



Center for
Clean Air Policy

Sectoral Approaches to the Post-2012 Climate Change Policy Architecture

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International Energy Agency
Sectoral Approaches for International Climate Policy
14-15 May 2008 - Paris, France
Session 3

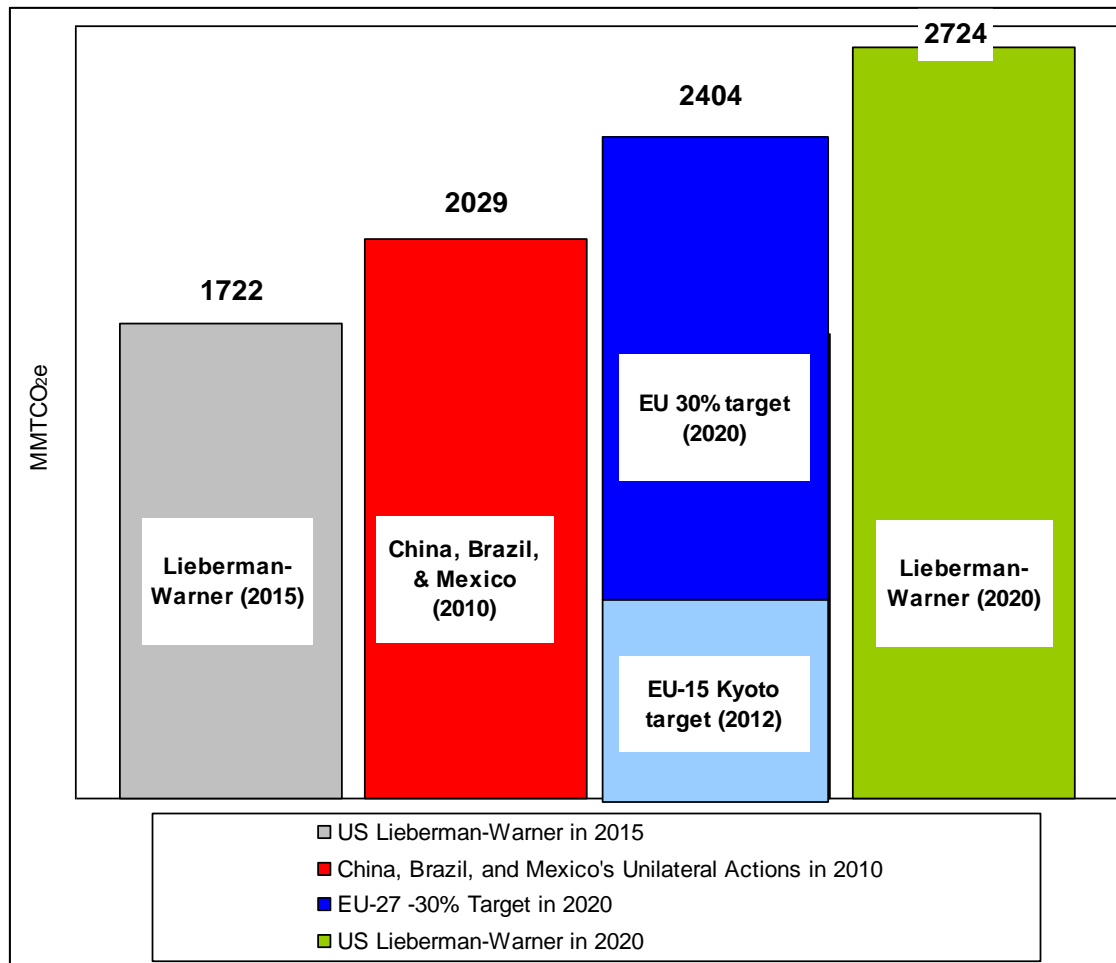
About the Center for Clean Air Policy (CCAP)

- Washington and Brussels-based environmental think tank
- Committed to advancing pragmatic and cost-effective climate and air quality policy through analysis, dialogue, and education
- CCAP's 30-country climate policy dialogue has produced agreements on emissions trading, design of Clean Development Mechanism, now focused on post-2012 climate policy
- Working with key developing countries (China, India, Brazil, Mexico) and U.S. states to design climate policies
- Helped design the EU CO₂ emissions trading program
- Running multi-stakeholder dialogues in the U.S. and the EU to build agreement on elements of a US national climate policy package and EU strategy
- Active participant in past and current negotiations on land-use change and forestry under the UNFCCC and other fora

