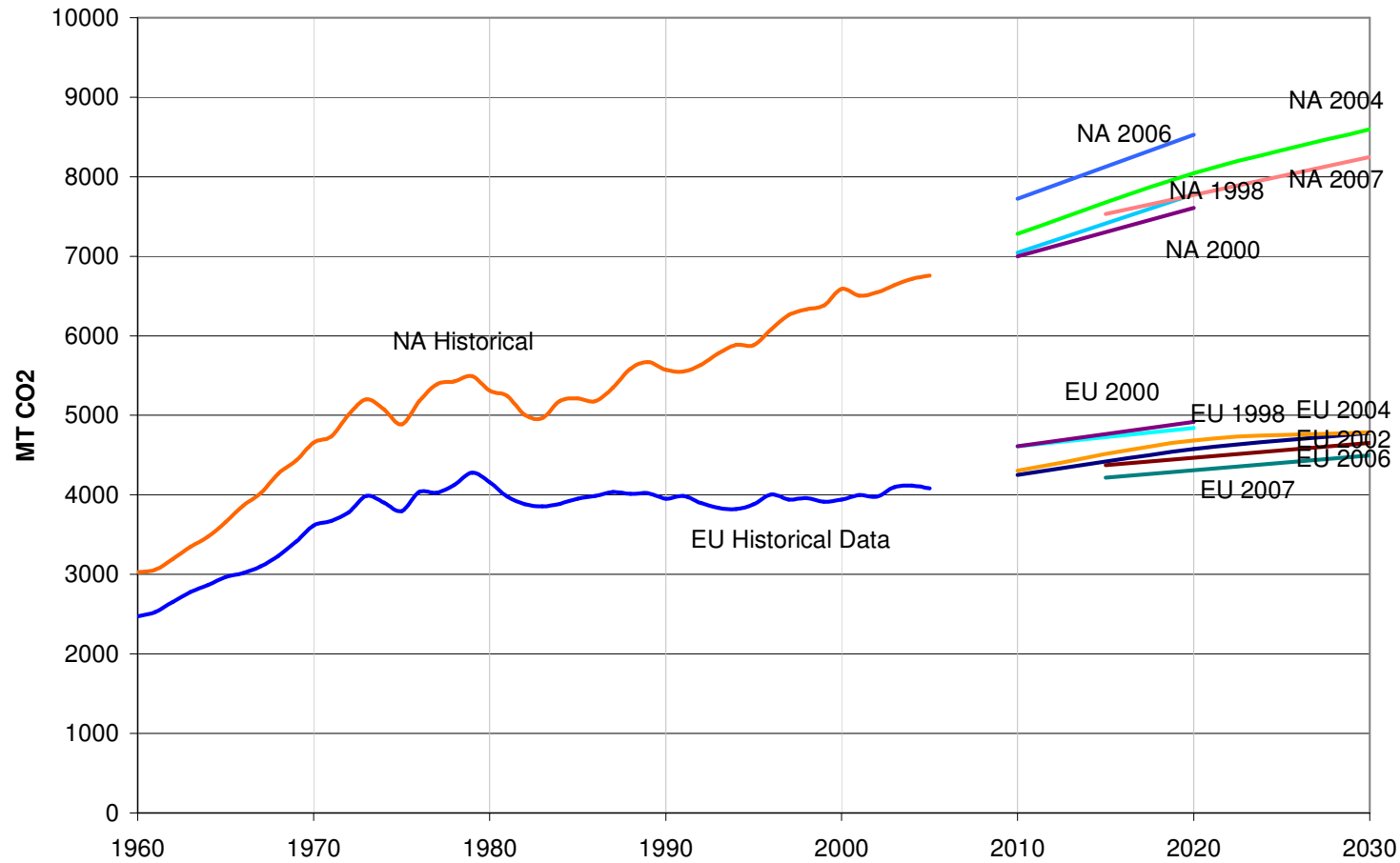
*Ilian Iliev, Amichai Magan, Anoop Singh, Zsuzsanna Pato, Maike Sippel,
Xiliang Zhang, Jim Cust, Kate Grant, Sarah Lester, Tim Laing
William Gboney, Haroldo Machado Filho, Uma Shankar
Aaron Cosby, Heleen de Coninck*



