



Center for  
Clean Air Policy  
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# Nationally Appropriate Mitigation Actions (NAMAs) and Sectoral Programs as Part of the Post-2012 Climate Change Framework

Ned Helme, President  
Center for Clean Air Policy

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# Outline of Presentation

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- Developing Country Unilateral Action
- The Sectoral Study
  - » Broad Lessons Learned
- Nationally Appropriate Mitigation Actions (NAMAs)
- Financing of NAMAs, U.S. Legislation
- Future of the CDM
- U.S. Approach to Competitive Industries and Possible Border Tariffs
- Conclusions and Key Questions

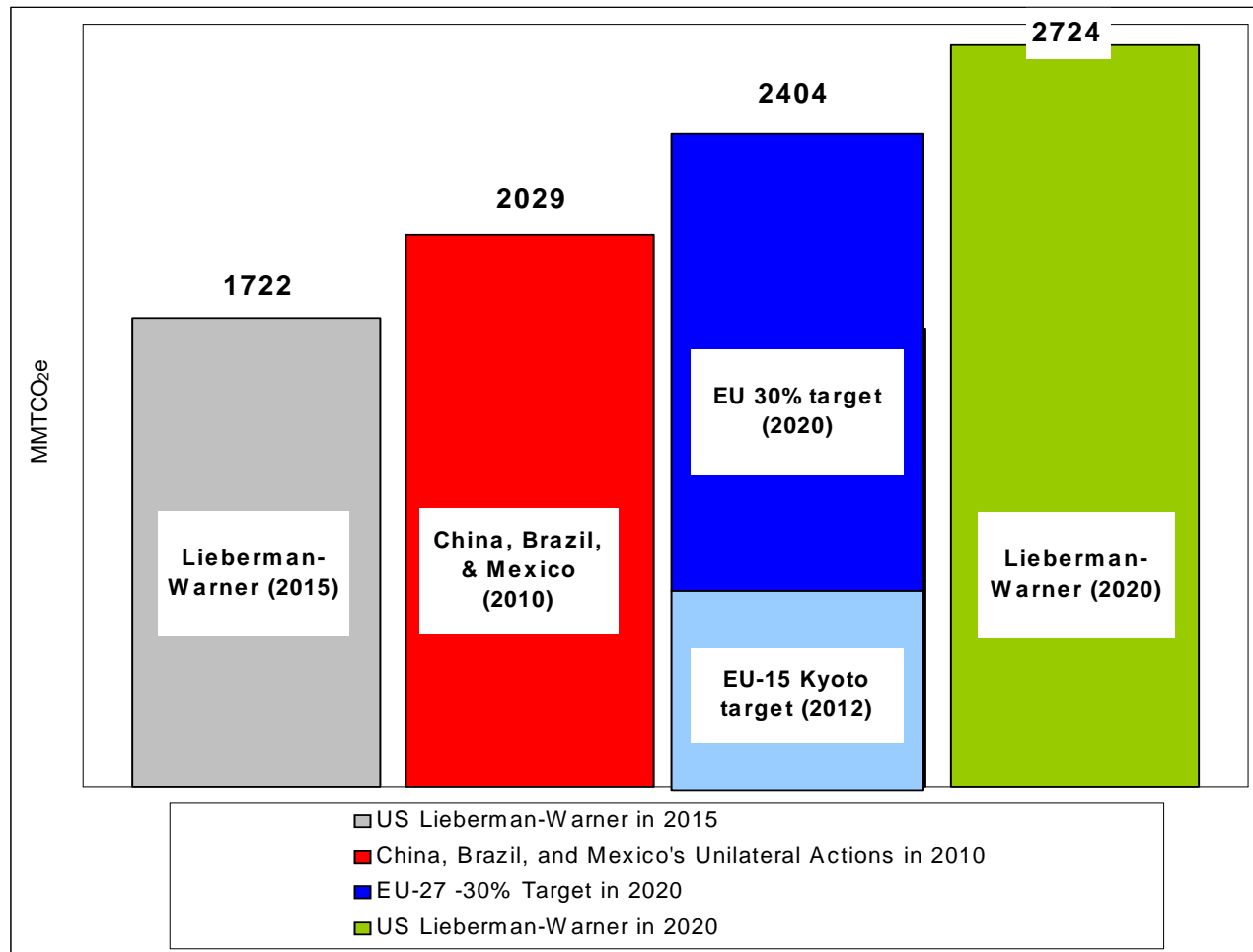
# About CCAP

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- Since 1985, CCAP has been a recognized world leader in climate and air quality policy
- Only independent, non-profit think tank working exclusively on those issues at the local, U.S. national and international levels
- Headquartered in Washington, D.C., CCAP helps policy-makers around the world develop, promote and implement innovative, market-based solutions to major climate, air quality and energy problems that balance both environmental and economic interests.

