



Sectoral approaches to greenhouse gas mitigation 'Mandatory transnational agreements'

*Pre-Major Economies Meeting
Workshop on sectoral approaches*

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Richard Baron – IEA

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What is meant by “sectoral approaches”

*Sectoral analysis
of GHG reduction
potentials to inform
mitigation
commitments*

*International
sectoral
agreements
(industry-led) or
policies (inter-
governmental)*

*Sector-based
actions in
developing
countries*

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 / car manufacturers
associations
(public-private)

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



International sectoral approaches

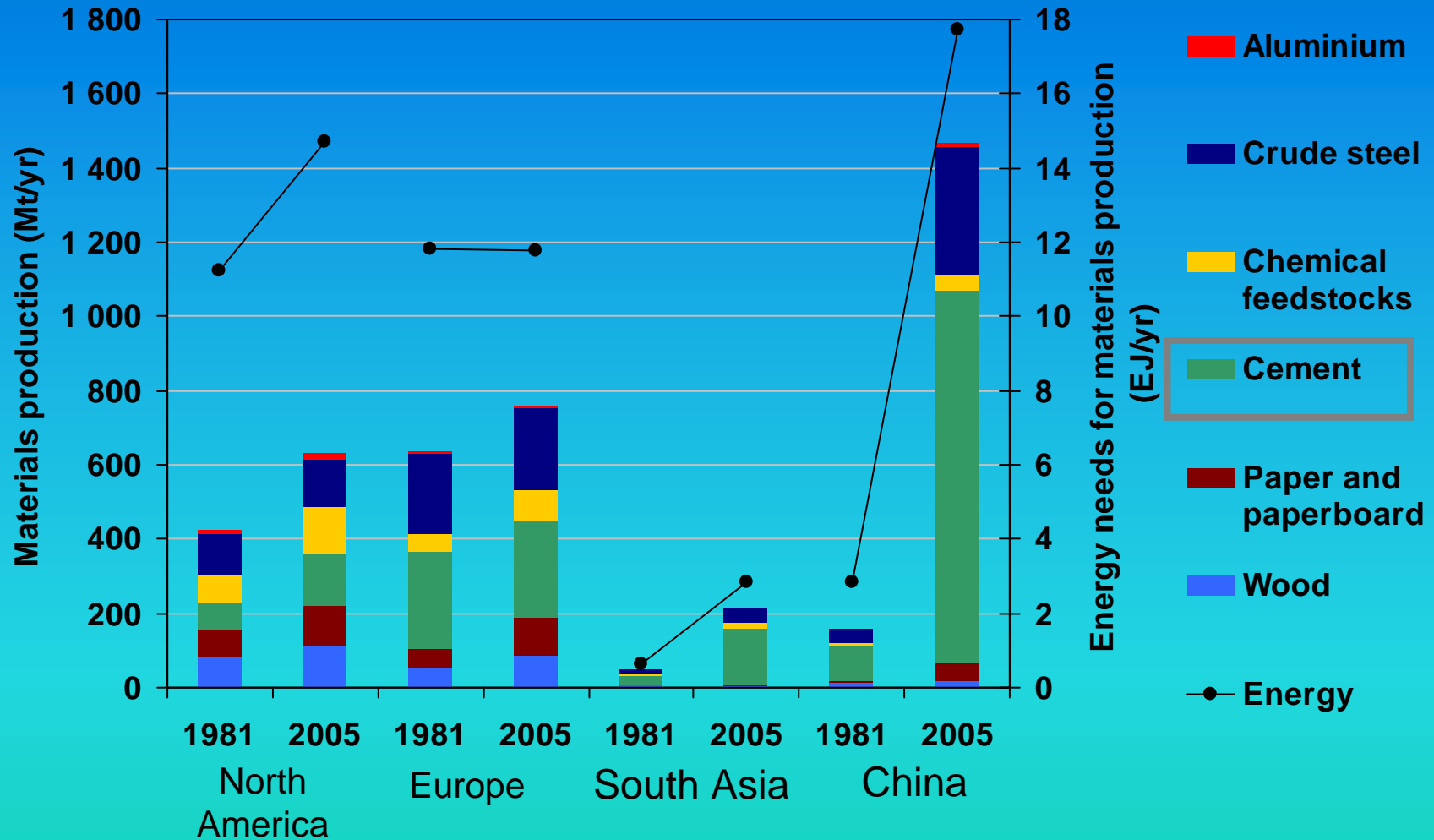
- Why focus on sectors? Why at international level?
 - Identify sectors with **rapidly rising emissions** – and ‘lock-in’ problems
 - Gather a **critical mass** for better coordination, market transformation
 - **Enhance effectiveness** of domestic policies
 - ◆ Address competitiveness and carbon leakage concerns in certain activities
 - Sector-level analyses reveal **win-win opportunities** and domestic capability for significant improvements

