



Sectoral approaches to greenhouse gas mitigation

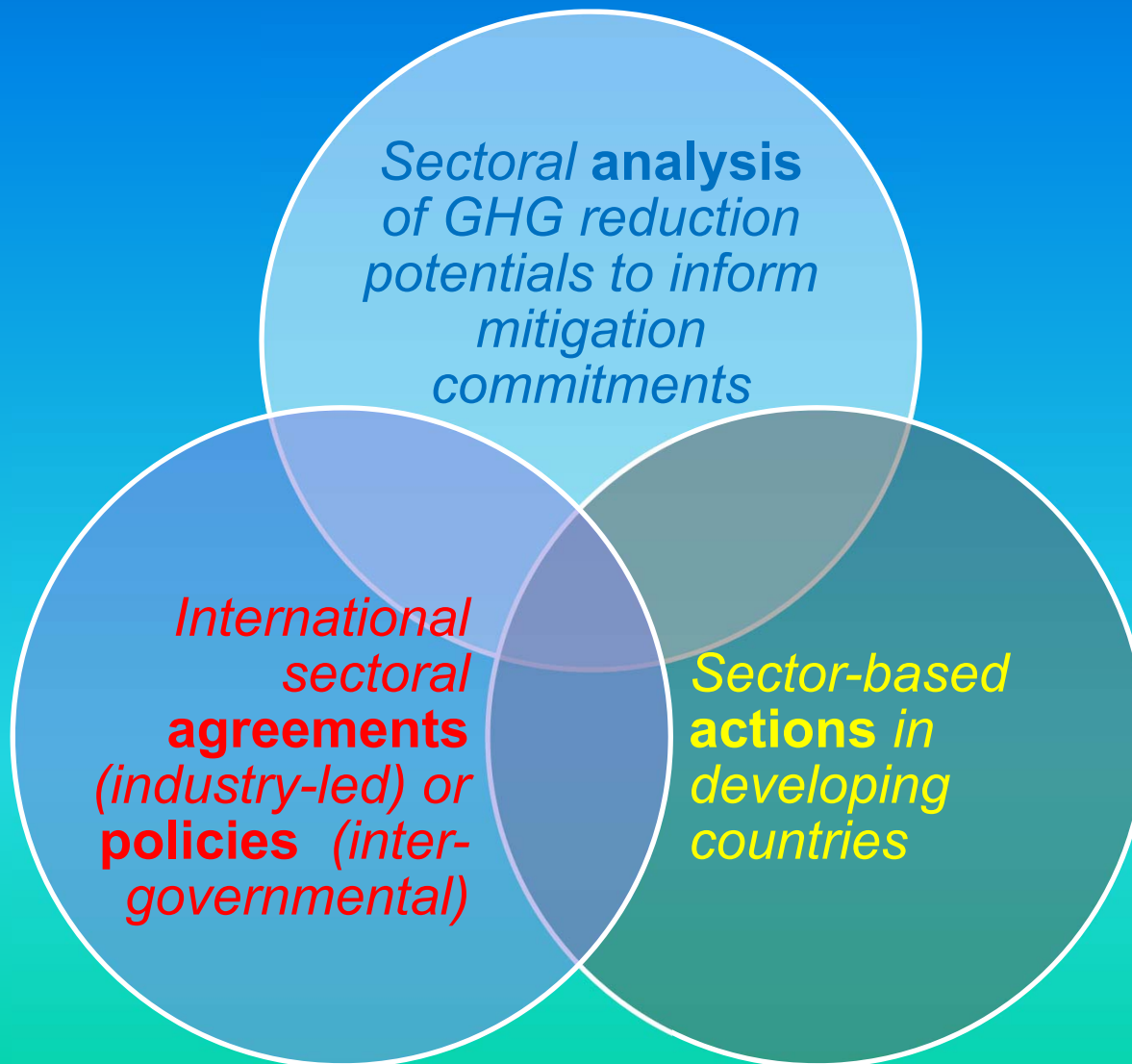
In-session workshop
AWG – UNFCCC – Bangkok
2 April 2008

Richard Baron – IEA

Baron, Reinaud, Genasci, Philibert (2007) *Sectoral approaches to greenhouse gas mitigation – Exploring issues for heavy industry*. IEA Information Paper. www.iea.org



What is meant by “sectoral approaches”



UNFCCC (intergovernmental)
“Cooperative sectoral approaches and sector-specific actions, in order to enhance implementation of Article 4.1(c) of the Convention”
— Bali A.P.

Technology focus

Asia-Pacific Partnership

EC / ACEA-JAMA-KAMA
(public-private)

Aluminium: IAI
Cement: WBCSD-CSI
Iron and steel: IISI
(private sector)



