



Center for
Clean Air Policy

Policy Options for Reducing GHG Emissions in Mexico and Their Relation to International Sectoral Approaches Post-2012

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Mexico Kickoff Workshop

2-3 September 2008

Overview of Workshop

- Workshop Objectives
- Status of the Centro Mario Molina/CCAP Mexico Project
- International Policy Context
- EU Sectoral Study Objectives
- Primary Sectoral Approaches
- Financing Mechanisms for Sectoral Approaches
- Sectoral Study Process, Timeline and Partners
- Coordination with Other Projects
- Analytical Work for the Sectoral Study
- Evaluating the Sectoral Approaches
- Key Questions

Workshop Objectives

- Review progress of the Centro Mario Molina/ CCAP Mexico Climate Policy Project
- Discuss initial policy recommendations for GHG emissions mitigation in key sectors in Mexico
- Discuss international sectoral approaches
- Discuss the relative attractiveness of the international sectoral approach incentives offered and how they could help Mexico implement its climate policies

Centro Mario Molina/CCAP Mexico Project

- Part of a 4-country (BZ, CH, IN, MX) study financed by UK DFID and the William and Flora Hewlett Foundation
- Designed to build capacity to assess opportunities and costs of policies for GHG emissions reductions in key sectors: electricity, industry and transportation (MX, BZ also include deforestation)
- Mexico work broken up into:
 - » Priority sectors – electricity, cement, oil, transport
 - » Non-priority sectors – chemicals & petrochemicals, iron & steel, pulp & paper, sugar refining
 - » Forestry

CMM/CCAP Mexico Project

- Phase I:
 - » Build supply curves for GHG emissions reductions from new and existing facilities in each sector
 - » Assess impacts of existing laws and policies on emissions and costs in each sector
- Phase II:
 - » Assess best policy options to achieve cost-effective GHG reductions
 - » Assess policy barriers and obstacles to achieving those reductions
 - » Assess alternative international sectoral approaches to determine best design to help each developing country implement its climate policies (expanded EU support for study)

International Policy Context

- Bali Action Plan calls for:
 - » “Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development,”
 - » “Supported and enabled by technology, financing, and capacity-building,”
 - » “in a measurable, reportable and verifiable manner.”
- Bali roadmap envisions a menu of options that developing countries can elect to pursue including tech transfer, CDM, sectoral approaches, and reducing emissions from deforestation and degradation (REDD)
- Also envisions a range of assistance (finance and technology transfer) from Annex I countries, including expanded carbon market mechanisms (based on tougher Annex I targets) and new financing beyond ODA

EU Study Objectives: Proof of Sectoral Concept

- New round of work in **China, Brazil and Mexico** financed by EU DG Enterprise to provide “Proof of Concept”
- Define data and capacities needed to be able to implement sectoral approaches in the international process
- Assess usefulness of sectoral approaches in assisting specific developing countries to take mitigation actions and to achieve sustainable development
- Assess effectiveness of finance and technology incentives to encourage developing country participation in sectoral approaches
- Focus first on high-emitting sectors – **electricity, cement, iron and steel, and aluminum**
- All feeding into the Bali Roadmap and Copenhagen 2009 discussions