Sectoral Approaches can help achieve Climate Progress

- Global GHG goals require contributions from developing countries
 - » Annex I reductions alone can't ensure stabilization
 - » Bali Action Plan calls for “Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, and “Cooperative sectoral approaches and sector-specific actions”
- Sectoral approaches can facilitate these contributions
 - » Focus on energy and GHG-intensive sectors
 - » Supported and enabled by technology, financing, and capacity-building
- Together with stringent Annex I targets, sectoral approaches can keep global emissions at levels that preserve potential for longer-term stabilization

Unilateral Actions Compared to US and EU Efforts



Why focus on internationally competitive sectors?

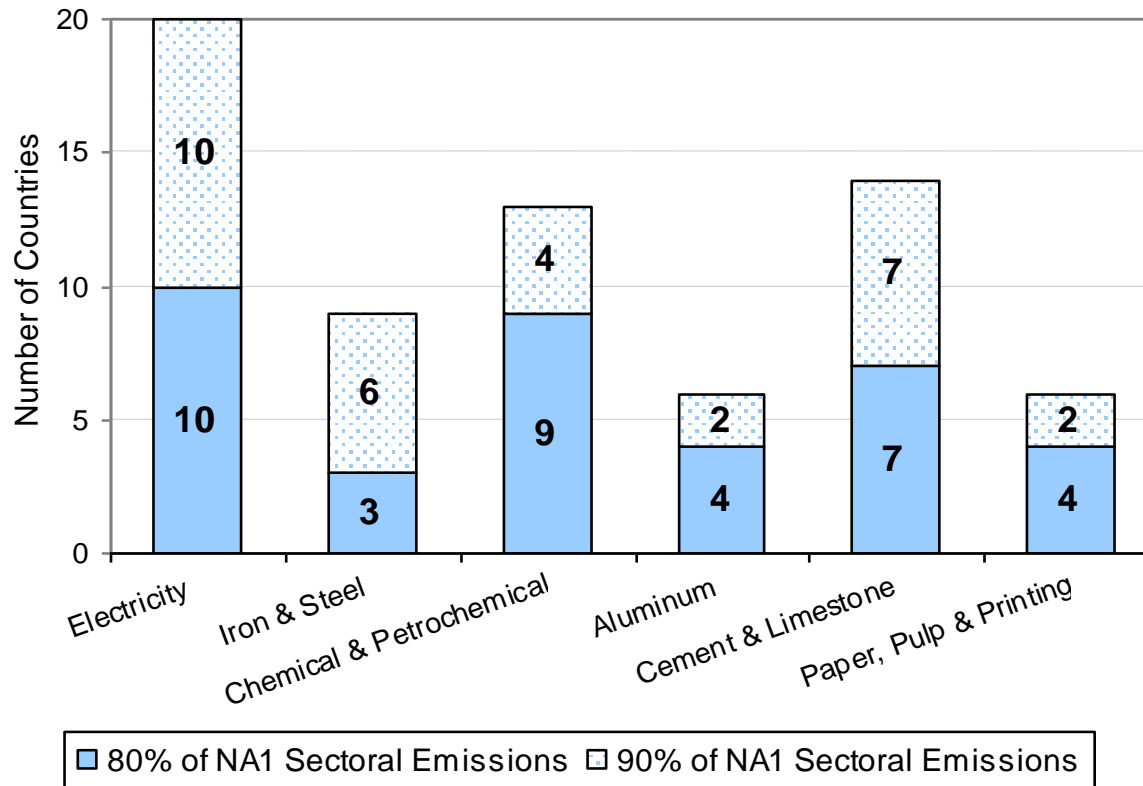
- For some energy-intensive industries, climate policies can affect trade dynamics
- Internationally competitive sectors like cement, steel, paper, and aluminum account for roughly 8% of global emissions,* but
 - » are important politically because of fears of loss of competitiveness, GHG leakage, and jobs/plant migration
- EU ETS allocation problems have demonstrated the importance of these sectors to competitiveness
 - » Decisions on auction vs. grandfathering have profound competitiveness implications
 - » Study showed that competitiveness in EU was more adversely affected by allocation decisions by Member States than by potential leakage to nearby developing countries