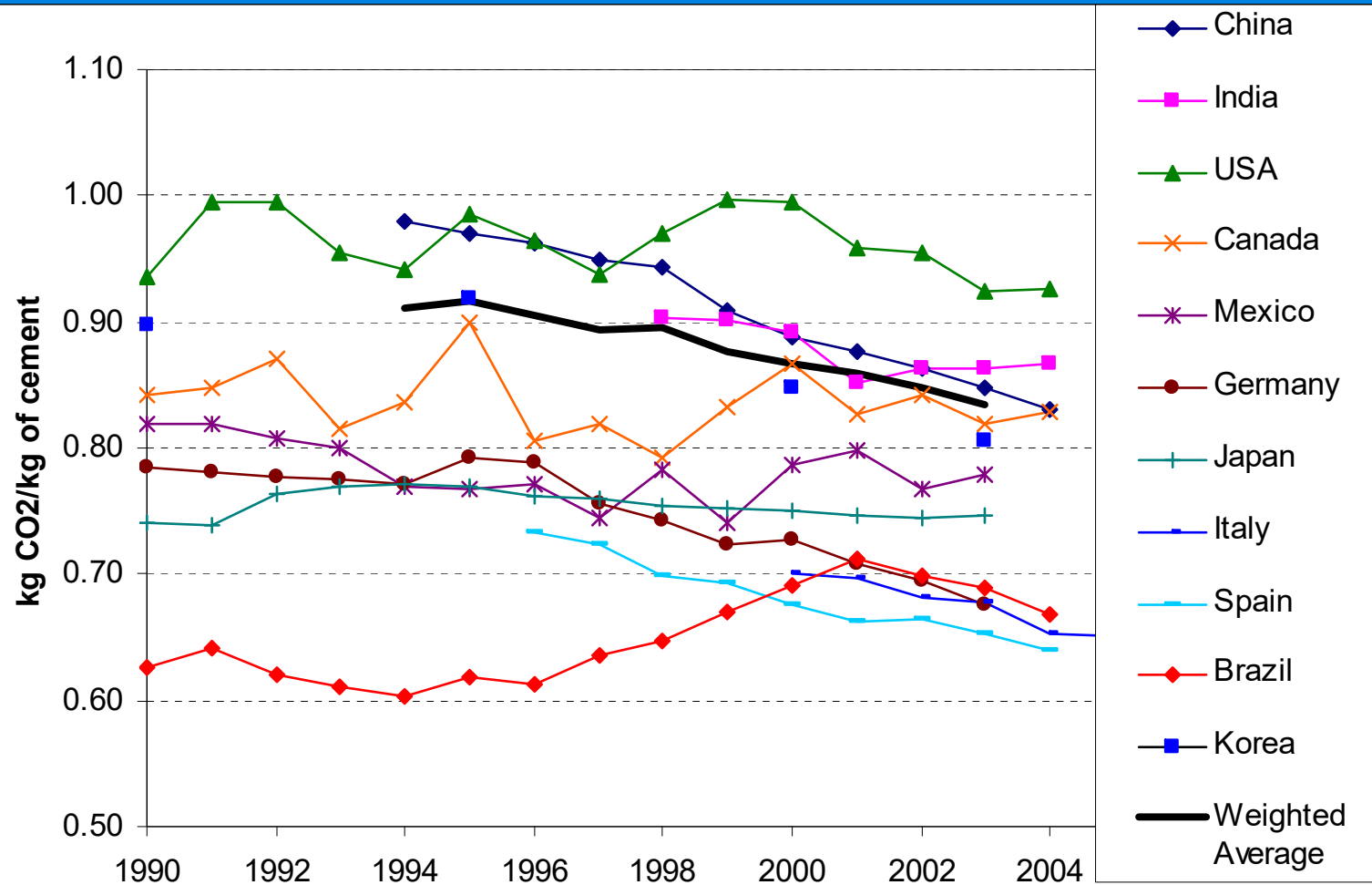
Sectoral analyses to inform emission commitments



- Estimate and *compare* sector-level performance.
Criterion: tCO₂ per unit of output
 - Different levels of performance indicate a potential for overall improvement
 - Caveat: recent trends unlikely to fully reflect CO₂ reduction policies
- Domestic policies also affect performance
 - Best policy practice – triggering most energy efficient and carbon-lean choices – must be shared by governments
- Identify where international collaboration or coordination may be useful



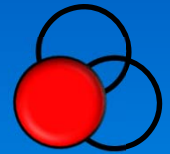
Example: CO₂ emissions per tonne of cement





International sectoral actions

Agreements - Policies

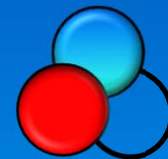


- Why and where?
 - Enhance effectiveness of domestic policies
 - ◆ Address competitiveness concerns in certain activities
 - 'Tipping and network effects'*
- What do these international approaches consist of?
 - From sharing best practice to benchmarking
 - ◆ E.g. power generation handbook (APP – public/private)
 - ◆ Heavy industry associations: benchmarking
 - Technology R&D
 - ◆ E.g. International Iron and Steel Institute's CO₂ breakthrough project (private sector)
 - Binding international policy coordination
 - ◆ E.g. EU ETS (governmental) made possible (not imposed by) the Kyoto Protocol mechanisms

*Bodansky, 2007, *International sectoral agreements in a post-2012 climate framework*. Pew Center on Global Climate Change



In summary – Sectoral approaches and mitigation commitments



- International sectoral analyses and comparisons
 - Identify potentials for lower GHG emissions through best practice
 - ◆ Including best practice in policy (G8 Gleneagles Plan of Action)
 - Caution: today's performance inadequate to face up to climate change challenge
 - The need for a GHG price signal
- International sectoral approaches of various kinds are underway – more could be envisioned
 - Countries accounting for a critical mass in given sectors could act to transform global markets (e.g. end-use efficiency)
 - Pool resources for technology development and deployment
 - Could offer an avenue to address competitiveness concerns as carbon cost is set to rise – modalities to be determined



www.iea.org/textbase/subjectqueries/sectoralapproaches.asp

Thank you