The limits of CDM

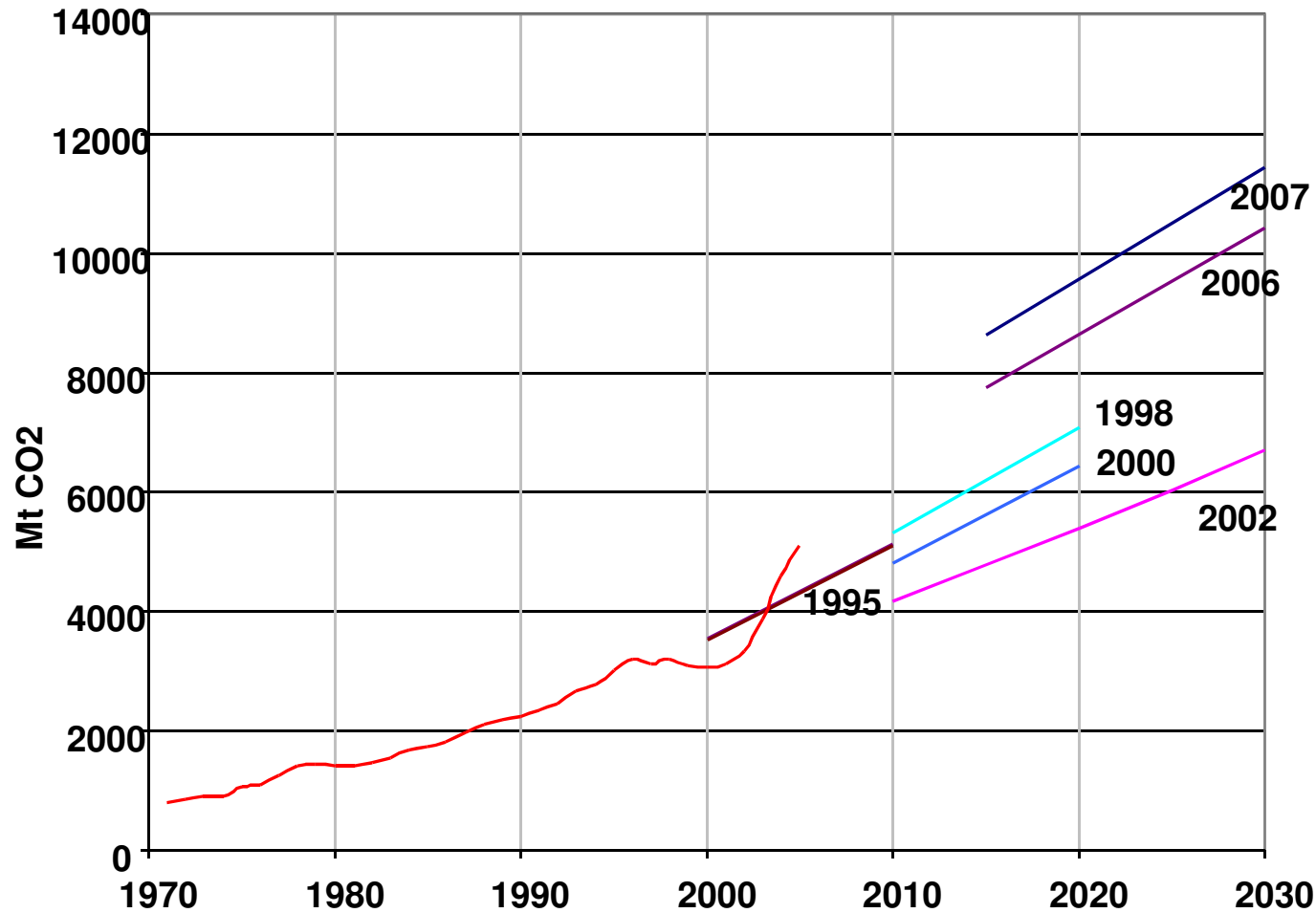


Projected CO₂ Emissions for OECD



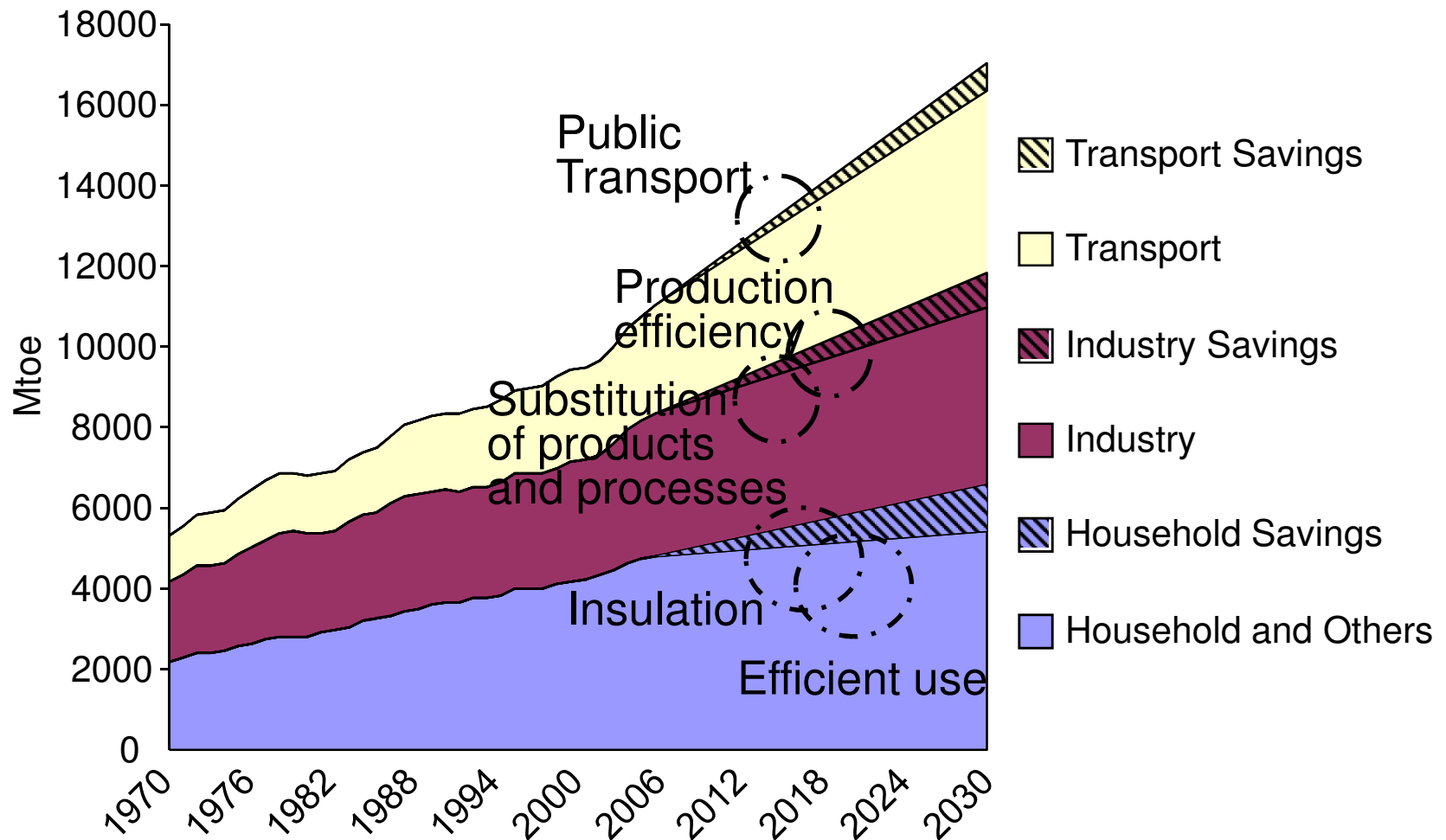
Source: IEA World Energy Outlook,
Only for fossil fuel consumption

Projected CO₂ Emissions for China



Source: IEA World Energy Outlook,
Only for fossil fuel consumption

Trigger points for efficient energy use



Climate Co-benefit Domestic GHG Policy

- Up gradation of distribution network; Improving efficiency of agricultural pump sets

