



Center for
Clean Air Policy

Sectoral Approaches to the Post-2012 Climate Change Policy Architecture

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UNFCCC In-Session Workshop
Bangkok, Thailand
1-3 April 2008

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



What is a Sectoral Approach to Post-2012 GHG Reductions?

- Method for encouraging sectoral emissions reduction contributions in non-Annex I countries (e.g. steel, cement, electricity) post 2012.

Designed to:

- encourage deployment of low carbon technologies in these sectors in all countries and
 - Move toward leveling the playing field for carbon in internationally competitive sectors
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- For Annex I countries, national carbon reduction targets could be developed in part via bottom-up sectoral intensity
 - one possible approach to “comparable effort”

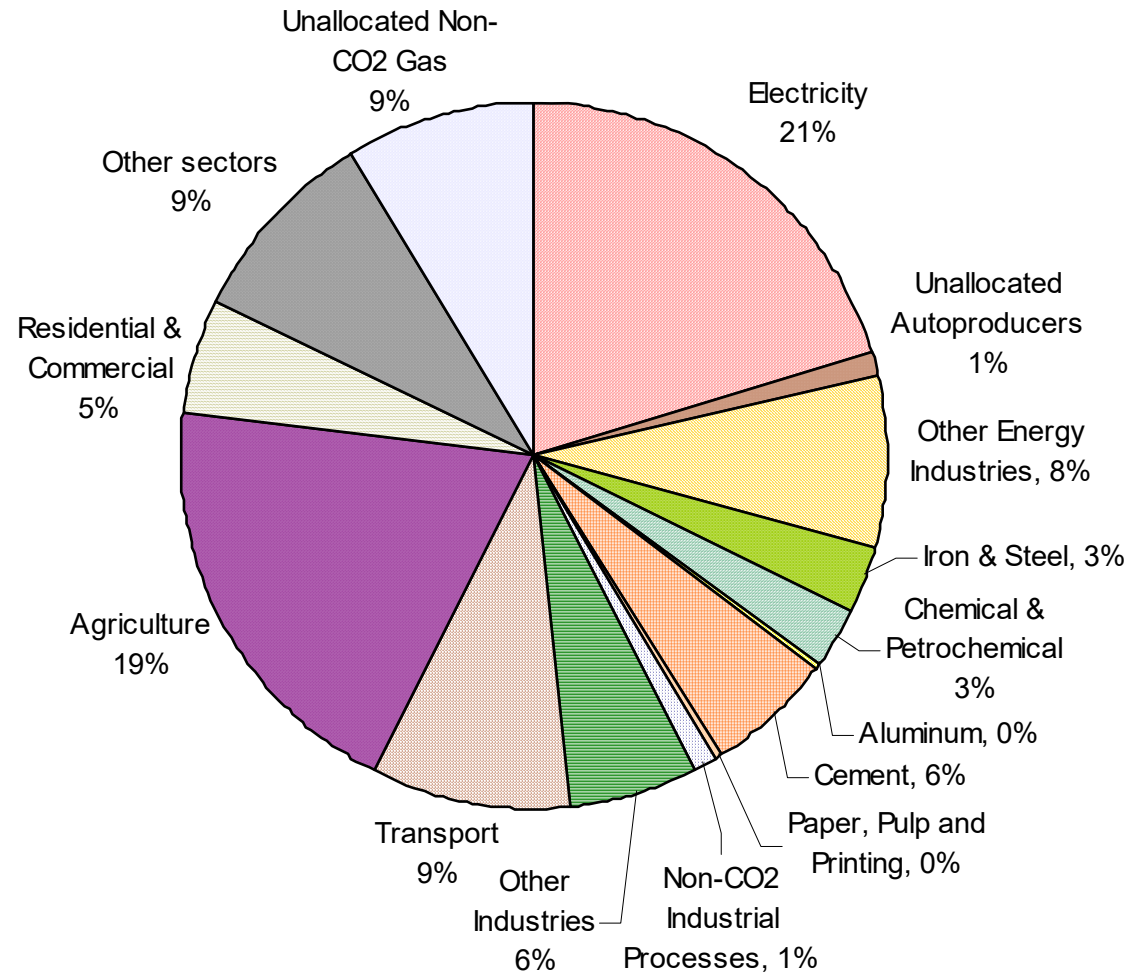
Why focus on internationally competitive sectors?