Carbon Regulation and International Competitiveness

- Addressing carbon differences within Annex I and between developing countries and Annex I may not eliminate job and plant shifts
 - » because of differences on taxes and labor costs etc
 - » but can reduce the impact of carbon regulation on those shifts
- Once these sectors are addressed, it will be easier for Annex I countries to set aggressive national reduction targets

How Many Developing Countries Need to Play ?

- Top 10 developing countries in each sector emit 80-90% of CO₂



Program guidance & lessons learned from previous work

- Build on developing country unilateral actions
- Build goals from the bottom-up and provide incentives for going further
 - » Encourage developing countries to take actions without penalties
 - » Maintain “common but differentiated responsibilities and respective capabilities”
- Place equal importance on encouraging sustainable development and achieving GHG reductions

Developing Country Mitigation Framework

- Developing countries would create national strategies based on the following elements:
 - » Countries outline “unilateral actions” to achieve sustainable development and reduce GHGs
 - » Outline other additional actions they are willing to undertake with assistance from developed countries, the UNFCCC or KP mechanisms, or new post-2012 frameworks, and **specify the technologies needed**
 - » Developed countries provide assistance to developing countries to undertake these additional measures
- Each country’s plan quantifies the sustainable development impacts and GHG reductions below BAU in key sectors