Co-benefits

- Energy savings
- To facilitate reduction in price subsidy

Challenges

- Few Implementation issues
- Large funding of incremental cost

Metrics

- Adoption of efficient technology
- Network loss reduction

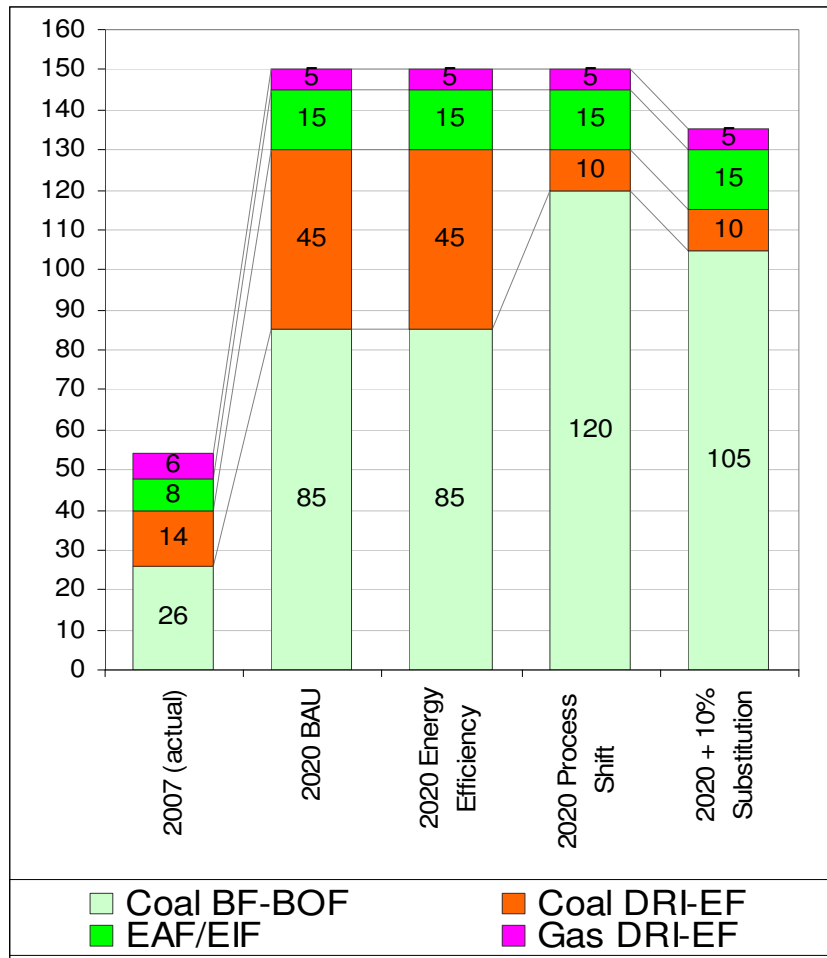
Scope for international cooperation

- Technology Cooperation
- Long-term financial commitment needed to provide appropriate signals to domestic / international equipment manufacturers

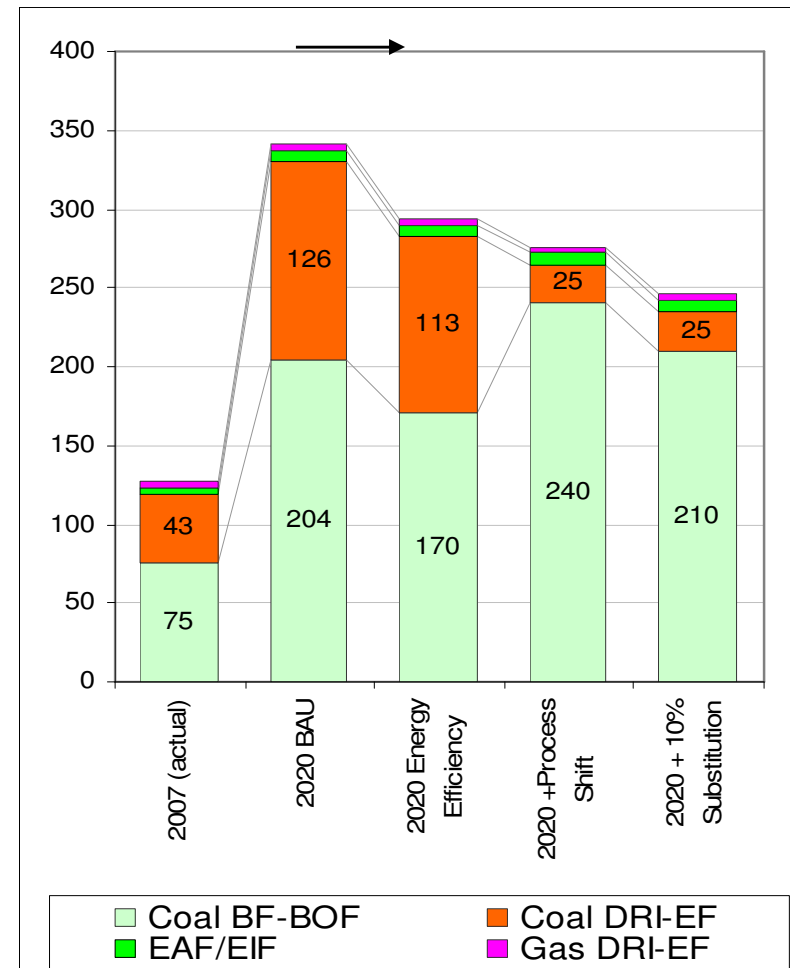
Domestic GHG Policy for Steel Sector in India

Policy outcome scenarios:

Production (Mn tonnes crude steel)



GHG emissions (Mn tCO₂e)



Domestic GHG Policy for Steel Sector in India

Policy Options

- Harmonised CO₂ tax complemented by administered standards

Co-benefits

- Enhances sector competitiveness
- Reduces coal demand

Challenges

- Acceptability
- Huge capital access for process shifts

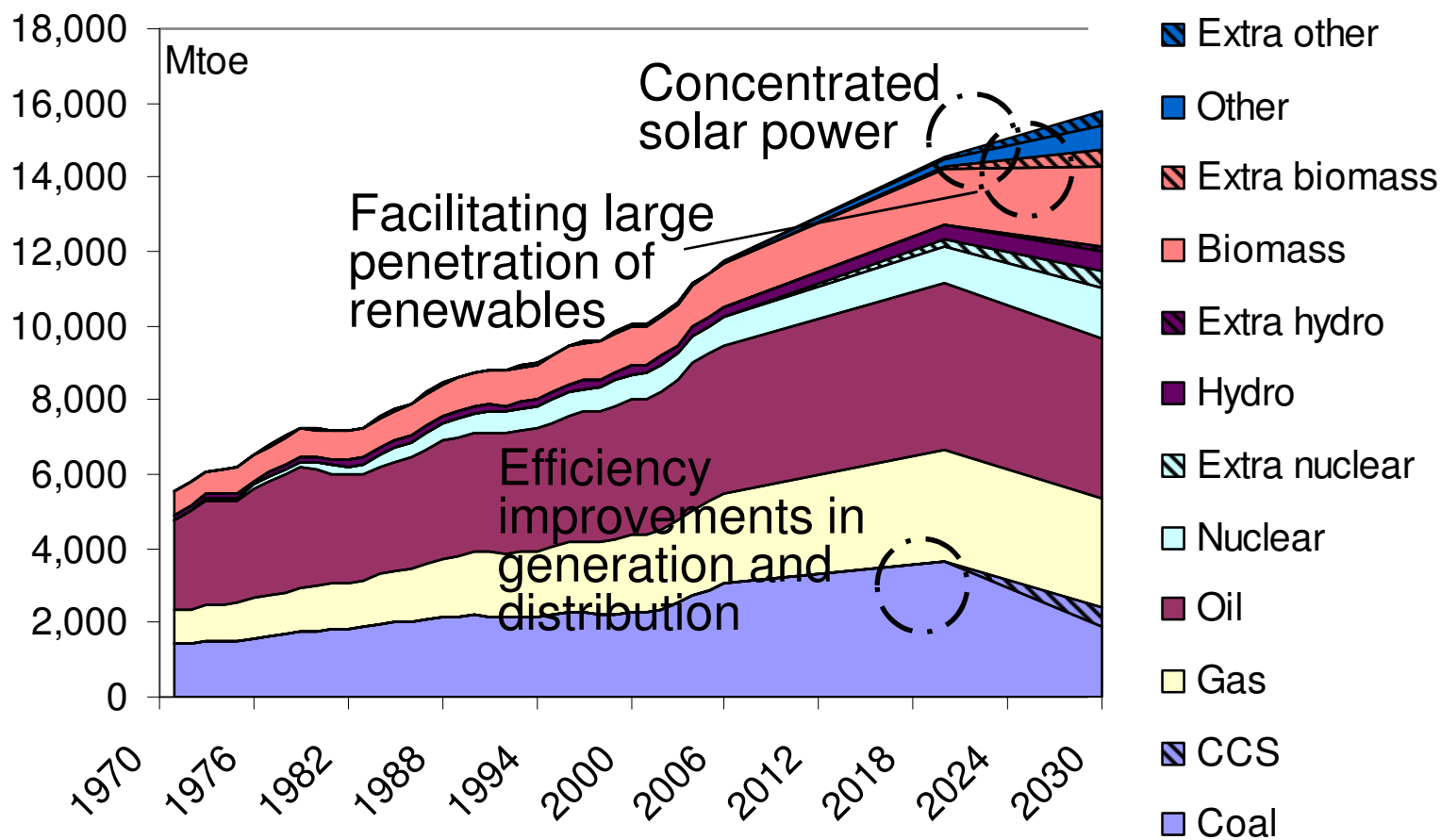
Metrics

- Domestic CO₂ price
- Emission Intensity levels; shifts in process type and plant size