Primary Sectoral Approaches

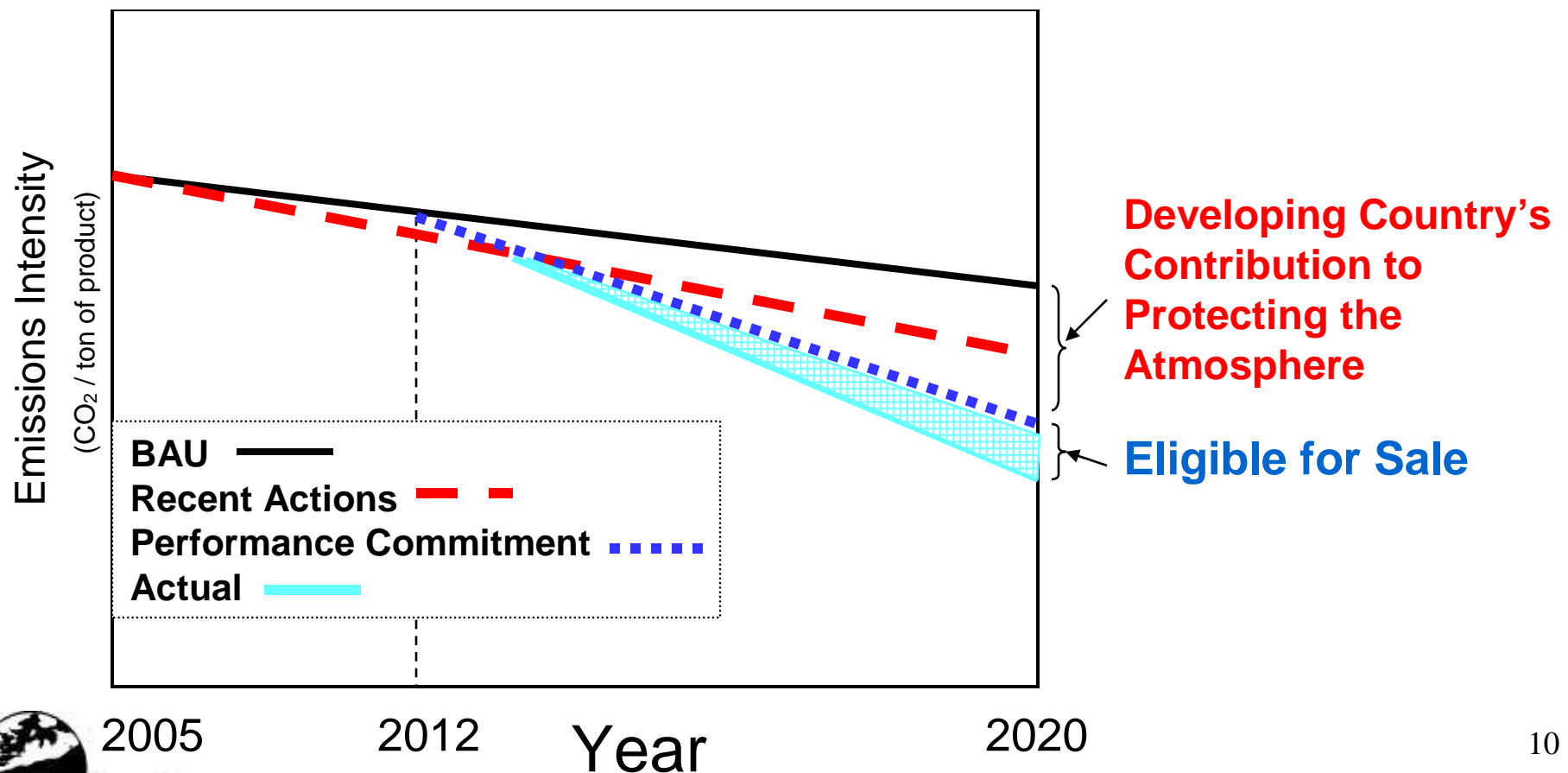
1. Transnational Sectoral Approach
 2. Sectoral Bottom-up Approach
 3. Sectoral Carbon Finance Approach (aka Sectoral CDM)
- A hybrid approach could seek to combine the best elements of each of the above – “one size may not fit all”

Transnational Sectoral Approach

- UNFCCC would certify international industry agreements that define sectoral boundaries, data needs and minimum intensity targets for sectors
- Emerging economies (EEs) would propose national sectoral standards based upon national circumstances – EEs would provide evidence to support their choice of target and UNFCCC negotiation process would finalize these
- Up-front funding for capacity building would be available to all EEs
- EEs that perform better than their national intensity targets could generate CERs for sale in the carbon market

Bottom-up Sectoral Approach: No-lose Target

- Emissions reductions beyond the country's sectoral target are eligible for sale



Key Elements of an All-inclusive Sectoral Carbon Finance Approach (Sectoral CDM)

