

IEA Workshop on

Sectoral Approaches for International Climate Policy

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Issues for India

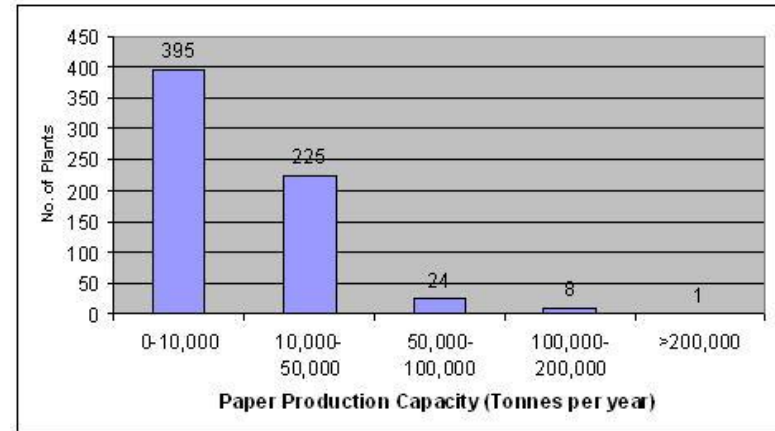
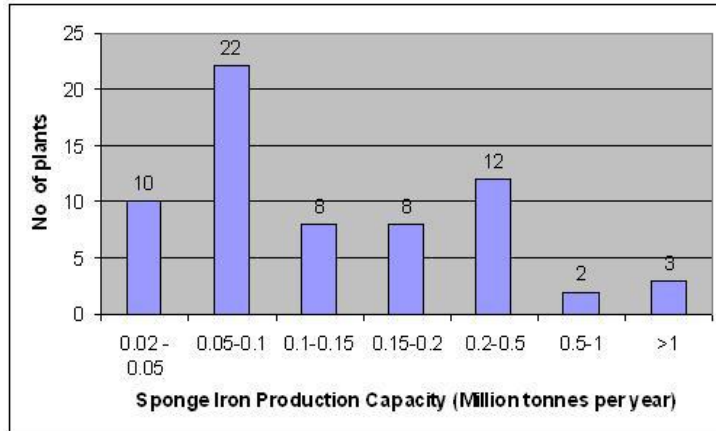
- India is already promoting energy efficiency in energy-intensive industries, and the Energy Conservation Act, 2001, provides a legal mandate for this
- Under the EC Act, nine sectors have been notified as “designated consumers”, who are, inter alia, required to appoint certified energy managers, undergo 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.



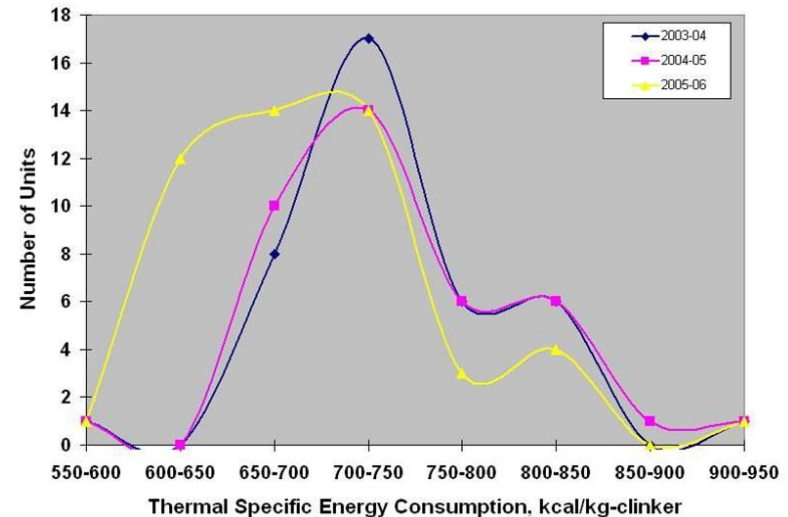
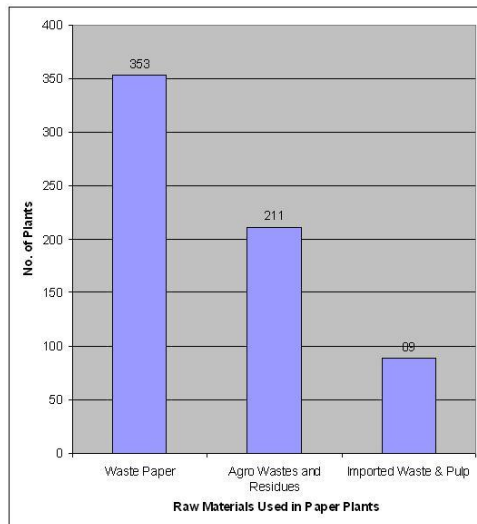
Practical Issues