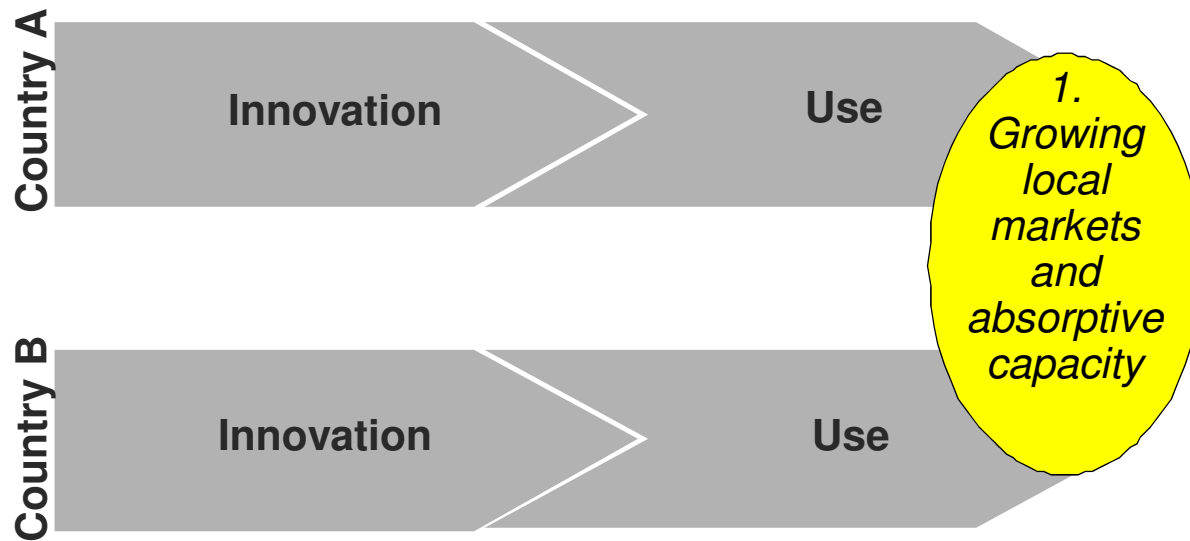
Scope for international cooperation

- Capacity building, training
- Technology cooperation

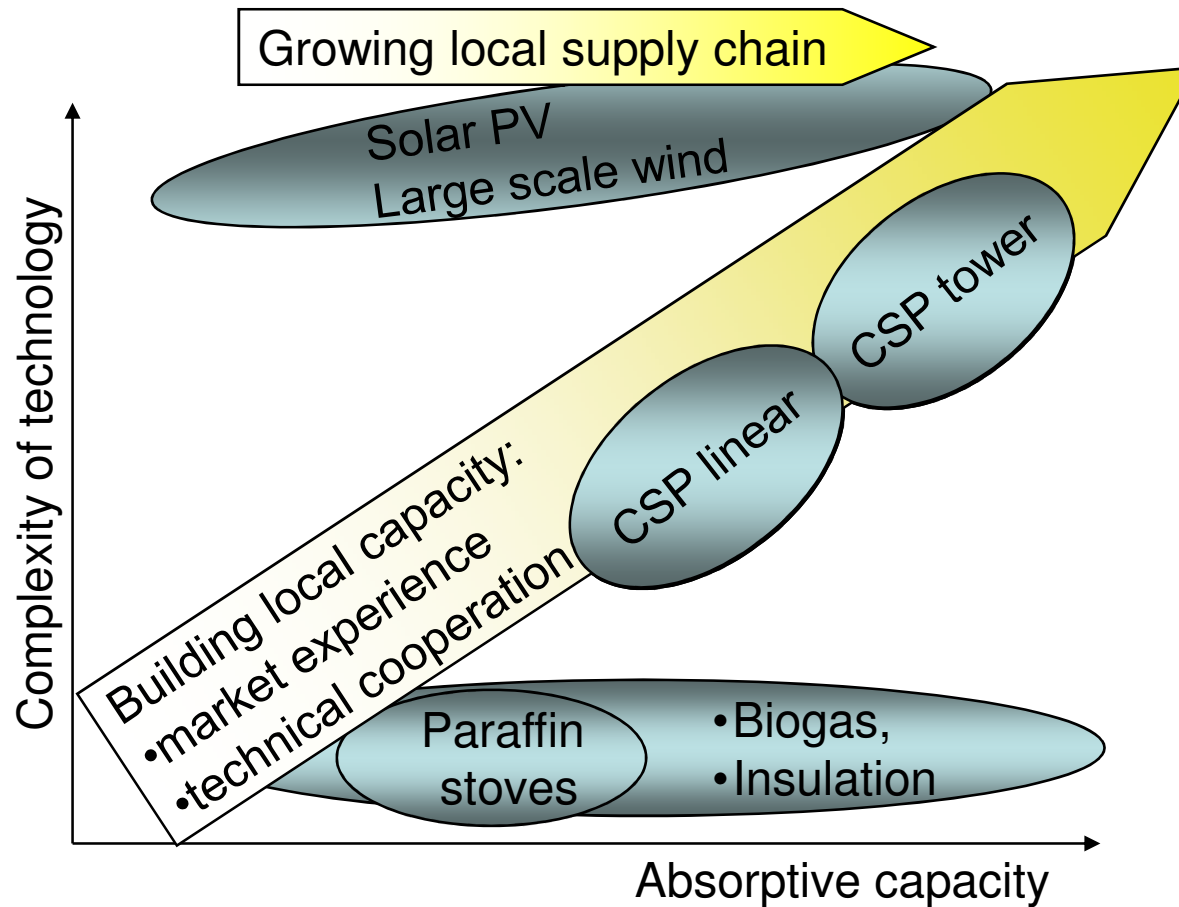
Trigger points for low-carbon energy technologies



