

Sectoral approaches to GHG mitigation Exploring issues for heavy industry

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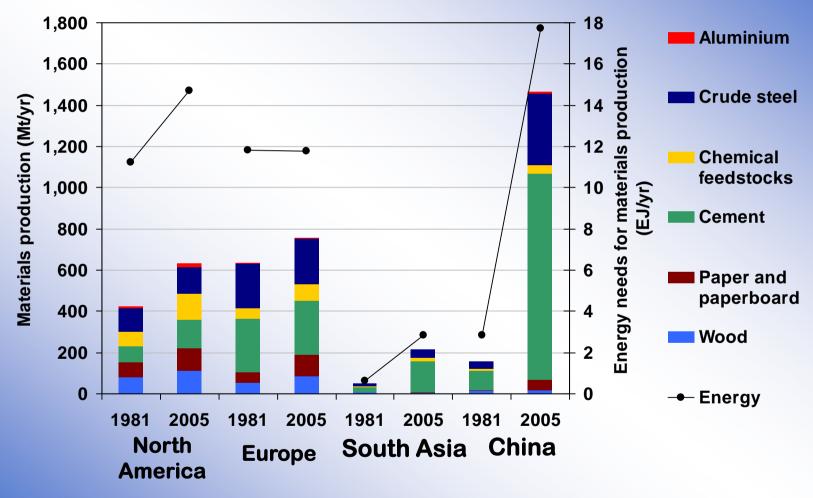


Sectoral approaches: why?

- CO₂ Emissions are growing rapidly: UNFCCC Parties seek ways to trigger more greenhouse gas reductions
 - Rapid growth in GHG-intensive industry in emerging economies
 - ◆ A focus on sectors could reveal the win-win potential of CO₂ reductions e.g. energy efficiency
 - → Sectoral approach as a way forward to reduce CO₂ for selected activities and countries?
- Competitiveness concerns of trade-exposed energyintensive industries in some IEA countries
 - CO₂ reduction measures (will) trigger costs and create an less level playing field
 - Cement, iron & steel, aluminium



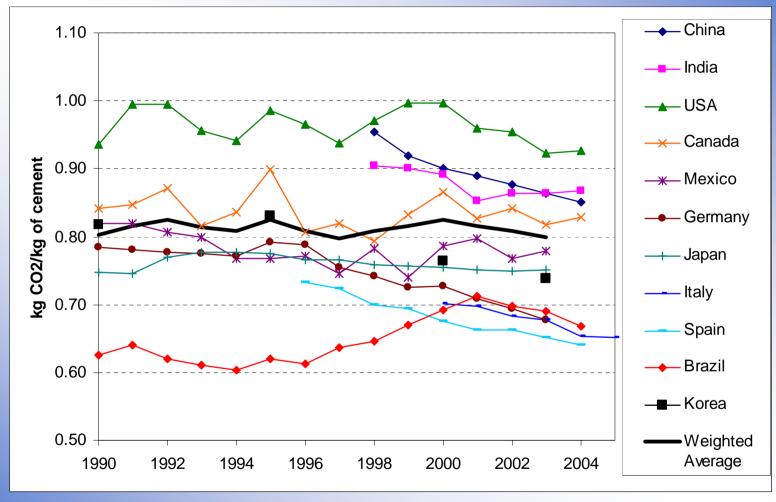
Regional industry growth



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



CO₂ emissions per tonne of cement



Note: Country averages, include process and energy-related CO₂ emissions. Source: IEA, 2007, Tracking Industrial Energy Efficiency and CO₂ Emissions.



Typology of sectoral approaches (SA)

- Existing initiatives: transnational sectoral approaches
 - E.g. International Aluminium Institute sustainability goals (incl. PFC reductions); WBCSD Cement Sustainability Initiative; International Iron and Steel Institute
 - **♦** Data gathering **→** seeking best practice **→** offer policy options
 - ♦ In some cases, R&D towards innovative technologies (IISI)
 - Governments not involved so far
 - Public-private: Task Forces under the Asia-Pacific
 Partnership on Clean Development and Climate (APP)
- ◆ Considered: sector-level action under the UNFCCC
 - Country-level, sectoral objective with GHG crediting
 - "No lose" sectoral target (CCAP) / non-binding sectoral target
 - Sustainable Development Policies and Measures



Instrumenting sectoral approaches

- Sharing best practice
 - ◆ Industry benchmarks (e.g. x tCO₂ per tonne of y)
 - Sector-wide goal at international level or
 - Country-specific goals based on common methodology
 - Government policies (see IEA G8 mandate)
- Incentives
 - Improve economic and energy performance (win-win energy efficiency potentials)
 - Potential credits under Clean Development Mechanism (Kyoto Protocol)
 - Extending GHG crediting to a sector basis



Criteria to assess future sectoral approaches

- Environmental effectiveness
 - Leads to a meaningful environmental outcome?
- Fairness
 - ◆ Set a more level international playing-field in relevant industries – where CO₂ policy drives a wedge in cost-competitiveness
- Cost-effectiveness
 - Does not create large differences in cost of CO₂
 reductions avoid 'carving out' sectors
 - Paves the way for an economic signal on CO₂ emissions



Further analysis needed

- Technical issues
 - Data: availability, international comparability?
 - Quantify the potential for CO₂ reductions via sectoral approaches in emerging economies
 - Heavy industry, power generation
- Institutional issues
 - Capacity to move from the project-level approach of the CDM to a broader sector-level approach?
 - Integration of international sectoral agreements in the existing climate policy frameworks?
 - Carefully consider implications of massive increase in GHG credits under sectoral crediting



In closing

- Sector-level GHG mitigation needed, of course
 - 'Sectoral approaches' only raise the profile for some more exposed activities
 - Question: are sectoral approaches the most effective vehicle to get there? Wait and see...
- Sectoral approaches in the climate negotiation –
 Two scenarios:
 - "Permafrost"
 - Negotiations remain focused on country-level emissions à la Kyoto Protocol – SA contribute indirectly
 - Accept sector-wide commitments as interim step for non-Al.
 - or "Sea-Change"
 - A bottom-up, sector-specific discussion
 - UNFCCC not familiar with this approach (with LULUCF being an exception)



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SECTORAL APPROACHES TO GREENHOUSE GAS MITIGATION

Exploring Issues for Heavy Industry

IEA INFORMATION PAPER

www.iea.org/Textbase/publications/free_new_Desc.asp?PUBS_ID=2000
www.iea.org, "by topic", then "climate change", "publications and papers"

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