- “Sectors” (e.g. steel, cement, paper) are everywhere characterized by great diversity in terms of:
 - Scale
 - Technology pathways
 - Technology vintages
 - Project boundaries
 - Type and quality of inputs/resource endowment
 - Product diversity

Diversity within Sectors in India



- Large variation in scale of production capacities

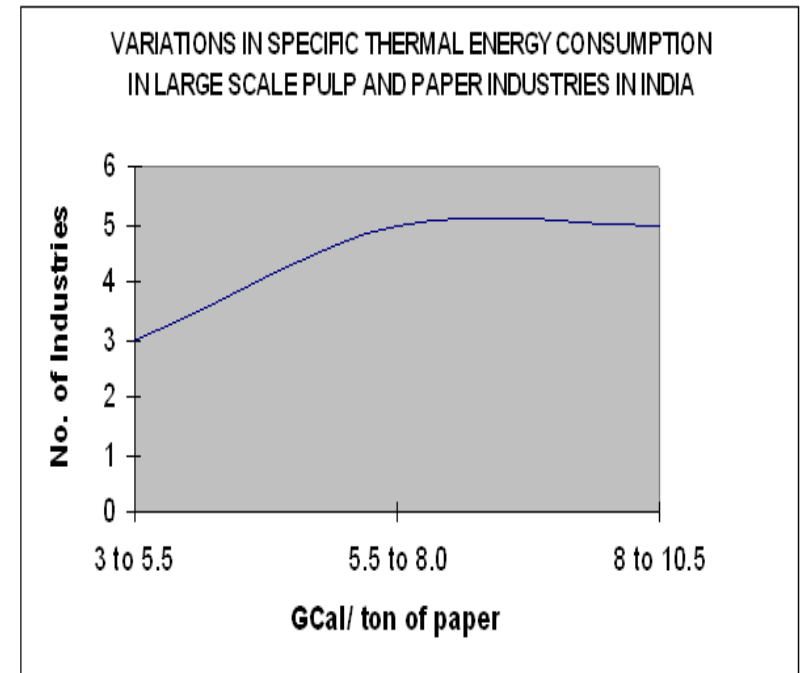
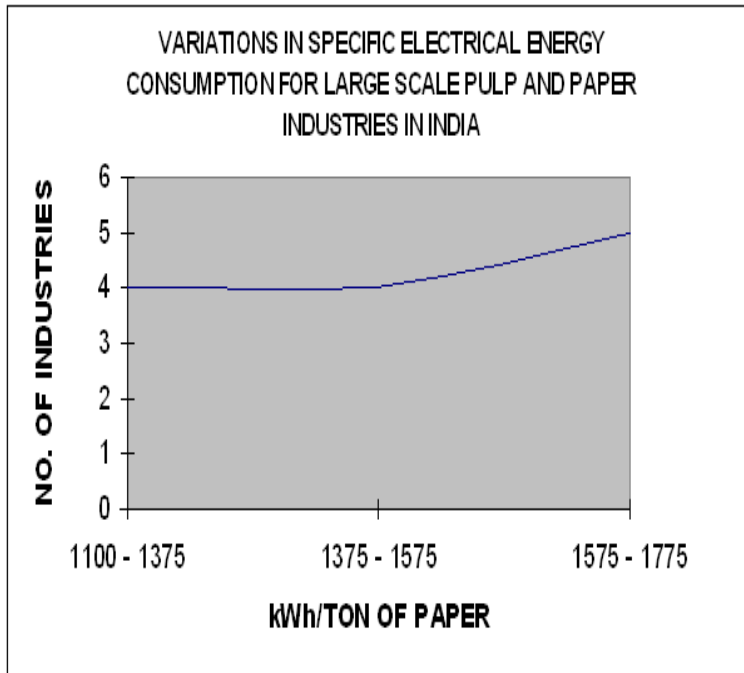


- Large bandwidth in specific energy consumption in cement sector



Diversity in raw material used

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 standards would drive 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 the Kyoto approach of reliance on cost-effectiveness through carbon market approaches – fiat based approaches such as harmonization cannot lead to cost-effectiveness (a basic result in environmental economics literature)

Feasible sectoral approaches

- Collaborative R&D supported by global venture capital fund, with concessional working of IPRs in developing countries
- Payment of royalties by GEF etc. 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, space conditioning, transport)



THANK YOU