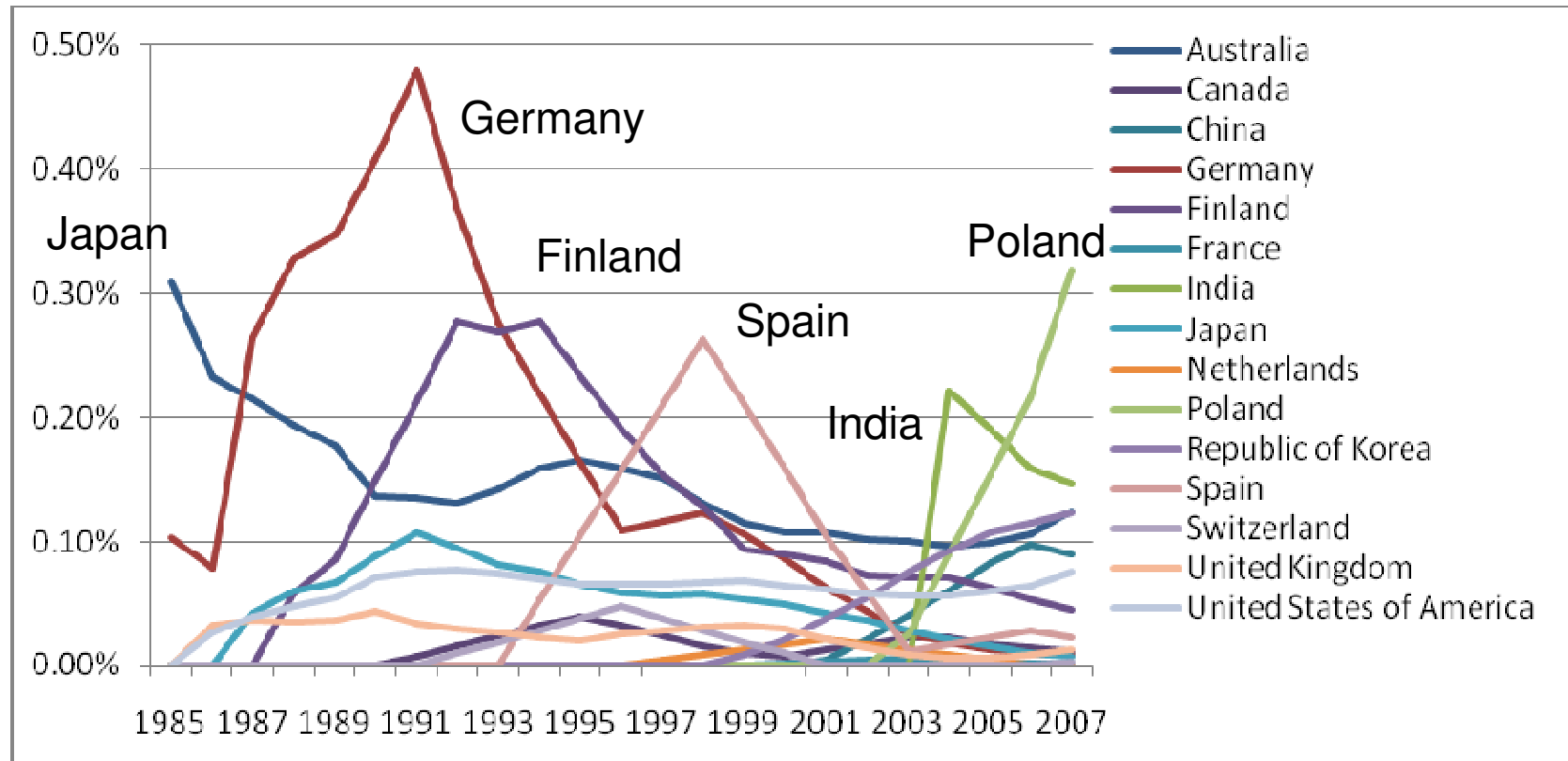
International Synergies in **Innovation** and Use