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



Industrial output growth: 1981-2005

Main products / world regions

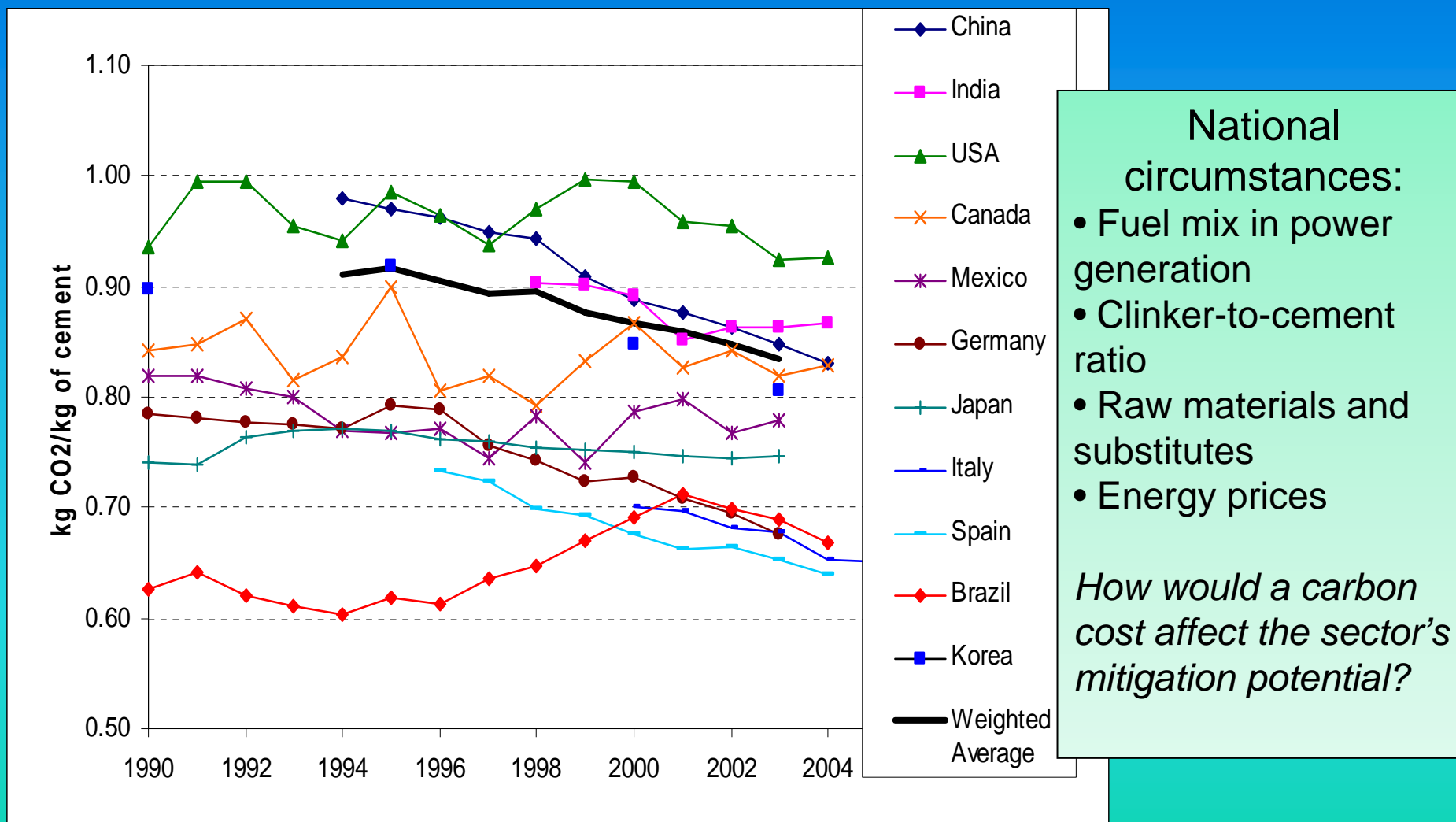


Source: IEA, 2007, *Energy use in the new millennium*.



Example: CO₂ per tonne of cement

Country averages





Industry-led initiatives: *Examples in heavy industry sectors*

- International Aluminium Institute
 - Reduction of perfluorocarbons (PFCs) and energy efficiency efforts
- International Iron and Steel Institute
 - Gather data on energy and CO₂ performance
 - Funding R&D towards breakthrough technology
- Cement Sustainability Initiative (WBCSD)
 - Performance data, towards regional benchmarks
- Limits of industry federations?
 - Suspicions of anti-trust?
 - Cannot bind their members
 - Develop cleaner technology. How to bring it to market?
 - Focus on performance improvements in growth scenarios
 - ◆ Carbon cost?



International, quantitative sectoral approaches (1)

- A group of countries could agree on coordinating action in specific sectors
- Quantitative emission objectives based on national circumstances
 - Objectives in terms of intensity (\times tCO₂eq/ t of output) or absolute emission levels (with flexibility)
 - Binding, or non-binding
- Commitments on the diffusion of a given 'best practice' technology
 - Caveat: cost? Freezing innovation?



International, quantitative sectoral approaches (2)

- Governments must play their part
 - Discourage free-riding
 - ◆ Domestic-level monitoring, reporting, verification and enforcement of agreed objectives
 - Possibility to rely on flexibility mechanisms
 - ◆ Provide international least-cost options for compliance – including outside the sector
 - ◆ Transactions must be recorded by governments



International sectoral approaches

Challenges

- Institutional capacity
 - Comparable data
 - Monitoring implementation
 - Assess data availability → define policy perimeter to maximise effectiveness
- Addressing possible carbon leakage?
 - Promotion of best practice
 - ◆ Lower emission increases if relocation
 - Incentives: GHG crediting (CDM+)
 - ◆ Further deteriorates competitive position of constrained sources
- Consider crediting for sectors w/o competitiveness concerns: electricity?



In summary

- International quantitative sectoral - Efforts underway
 - From industry-led to public-private (APP) and intergovernmental (EU ETS)
 - Critical mass in a few countries / companies
- International comparisons
 - reveal low-cost mitigation potentials – national circumstances matter
- Industry cannot do it alone
 - Governments to set rules and act as referee
- Financial incentives and ‘carbon leakage’
- Data and capacity crucial to identify sectors suitable for quantitative approaches



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

Thank you