# Sectoral Crediting Mechanisms for Greenhouse Gas Mitigation:

Institutional and Operational Issues

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## **Outline of the Paper**

- Definitions and scope
- Insights from existing mechanisms
- Operational issues for baselines
- Requirements to make SCM effective
- International governance issuesThis presentation:
  - Description of main options
  - Baseline issues
  - Governance questions



Source:

Baumert, 2006

## **Definitions and scope**

- Starting point: an interrogation
  - Could a crediting mechanism be broadened to whole sectors to encourage more GHG mitigation and sustainable development?
  - A way to address competitiveness concerns?
- How would this work?
  - A country can decide to enter a GHG crediting framework on the basis of the total of a sector's emissions
    - Different from CDM projects with a consolidated baseline, where crediting is still gauged on a project, not sector, basis
  - A baseline is needed for the sector as a whole



## **SCM versus CDM projects**

**SCM Case** 

Sector baseline

Trend after SCM

**CDM Case** 

Sector emissions

Project baseline

Trend after CDM

Project baseline

Trend after CDM





| Credited | reductions

## **Three Options for SCMs**

- Policy-based
  - Evaluate and credit reductions pertaining to well-identified policies
- Fixed limits
  - Fixed caps on sectors' (and installations') emissions
- Rate-based
  - Baseline set in tCO<sub>2</sub>-eq per unit of output
  - > Baseline: national or international?
  - > Critical choice: what level of disaggregation?
    Account for various processes, fuel mixes, etc?



### **Issues common to all 3 options**

- SCM requires a clear definition of the sector boundaries and eligibility
  - Types of activities, size of installations, geographic scope, GHG coverage
- Baseline setting requires data on a sector-wide scale
  - Assess present conditions and project future growth/technology developments under business-as-usual conditions

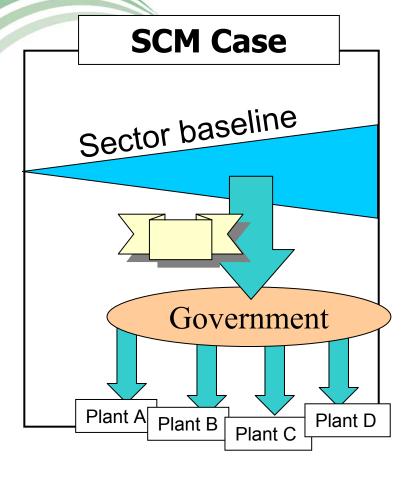


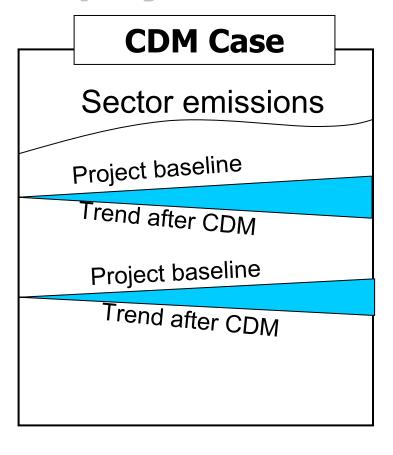
## Baseline setting at sector level

- National/international
  - Little homogeneity in processes, even in homogenous products
- All plants, new plants only?
  - Consider sectoral dynamics: would a coverage of new plants be most cost-effective?
- A common international framework for baseline setting rather than a single international baseline level (e.g. tCO<sub>2</sub> per unit of output)
- Policy-based SCM could require ex-post baseline evaluation
  - Emissions within a sector can be affected by many factors other than a specific policy: all observed reductions may not be credited
- Once baselines are set, crediting may be less cumbersome than on a project-by-project basis
  - Governments responsible for the management of credits at domestic level



# Can SCM work? SCM versus CDM projects

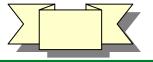








Credited reductions



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## Can SCM Work? (2)

#### Policy-based SCM

- Can crediting trigger policy implementation?
- Should all GHG-reducing policies be creditable? Where should the line be drawn otherwise?

## Administrative feasibility of a sector-wide crediting mechanism

- Data gathering: prerequisite for baseline setting
  - Slippery slope: each plant is different for a reason...
- Monitoring and review of emissions (and output, for a rate-based SCM)
- Enforcement?

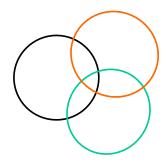
#### Fixed limits SCM

 Questions on new sources, etc. similar to those raised by cap and trade systems



### **International Governance Issues**

 Links to existing mechanisms (CDM, including programmes of activities)



- How would baselines be negotiated?
- Role of international industry federations?
- Who would supervise SCM internationally?
  - Role for competition authorities to ensure fair trade?
- Crediting may exacerbate competitiveness concerns in some sectors
  - Crediting some industry in non-Annex I countries
  - while "taxing" emissions from similar industry in Annex I countries



### Without concluding...

- Sector definitions and baseline setting unlikely to be trivial
  - Data
  - Competitiveness concerns related to the crediting aspect of the approach
- New administrative duties for host countries
- Moving crediting to a much larger scale raises new concerns
  - Additionality
  - Scale of credit supply must be matched by a large market for generated credits – requires emission reduction commitments that can absorb such supply