International Synergies in Innovation and Use

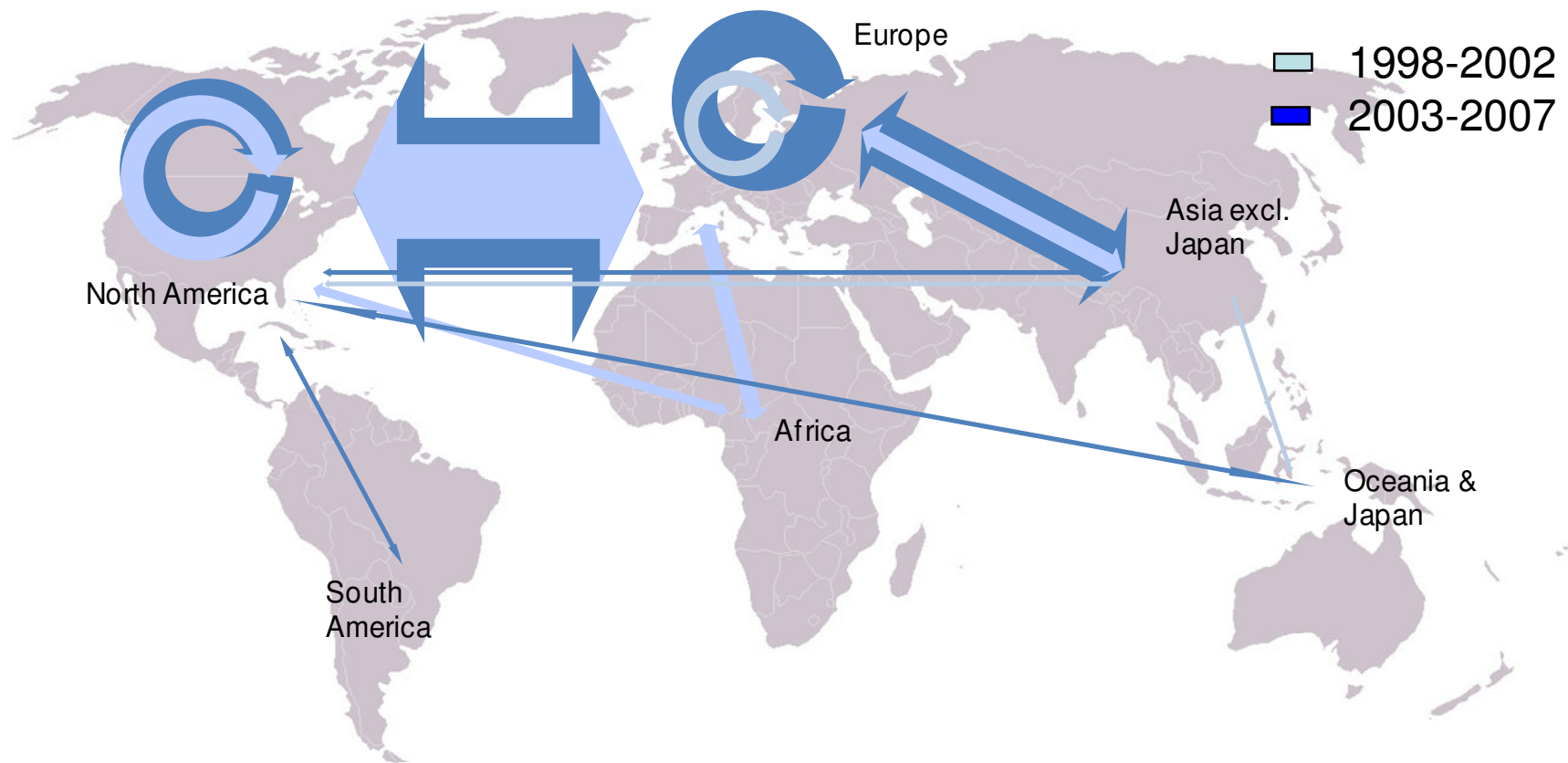


Countries focus on technology they require

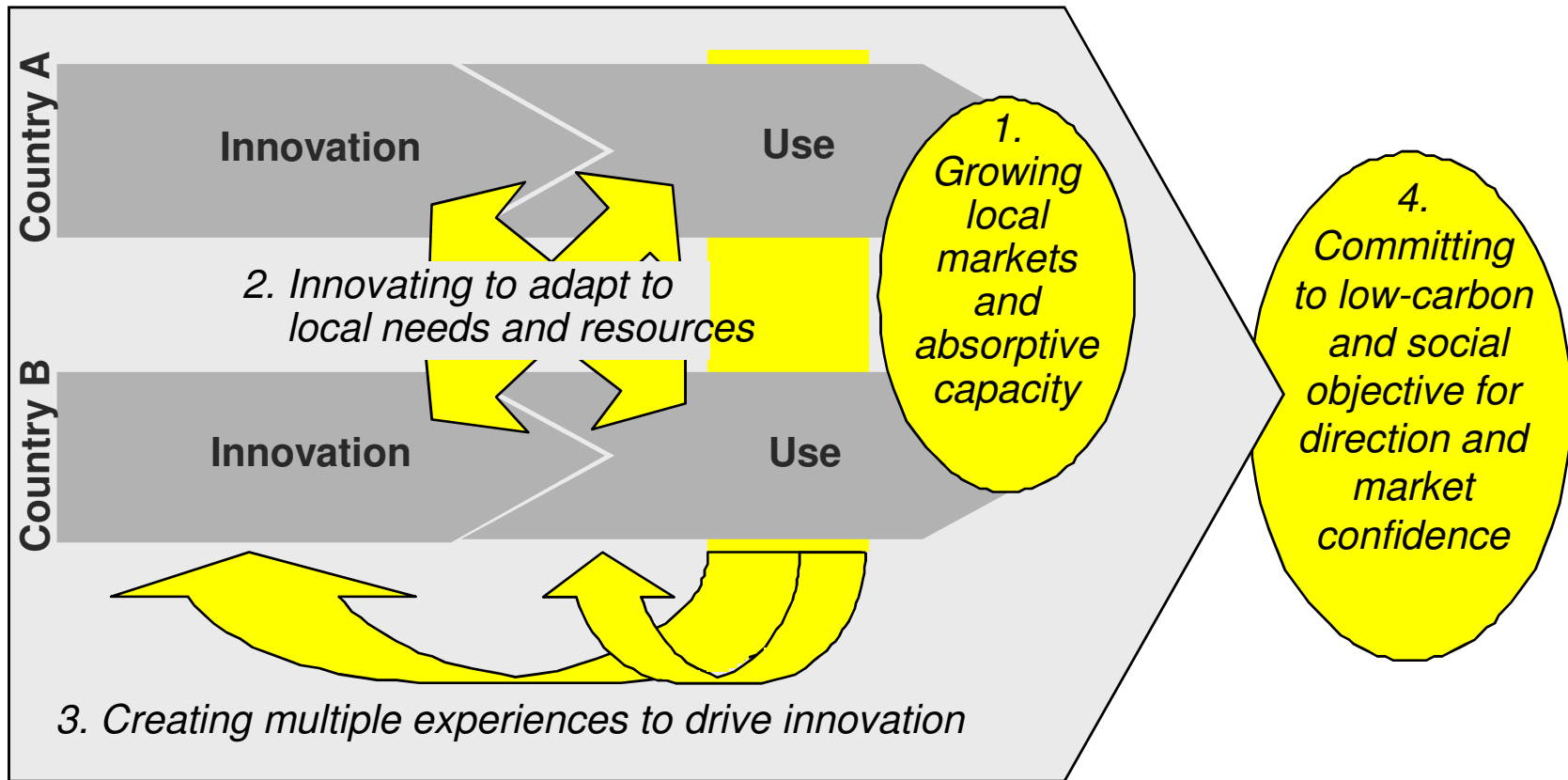


Coal power patents as proportion of total WIPO filings by Inventor Country

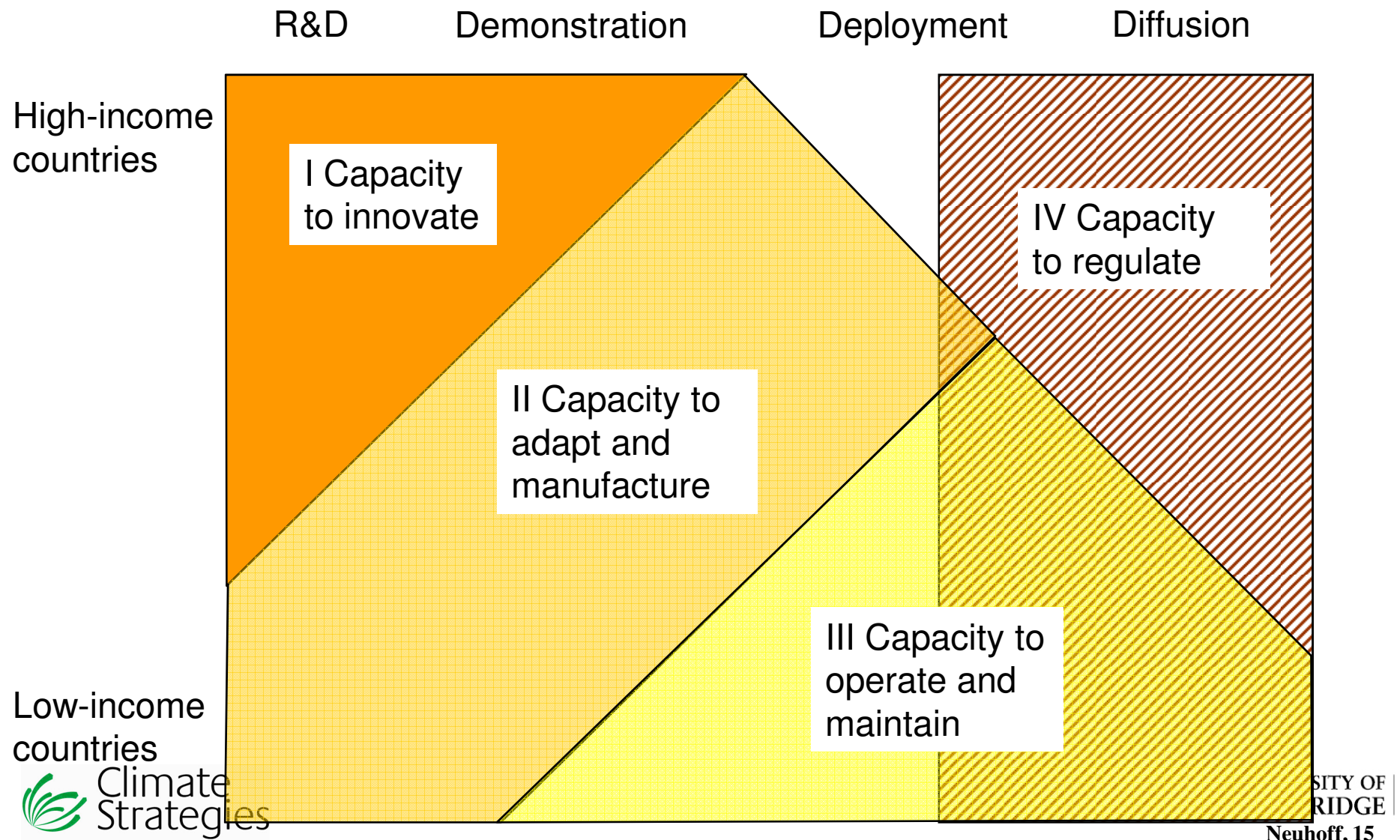
International inventor collaboration on coal power stations