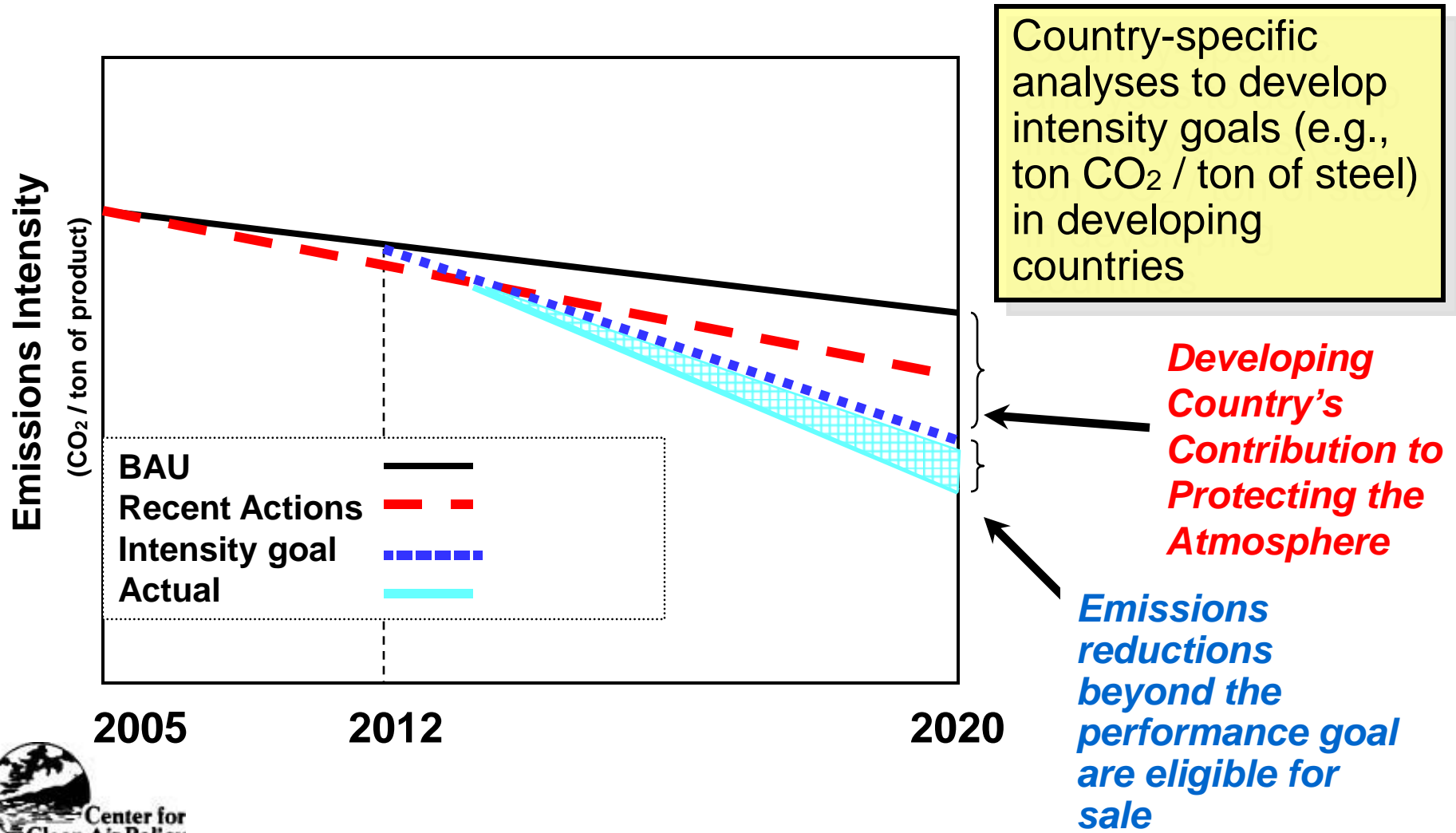
Developing Country Mitigation Framework

- Developing countries specify policy actions they intend to take and the expected results. Could be undertaken under existing programs/mechanisms (e.g., UNFCCC), or new ones within the post-2012 framework
 - » Unilateral actions and SD-PAMs to reduce GHGs (existing and new)
 - » Policy-based lending to build capacity to develop/implement policies
 - » **Sectoral bottom-up approach for selected sectors** (new)
 - » Sectoral carbon finance, program of activities, and traditional CDM (new and existing)
 - » Reducing emissions from deforestation (new)
 - » Technology demonstration and deployment (new and existing)
 - » Financing (new and existing)

Sectoral Bottom-Up Approach

- Method for encouraging sectoral emissions reduction contributions in non-Annex I countries (e.g., steel, cement, electricity) post-2012. Designed to:
 - » Build on previous unilateral actions and offer up-front technology finance packages to encourage more stringent targets
 - » Analyse what is technologically feasible and economically cost-effective in each industrial sector in each country
 - » Encourage deployment of low carbon technologies in these sectors in all countries
 - » Move toward leveling the playing field for carbon in internationally competitive sectors
- For Annex I countries, national carbon reduction targets could be developed in part via bottom-up sectoral intensity – one possible approach to “comparable effort”