- Internationally competitive sectors like cement, steel, paper, and aluminum account for roughly 5% of global emissions (~9% of non-Annex I GHG emissions)* BUT
 - » are disproportionately important politically because of fears of loss of competitiveness, leakage, and jobs/plant migration
- Once these sectors are addressed, it will be easier for A1 countries to set aggressive national reduction targets



* Doesn't include emissions from LULUCF; Only direct emissions, which don't account for emissions associated with electricity use in these sectors

Non-Annex I Sector GHG Emissions in 2000 (w/o LUCF)



Source: Author's calculation, see Schmidt et al., 2005; IEA, 2002; Scheele and Kruger, 2004; Schaefer et al., 2004

Sectoral Approaches

- Several sectoral frameworks being discussed:
 - » **Transnational sectoral**
 - » **Sectoral bottom-up**
 - » **Sectoral carbon finance**

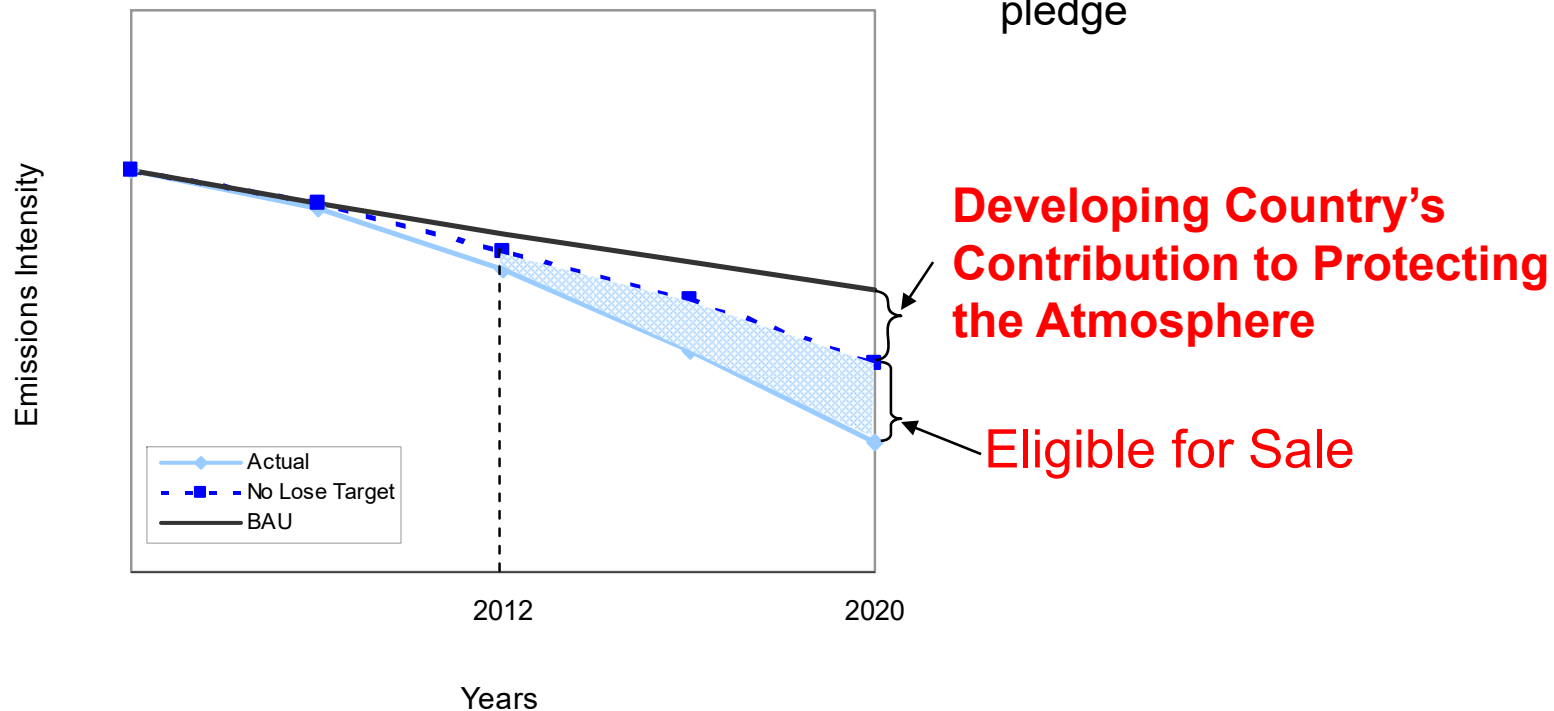
Transnational Approach

- All companies and/or countries face the same emission/intensity targets or mandates,
 - » regardless of their location, area of operation, or other factors.
- Could be designed to allow certain parameters – such as the financial and technological assistance provided and the deadlines for reaching the benchmark – to vary from nation to nation
 - » similar to the way in which the Montreal Protocol is structured (a “transnational approach with differentiation” in incentive levels and deadlines).
- One key difference with Montreal Protocol, however, is that underlying natural resource base (coal, oil, renewables, etc) was not a factor
 - » setting single standard for carbon in sectors will have much broader economic implications than MP chemicals