- All or most facilities in a sector would be covered and would meet a carbon intensity standard collectively
- Reductions achieved below the standard on an aggregate basis would be automatically additional
- Choice of the standard would ensure that the developing country is making a unilateral contribution to the protection of the atmosphere (i.e., some reductions from BAU would be required to be achieved without Annex I payments)
- Choice of the standard by the host country would be based upon an assessment of benchmarks related to best practices and the costs/benefits of meeting these

Potential Sectoral Incentives for DC Participation

- Each of the 3 options would offer:
 - » some form of sectoral crediting mechanism like CDM CERs
 - » capacity building, data and MRV assistance
 - » knowledge sharing on advanced technologies, industry best practices, and win-win opportunities
- Bottom-up no-lose approach would offer additional advanced technology finance based on:
 - » new sources of financing, such as Annex I allowance auction revenues, fees on bunker fuels, extension of the CDM fee to ET & JI
 - » Financing could be flexible – tailored to nature of financial markets in a particular developing country
- Technology assistance could be included in sectoral CDM by offering bonus CERs for facilities using advanced techs

Potential Financial Incentives

- Financial incentives can take a variety of forms, tailored to the host country's needs and conditions
- Incentives could provide:
 - » Financing to write down the cost of deployment of step-change technologies
 - » Structures to reduce or eliminate host country financing barriers (e.g. SPEs, guarantees),
 - » Financial support to reduce the cost to consumers of policy actions (e.g. feed-in tariffs)

Sectoral Study Partners

- Center for Clean Air Policy – Europe (CCAP)
- Centre for European Policy Studies (CEPS)
- Climate Change Capital (CCC)
- Institut du développement durable et des relations internationales (IDDRI)
- Zentrum für Europäische Wirtschaftsforschung GmbH (ZEW)

In-Country Partners

- Tsinghua University (China)
- Yunchuan Jing (China)
- ICF International (Mexico)
- ICF International (Brazil)
- Giovanni Barotini (Brazil)

Sectoral Study Timeline: Broad Objective

- Interim results will be available prior to COP 14 in Poznan
 - » Preliminary results for one sector in each country
- Final results will be available prior to COP 15 in Copenhagen

Sectoral Study Process

- Quantitative analysis
- Model the impacts of sectoral approaches
- Identify financial incentives that would encourage countries to take additional sectoral actions.
- Better define and articulate each sectoral approach and how it would apply in each country and sector

Overview of analytical work

- Acquisition of plant-specific data (location, capacity, annual production, annual fuel consumption by type, technologies and production processes employed, etc.)
- Development of annual BAU estimates of key parameters through 2025 in each sector
 - » Production and demand
 - » Fuel consumption by type
 - » CO₂ emissions
 - » Energy and emissions intensity
 - » Construction of new plants, expansion of existing plants, and retirements associated with production projections

Overview of analytical work

- Identification and analysis of potential mitigation options
 - » Technologies required, availability, emission reduction potential, development of marginal abatement cost curves
 - » Technical, financial or other barriers to implementation
- Development of lower-emission scenarios under each sectoral approach
- Estimation of funding levels required and potential financing options
- Global modeling analysis to estimate impacts of sectoral approaches on international trade in one sector
- Identification of gaps in data and development of country-specific options to address them
- Development of potential government and private sector policies to implement mitigation options and sectoral programs

Coordination with other projects

- There are several other related projects:
 - » Cement Sustainability Initiative
 - » International Iron and Steel Institute
 - » IAI's Aluminium for Future Generations initiative
 - » Asia Pacific Partnership (APP) – Multisector
 - Aluminium Task Force
 - Cement Task Force
 - Power Sector Task Forces
 - Steel Task Force

Criteria for Evaluating Sectoral Approaches

- GHG environmental effectiveness
- Contribution to sustainable development
- Cost effectiveness
- Equity
- Operational feasibility
- Political feasibility

Key Questions: Design and Institutional Issues

- How can the design of a sectoral approach create maximum incentives for action?
- What level and incentive structure would encourage additional emission reductions?
- What barriers/issues are associated with the various types of sectoral approaches?
- What capacity-building (e.g., in monitoring and reporting greenhouse gas emissions) will be needed in developing countries?



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Questions?

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