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**DIRECTORATE FOR SCIENCE, TECHNOLOGY AND INDUSTRY
STEEL COMMITTEE**

SECTORAL APPROACHES FOR GREENHOUSE GAS REDUCTIONS

7-8 November 2006

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OECD-IEA-IISI

Climate Policy and Competitiveness
in the Iron and Steel Sector

7 November 2006

Sectoral Approaches for Greenhouse Gas Reductions

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Political momentum behind sectoral approaches

- OECD high level roundtable on *transnational sectoral agreements* for climate policy (2005)
- G8 Gleneagles Plan of Action (July 2005)
 - ◆ Consider energy efficiency potential in industry
- Sectoral *task forces* under the Asia-Pacific Partnership on Clean Development and Climate
- Beginning of post-2012 climate change negotiations under the UNFCCC
 - ◆ Calls for analysis of sectoral dimensions – including competitiveness
 - ◆ Sectoral approaches as “complement” to country-wide commitments

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Why a sectoral focus?

- The typology of the Kyoto Protocol raises concerns about competitiveness of trade-exposed industries (“carbon leakage”)
 - ◆ A theoretically efficient system (emissions trading) ... but leaves out potential competitors
 - ◆ Limited incentives for improvements in developing countries
- Inside “Kyoto”, a country-by-country approach lacks coordination/fairness
 - ◆ Example: EU emissions trading scheme 2005-07 allocations reveal discrepancies: expected reductions (i.e. cost) and market access rules (new entrants, closure) differ across countries

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Questions

- Can an *international sector-specific* approach cost-effectively reduce a sector's greenhouse gas emissions, and not distort competitiveness?
- What could be the elements of such a sectoral approach for the iron and steel industry?

[Assumption: a single global price on CO₂ emissions of a (any) sector is still out of reach]

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Basic dimensions of a sectoral approach

- Who participates?
- What would it consist of?
- How would it function?

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WHO? Which sectors/activities?

- Two possible objectives for governments:
 - ◆ Maximise efficiency of the negotiation
 - ◆ Maximise greenhouse gas emission reductions – at least cost
- Activities with important & rapidly growing emissions
- High level of market concentration
- Sectors with homogeneous products or processes
 - ◆ Facilitate technical discussions
 - ◆ Address specific competitiveness concerns

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WHAT could a sectoral agreement consist of?

- What would it seek to control?
 - ◆ Direct and indirect GHG emissions of a sector?
 - ◆ E.g. ALCOA commitment to make its aluminium carbon-neutral (including "product application")
- How would goals be formulated?
 - ◆ CO₂ per unit of output
 - ◆ Energy efficiency goals
 - ◆ Diffusion rate of a specific, low-CO₂ technology
 - ◆ Absolute emission targets
- Harmonised domestic policies?
- What, if any, mechanisms of international coordination?
 - ◆ Flexibility via emissions trading (i.e. a common price signal on CO₂ emissions)
 - ◆ Pooling R&D resources
 - ◆ Technology assistance
 - ◆ Information sharing
 - ◆ ... Border-tax adjustments?

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HOW would sectoral approaches function? (1)

- Who are parties in the negotiation?
 - ◆ "Governments must be involved"
 - Governments negotiate *with* industry
 - Government to government negotiations on specific industry goals?
 - ◆ Industry federations, or industry at country level? Is the industry organised for this?
- Negotiation forum
 - ◆ UNFCCC, APP, IISI, OECD, IEA?
 - ◆ Legal nature of the agreement

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HOW would sectoral approaches function? (2)

- Sharing the burden? National circumstances matter greatly:
 - ◆ Rapid demand and production growth outside OECD
 - ◆ Regions differ on technologies, access to resources, overall energy efficiency level
 - ◆ Could a single, simple goal be acceptable to all? A future level of performance (x tCO₂ per ton of crude steel by 2030)?
 - ◆ Use CO₂ “credits” (Kyoto carbon markets) to encourage developing countries’ participation?

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Various institutional formats for an international sectoral approach

Voluntary action
by industry

International agreement
between industry &
government

Inter-governmental
negotiation on
specific sectors

Growing government recognition and involvement 

- Implications on:
 - ◆ Negotiability (from industry-centered to an inter-governmental, sector-specific negotiation *à la* WTO)
 - ◆ Access to emissions trading mechanisms
 - ◆ Responsibility for compliance with objectives
 - ◆ Overall impact on emissions – does broader coordination allow more ambitious goals?

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Further remarks

- What is the incentive for producers not currently covered by the Kyoto Protocol to participate in such an approach?
 - ◆ “Crediting” reductions – i.e. financing emission reductions.
 - Acceptable to competitors covered by Kyoto Protocol?
 - ◆ Alternative to a country-wide greenhouse gas commitments?
- Sectoral approach could help to manage intra-sector competitiveness. What about competing materials?
- Regional production trends and markets are not primarily driven by CO₂ constraints



IEA work on sectoral approaches

- Gather technical expertise from IEA G8 work on industry
 - ◆ Identify potentials for energy efficiency improvements
- Shed light on the concept of sectoral approaches
- Consult regional industry interlocutors
 - ◆ Sectoral approaches: who, what and how?
- Consider competitiveness dimension

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