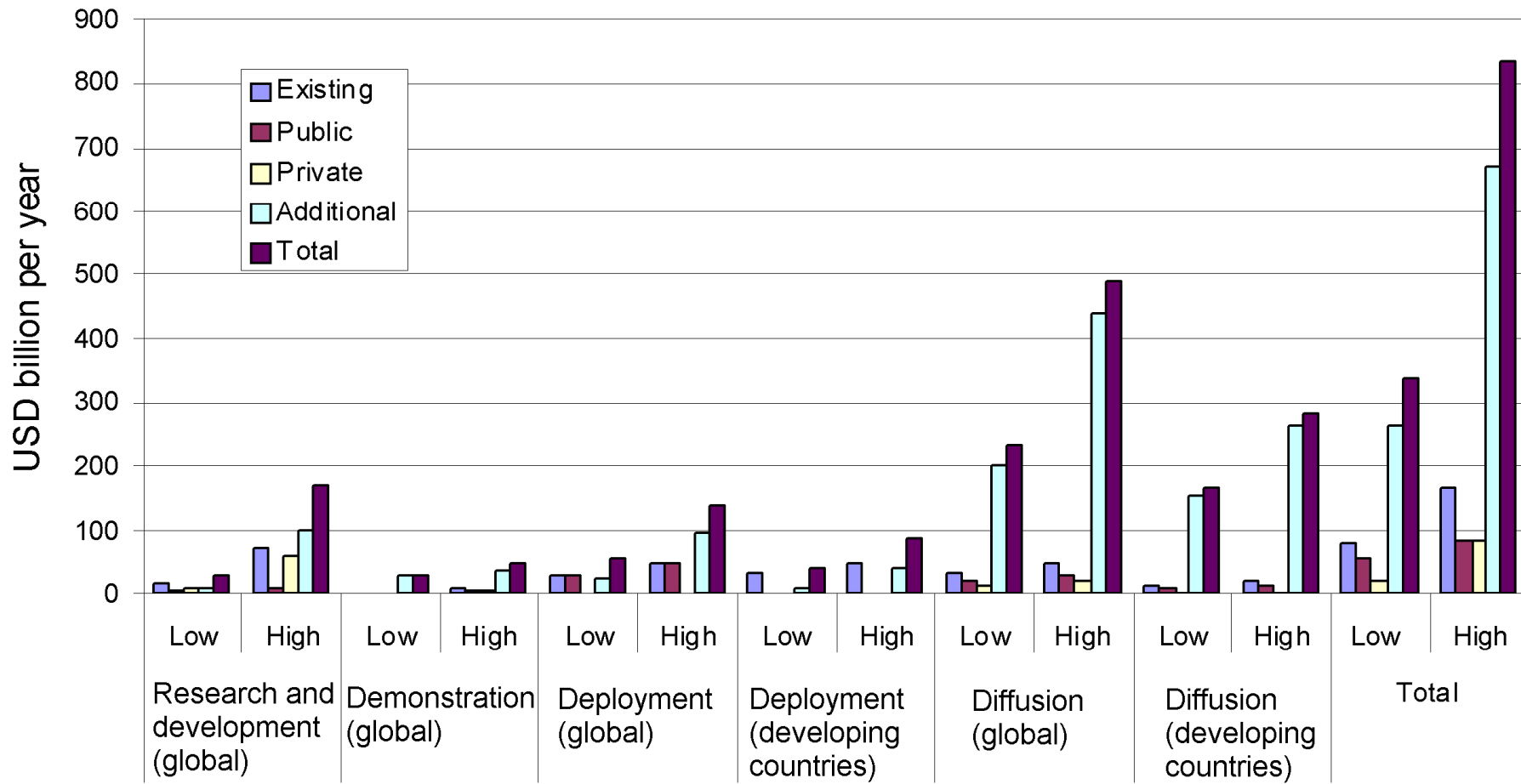
International Synergies in Innovation and Use