Sectoral Bottom-Up Approach

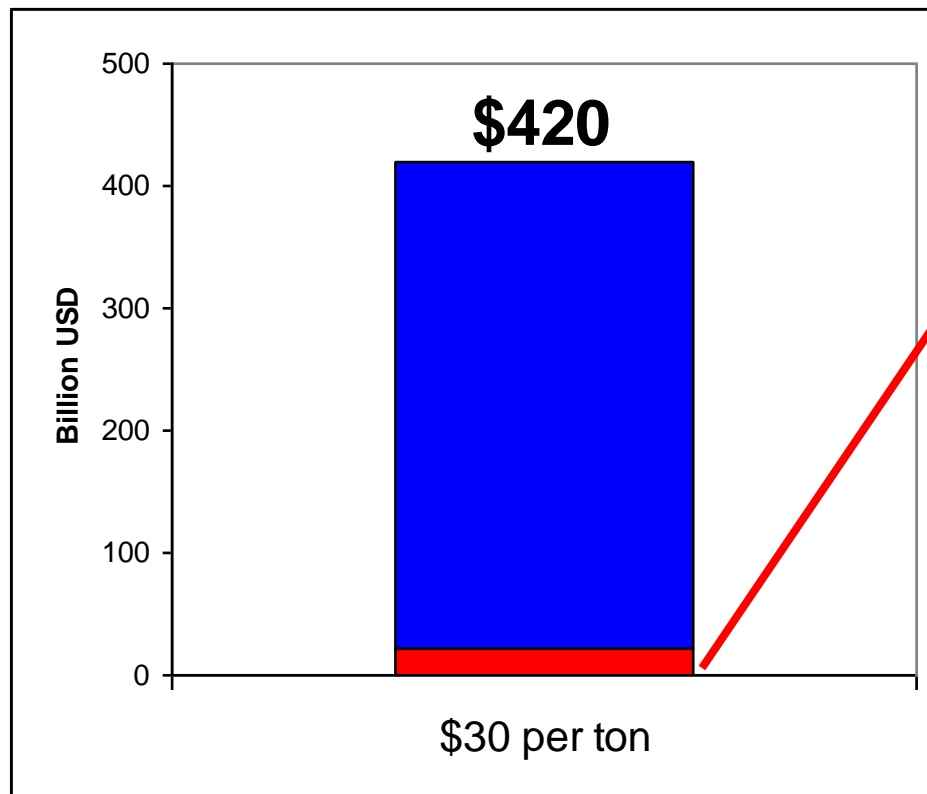


Technology Financing and Assistance Package

- Industrialized countries, International financial institutions (IFIs), Export credit agencies (ECAs) provide:
 - » **A package of technology finance and assistance incentives** to help participating non-Annex I countries establish and meet more aggressive “performance commitment” and increase deployment of advanced technologies
- Could be financed through the allowance values or auction revenues in developed country emissions reduction programs
 - » e.g., through an international set aside (i.e., portion of allowances taken out from the outset) to a fund like Mexico has proposed OR
 - » Countries setting aside portion of allowances or auction revenues in domestic trading system (e.g., as Germany is doing with 30% of the auction revenues for the EU ETS sectors)

How Much Money Could be Generated: An Example*

Value of Annex I Allowances in 2020 per year



- If 5% of Annex I allowance value set aside for advanced technology deployment could generate
 - » \$21 billion per year

* Based upon 20% below 1990 levels target for all Annex I emissions

Developing Country Mitigation Framework: UNFCCC implementation

- The successful development, adoption and implementation of this framework will require consideration of the following:
 - » Procedures for the development of each sectoral or SD-PAMS strategy
 - » Commitments for financing and procedures for negotiation of technology assistance
 - » Measurement, reporting and verification requirements (MRV)
 - for developing country action
 - for Annex I financing and technology assistance

Conclusions: to Date

- Post-2012 mitigation framework needs to include elements that:
 - » Provide a structure for developed countries to provide targeted technology financing for deployment
 - » Move toward addressing carbon differences in energy-intensive and trade-sensitive sectors –
 - Bends developing country emissions curve in the near-term
 - Relieves political opposition in Annex I countries
 - » Set global emissions level for 2020 that preserves potential to achieve stabilization of long term atmospheric concentrations at a safe level
 - » Set more stringent developed country commitments for 2020

Next steps for Sectoral Approaches: Exploring “Proof of Concept”

- European Commission – DG Enterprise and Industry
 - » Call for Proposal ENT/CIP/08/C/N02S00/1: *Global Sectoral Approaches: sectoral approaches as part of a post-2012 framework*
 - » Aim is to provide proof of concept of how international sectoral approaches could work and fit into a post-2012 international framework on climate change
 - » What actions would be necessary for sectoral approaches to become a tool in the mitigation of GHG emissions and necessary links to the global carbon market?

Focus of Efforts

- Project Partners:
 - » CCAP – Europe
 - » CEPS
 - » Climate Change Capital
 - » IDDRI
 - » ZEW
- Four sectors
 - » Iron & Steel
 - » Cement
 - » Aluminum
 - » Electric Power
- Three countries: China, Brazil, Mexico
- Three primary sectoral approaches
 - » Transnational Sectoral Approach
 - » Sectoral Bottom-up Approach
 - » Sectoral Carbon Finance Approach

Work efforts to include:

- Quantitative analysis
 - » Baseline forecasts
 - » Technology benchmarks
 - » Mitigation cost curves
 - » Financial analysis
 - » Int'l trade & competitiveness analysis
- Policy papers
- Workshops
 - » In developing countries
 - » In developed countries

- Reports