INDIA

ENVIRONMENT POLICY ISSUES AFFECTING THE IRON AND STEEL INDUSTRY - OVERVIEW OF IEA ACTIVITIES

Joint India/OECD/IISI Workshop, New Delhi (India), 16-17 May 2006.

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JT03208581
Environment policy issues affecting the iron & steel industry
- Overview of IEA activities -

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Joint India/OECD/IISI India workshop on steel
New Delhi May 17, 2006

Topics

• IEA work on the iron & steel industry
  ◆ G8 activities
  ◆ Other IEA activities

• Areas for collaboration with the IEA
IEA’s G8 Activities

The G8 Gleneagles Plan of Action

- Gleneagles summit held in July 2005
- Launched a Dialogue on Climate Change, Clean Energy and Sustainable Development
  - with China, India, Mexico, Brazil, South Africa (+5)

- Gleneagles Plan of Action assigned 14 tasks to IEA amongst which industrial energy efficiency:
  - “...invite the IEA to develop its work to assess efficiency performance and seek to identify areas where further analysis of energy efficiency measures by industry sector could add value, across developed and interested developing countries”

- Final report due at the G8 summit in 2008 (Japan), interim reporting planned for the 2006 & 2007 summits (Russian and German chairs)
IEA Scenario Analysis for the G8

- **G8 to IEA:** “Advise on scenarios and strategies for a clean, clever and competitive energy future”

- **Response:**
  - Update of IEA World Energy Outlook
    - Alternative Policy Scenario: will be deepened and more detailed and look beyond 2030 building on the new publication ETP
  - New IEA publication “Global Energy Technology Perspectives”:
    - Address in detail how technologies in each sector (including industry) impact long-term energy markets and CO₂ emissions (→2050)

Timing of G8 work on the iron & steel industry

- **July 2006 St Petersburg:** Technological Potentials for CO₂ Emission Reduction in the Global Iron and Steel Industry (projections until 2050)

- **End 2006/2007:** Workshop on energy efficiency potential in the iron & steel industry

- **January 2007:** Publication on current industrial energy efficiency
Other IEA work programme

Sectoral Approaches: Background


- OECD Roundtable on Sustainable Development (2005): Can transnational agreements help reduce greenhouse gas emissions?
  - Aluminium, cement, steel, light-duty vehicles, coal-fired generation

- Charter for the Asia Pacific Partnership on Clean Development and Climate
  - Task forces on clean fossil energy, renewables, power (gen. and trans.), steel, aluminium, cement, coal mining, buildings and appliances
Simulated Cost of CO₂ Constraint for steel under the EU ETS
(allowance price = € 30/tCO₂)

<table>
<thead>
<tr>
<th>% final product cost increase</th>
<th>Integrated steel 1.9 tCO₂/t</th>
<th>Electric arc furnace steel 0.15 tCO₂/t</th>
</tr>
</thead>
<tbody>
<tr>
<td>allowance purchase = 2% of ex-ante emissions</td>
<td>1.8%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Allowance purchase = 10% of ex-ante emissions</td>
<td>3.5%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Full opportunity cost of allowances (= a CO₂ tax) [increase from electricity price]</td>
<td>23% [1.4%]</td>
<td>4.5% [2%]</td>
</tr>
</tbody>
</table>

Issues
- Ability to pass costs through to product prices?
- Relocation of carbon-intensive processes?
- Freight costs
- Wholesale electricity prices versus actual electricity costs to industry?
- Uncertainty

Reinaud, J. (2005): Industrial competitiveness under the EU ETS, Information Paper

Analysis on Sectoral Approaches

- What could sectoral approaches consist in?
  - Benchmarking? Other types of goals?
  - Information sharing? Pooling R&D efforts?
- Pros and cons in economic, technological and feasibility standpoint – in light of existing approaches
- Links to, and compatibility with existing policy frameworks addressing greenhouse gas emissions
- Lessons learned from international sectoral agreements on other issues (e.g. OECD on steel subsidies)
- Governance/Institutional framework
- Envisioned case studies: mid-2007
  - Power generation, aluminium, cement, iron and steel
Areas for collaboration

- IEA G8 workshop on energy efficiency and CO₂ mitigation options in the iron & steel industry
- Sectoral approaches project
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