



Sector Crediting Options

Presentation to the Sectoral Study Side Event

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William Whitesell, Director of Policy Research,
Center for Clean Air Policy

Acknowledgment and Disclaimer

- The analysis presented here arose from work on Sectoral Approaches
- Supported by the European Commission and others
- Views expressed do not represent those of the EC

Developing Country Sector Programs Differ Widely

- Mexico: cap-and-trade for two sectors, maybe more
- China: targets for neither absolute emissions nor intensity but for technology penetration
- India: energy efficiency standards for 9 sectors (initially) with tradable “certificates”

A flexible international framework is needed to accommodate such differences

NAMAs and Sector Programs

- NAMAs in part supported by public finance
 - » Simple if designed for one sector
 - » Could be many within one sector or one that crosses many sectors
- Crediting baselines need to take into account:
 - » Grouping individual NAMAs within a sector into one sector crediting baseline
 - » Possible multi-sector crediting baselines:
 - NAMAs crossing parts of several sectors (e.g., motor replacement)
 - Comprehensive, multi-sector cap-and-trade

Possible Market Design Options

- Linked multi-sector cap-and-trade programs
 - » Among Annex 1 countries
 - » Developing countries (DCs) as well
- Sector “trading”: emission cap on a sector
- No-lose sector crediting:
implementation within DCs could vary widely

Linked Cap-and-Trade

- Ideal of common global carbon price
- “Differentiated responsibilities”: DCs sell domestic allowances to Annex 1
- These sales replace offset credits
- Competitive effects depend on free allowances given in different countries
- May be some time before DCs develop these programs and links can be formed
- EU sees sector trading or crediting as an interim step toward linked cap-and-trade

Sector Trading

- Simple version of cap-and-trade for one or a few sectors in a DC
- Allowances given to DC in advance by international body
- Allowance submission requirement for DC is an internationally enforceable cap
- Competitive effects depend on the DC's sector policies (i.e., grants of free allowances or other subsidies)
- Not many DCs may be ready to make such international commitments as yet

Sector Crediting

- Reflects EU idea of incentives for DCs to make transition from project credits
- No lose, ex post, based on:
 - » Absolute emissions
 - » Emission intensity
 - » Technology penetration level (translated into tons)
- Implementation options in DCs could include:
 - » Package of NAMAs and mandates in a sector
 - » Domestic cap-and-trade (prior to full linkage)
 - » Tradable intensity standard

Sector Crediting Issues Re: Pass-through to Private Firms

- Pro-rata sharing of credits among DC firms:
 - » Winning firms get less than one credit per ton
 - » Price signal below international carbon price
- Difficult to get finance by selling future credits when results depends on performance of other firms
- Would DC governments agree to pay for firms with excess emissions?
- Some suggest fines on failing firms;
 one version of this is a tradable intensity standard

Tradable Intensity Standard with International Link

- DC sets intensity standard at baseline for international crediting
- International credits used as compliance instrument for firms
- DC government gets credits from international body if sector beats baseline
- Firms with excess intensity buy credits to submit to government
- Government gives credits from both sources to firms that beat intensity baseline (one credit per ton)

Effects of Tradable Intensity Standards

- No lose for DC government
- Firms face the full international carbon price to motivate emission abatement
- Firms exceeding intensity baseline:
 - » pay only for emissions above baseline
 - » Less effect on marginal cost of output than cap-and-trade without free allowances
- Firms that beat the baseline:
 - » Earn a credit for each ton below
 - » Can finance projects with forward sales of credits
- Production incentive favors firms beating the baseline
- To avoid any competitive effect (assuming no free allowances to industry by Annex 1), could discount credits, but then lose incentive of full carbon price signal

Questions for Discussion

- How soon could DCs be expected to implement broad cap-and-trade programs?
- How soon could such programs be linked with those in Annex 1 countries?
- Will sector programs be effective transitional vehicles?
- How can sector approaches:
 - » accommodate differences in program designs across DCs
 - » provide incentives and private financing for substantial emission reductions?
- Can tradable intensity standards play a role in some countries?

Thank you!

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