LCA Workshop on

Sectoral Approaches for International Climate Policy

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Sectoral Approach

Para 1 (b) (iv) of the Bali Action Plan: Enhanced National / International Action on mitigation of climate change, including, inter alia, consideration of:.... *Cooperative sctoral approaches and sector-specific actions, in order to enhance implementation of Article 4, paragraph 1 (c)*, of the Convention.

 Article 4, para 1 (c) if UNFCCC: All Parties... shall:

"Promote and cooperate in the development, application and diffusion, including transfer of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors"

What kind of sector-specific actions can promote and support cooperation to reduce GHG emissions through energy efficiency interventions ?

Issues for India

- India is already promoting energy efficiency in energyintensive industries, and the Energy Conservation Act, 2001, provides a legal mandate for this
- Under the EC Act, nine sectors have been notified as "designated consumers", who are, inter-alia, required to appoint certified energy managers, undergo specific energy audits, report energy consumption data, and comply with prescribed energy consumption norms.
- The BEE certifies energy managers (through a national exam), accredits energy auditors, and is setting up a web-based energy reporting system.
- Energy consumption norms have not been prescribed for any sector as yet.

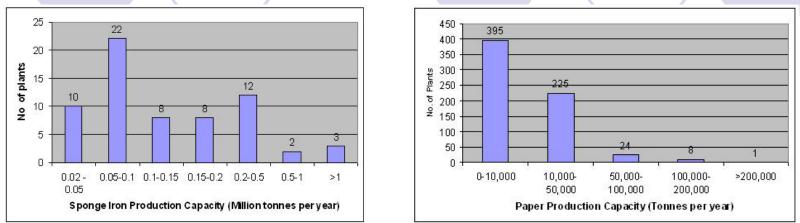
Practical Issues

 "Sectors" (e.g. steel, cement, paper) are everywhere characterized by great diversity in terms of:

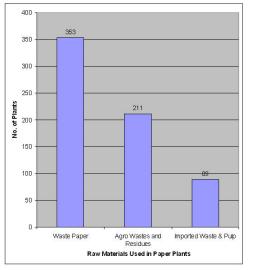
O Scale

- O Technology pathways
- O Technology vintages
- O Project boundaries
- O Type and quality of inputs/resource endowment
- O Product diversity

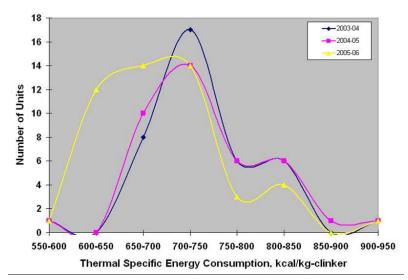
Diversity within Sectors in India



Large variation in scale of production capacities

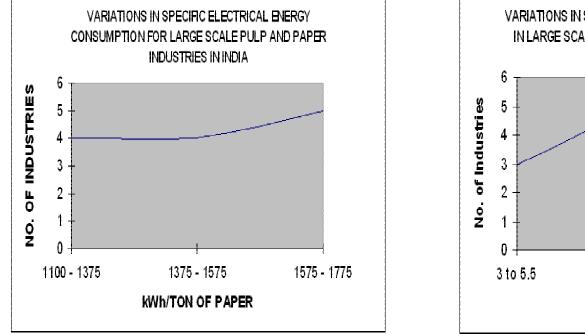


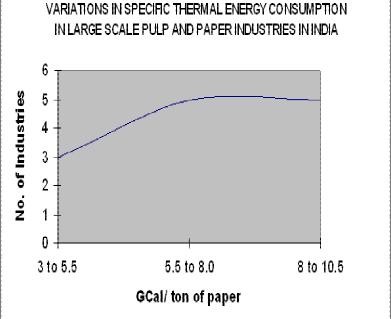
 Diversity in raw material used



 Large bandwidth in specific energy consumption in cement sector

Variations in Specific Energy Consumption





Practical Issues...

- Such diversity renders each plant in each country unique!
- Not feasible to define norms/standards unless there is significant homogeneity amongst plants in a sector
- Verification of attainment of sectoral standards would be "the mother of all intrusive actions" (Inspector Raj!)
- Alternatively, presuming that use of certain technologies would ensure attainment of prescribed sectoral standards would drive global market to these (few) technologies with closely held IPRs

Concerns regarding sectoral approaches

- Will limit technology choices to a few, protected by IPRs held by developed country firms. They would then have cartel power to dictate royalty payments, sharply increasing cost
- Even otherwise, these technologies would not be optimized for resource endowments of developing countries and relative factor costs, leading to the sectors becoming uncompetitive in any case
- Represents a serious deviation from Principle 11 of Rio Declaration that "standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries".

Feasible approaches

- Collaborative R&D supported by global venture capital fund, with concessional working of IPRs in developing countries
- Compulsory licensing of. And payment of royalties by multilateral fund for, technologies needed by developing countries to implement their national action plans
- Norms on packaging, re-use, recycling of energy intensive materials; implicit GHG in consumption goods (e.g. food, transport)
- National (non-binding) Energy Efficiency Programmes



THANK YOU