Sectoral Bottom-up Approach

- A voluntary “no lose” intensity target (e.g., ton CO₂ / ton of steel) is established in developing countries
- Emissions reductions beyond the “voluntary pledge” are eligible for sale
 - » No penalty for not meeting the pledge

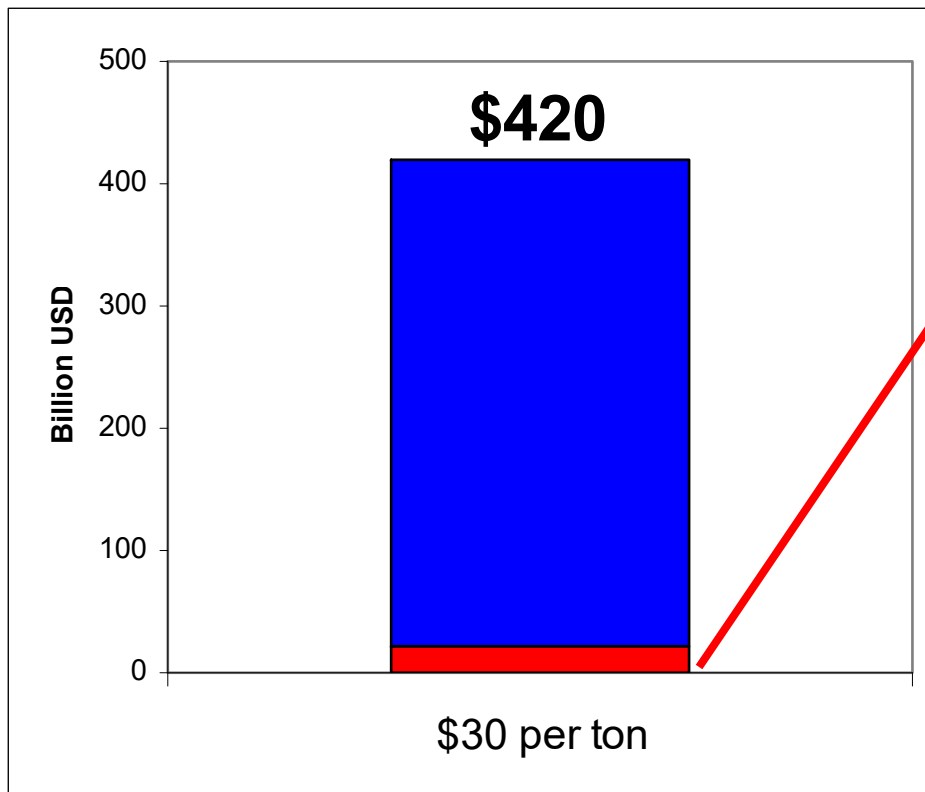


“Technology Financing and Assistance Package”

- 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 “no lose” targets 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) OR
 - » Countries setting aside portion of allowances or auction revenues in domestic trading system (e.g., as Germany is doing with the auction revenues for the EU ETS sectors)

How Much Money Could be Generated: An Example*

Value of A1 Allowances in 2020 per year



- If 5% of A1 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

Sectoral Carbon Finance

- ❑ Broadens today's project-by-project CDM approach to encompass a sector rather than a single project.
- ❑ Effects of multiple actions are taken at multiple sites, instead of measuring the effects site by site as in the CDM.
- ❑ Application of a standardized sectoral baseline – probably based on emissions intensity.
- ❑ Standardized additionality may also be appropriate, where some technologies automatically qualify for crediting.
- ❑ International financing is limited to carbon financing.

Conclusions

- Sectoral approaches could help Annex I countries meet their post-2012 mitigation commitments:
 - » Carbon credits generated for beating “no lose” targets or carbon finance baselines could be used to help meet A1 targets
 - » Create frameworks for providing technology & capacity building incentives to non-A1 as outlined in the UNFCCC and KP
 - \$ could be generated from allowance value or auction revenues
- Move the int’l process forward to addressing “level playing field” and therefore minimize domestic concerns on aggressive A1 targets