Capacity constraints along innovation chain

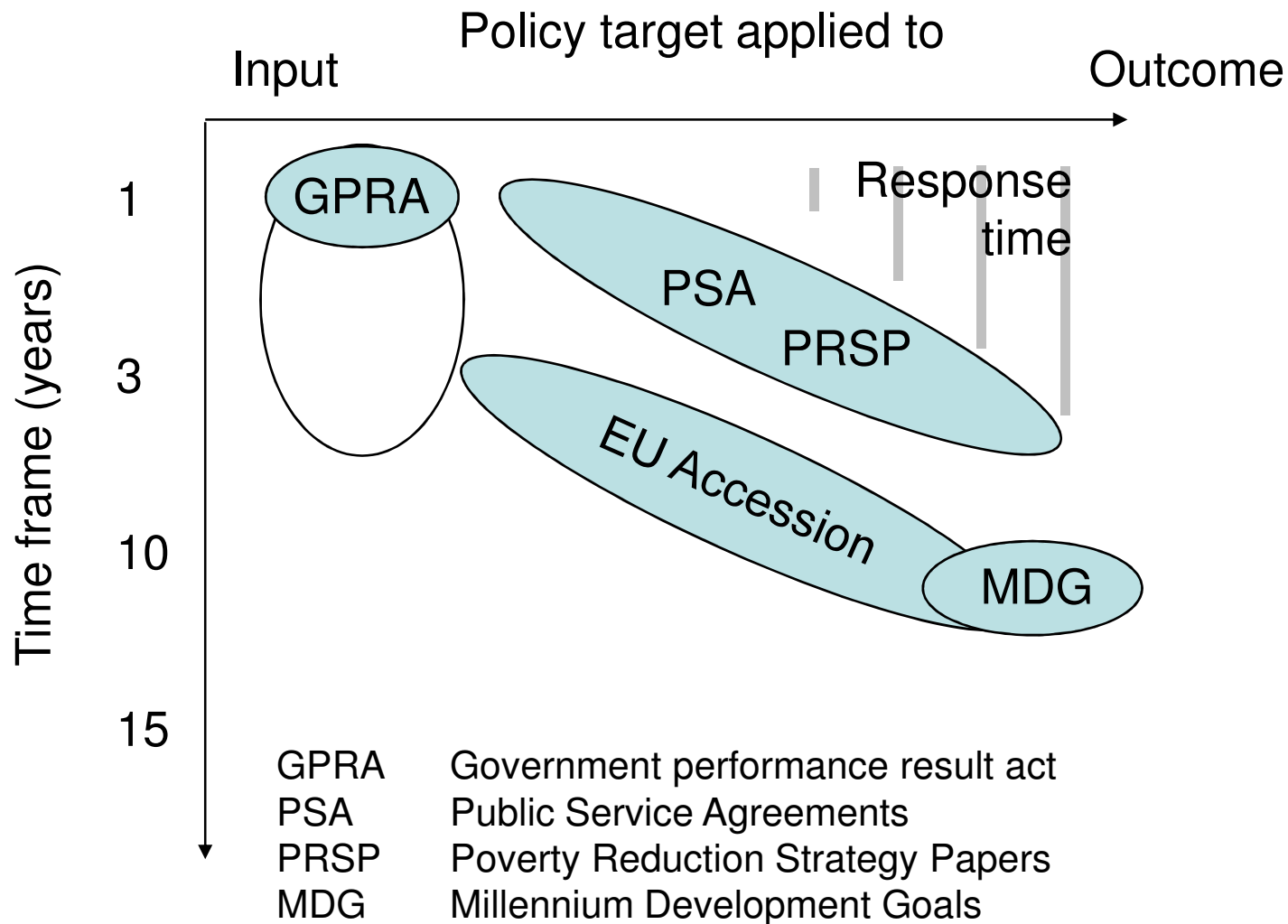


Summary of financing needs



Funding needs to increase 2 to 10 fold

Options for definition of policy targets



Lessons from policy targets

- Importance of partnership approach
 - Throughout designing, implementing and evaluation
 - Trust, sense of ownership of policy target, consensus
 - Hurdle: avoid paternalism, imposed targets, poor negotiations
- Metrics usually outcome-based
 - Link to public management/medium term expenditure framework
 - Linked to incentive schemes (e.g. future budgets)
- Policy targets need to be relevant and balanced
 - Indicators appropriate, relevant, selective, outcome oriented, capture cross cutting outcomes
 - Hurdle: If targets not believed to be achievable
- Implementation challenges
 - Accountability, use of reward schemes
 - Hurdle: Lack of local delivery mechanism

What institutional set up is desirable?

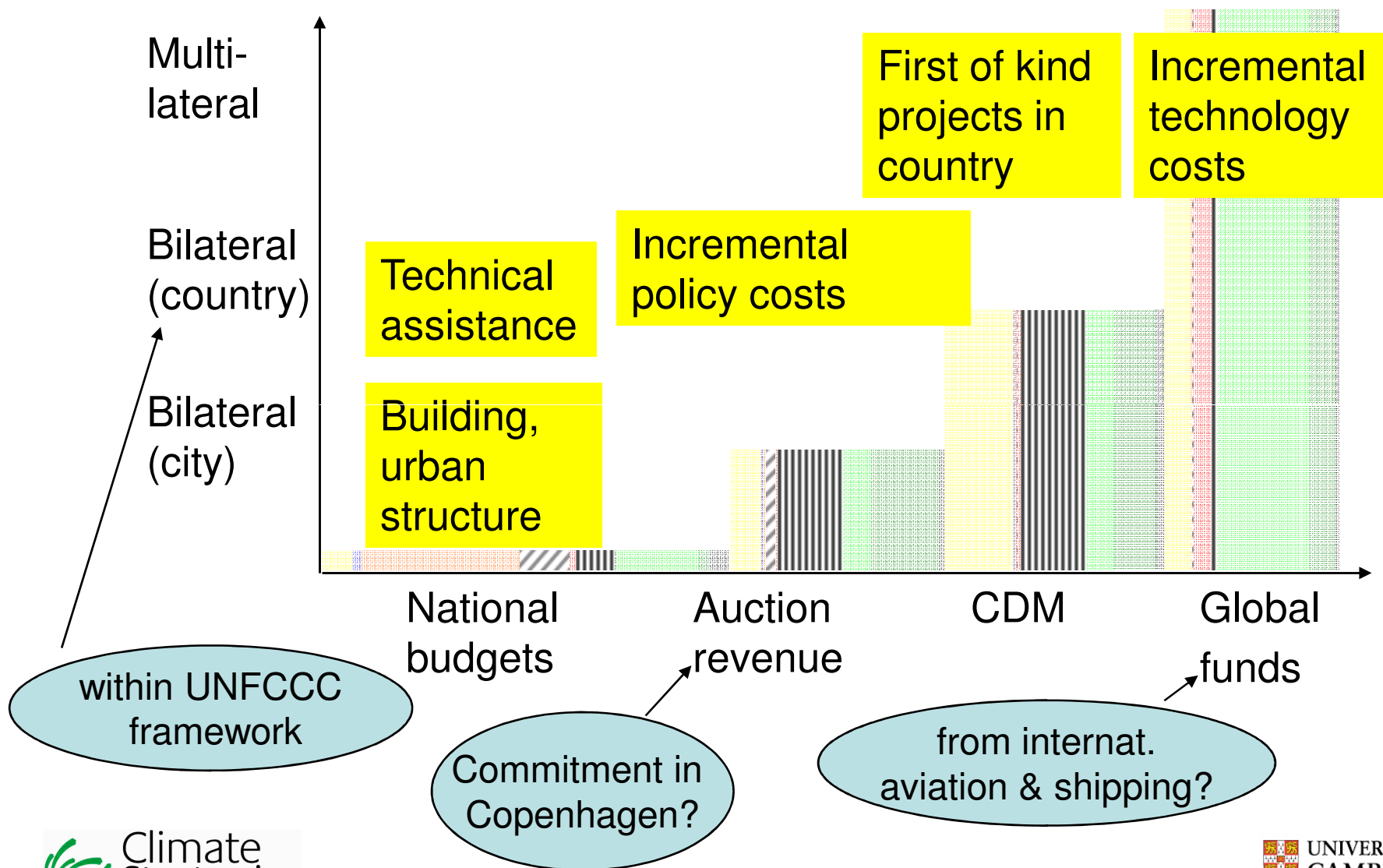
- **Multilateral**
 - Example IMF/World Bank, CDM EB, GEF
 - Transparent, harmonised approach
 - All inclusive but less flexibility
- **Bilateral**
 - Using twinning – similar to Paris declaration
 - Cooperation across governance levels possible
 - Tailor approach & process to national circumstances
 - Requires robust framework to ensure transparency!

What can we learn from past incentive schemes?

Indicative characterisation of conditionality provision

	IMF	World Bank	Bilateral aid	EU Enlargement
Stringency of reaction to non-compliance	xx	x		xxx
Compliance with conditionality	xx	x		xxx
Competition on donor side			xx	
Competition between recipient countries			xx	xxx

Different options for cooperation



Summary

- Enhance scale, scope and speed of implementation of domestic policies with climate (co-) benefits
- Intermediary outcome indicators to manage and share information on policies
- Anchoring in UNFCCC framework