# GHG Mitigation: Developing Countries Are Already Doing a Lot

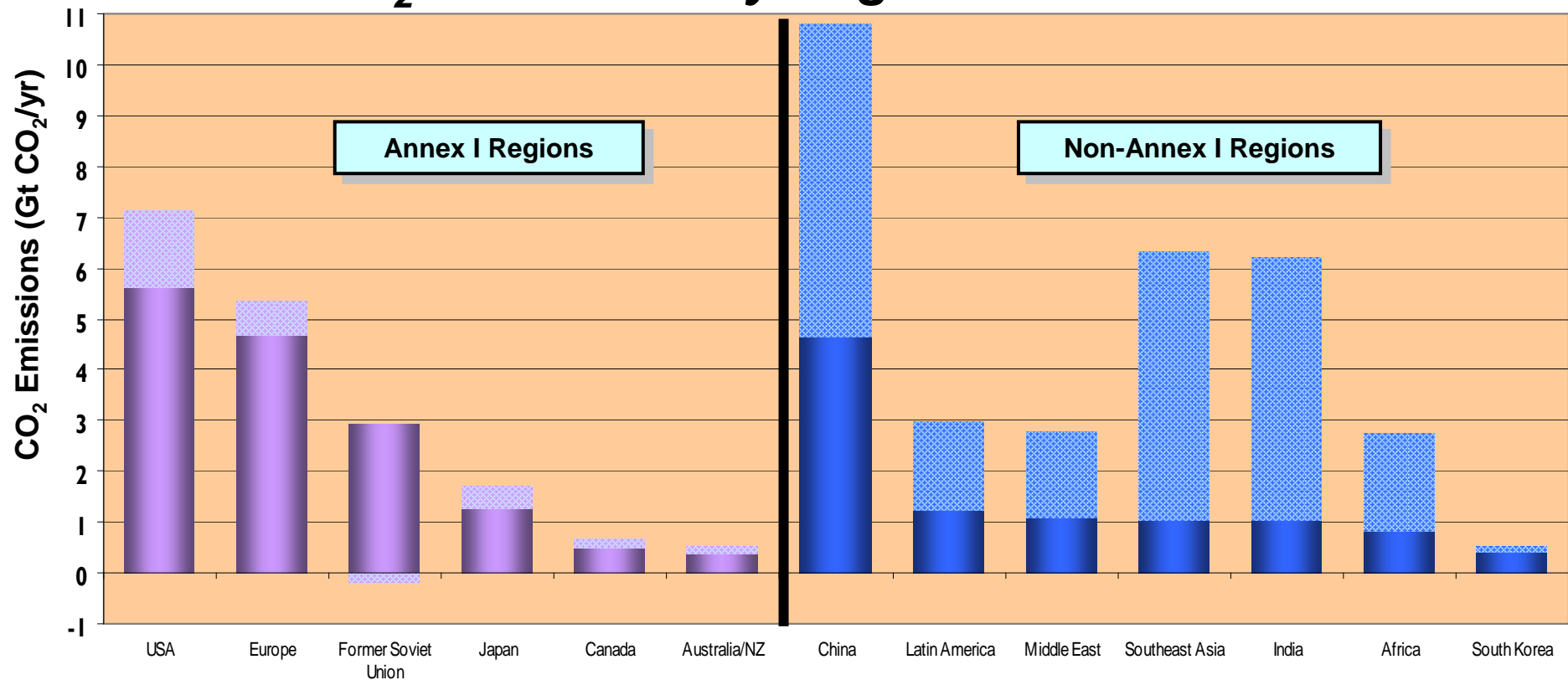


Reductions from BAU

Source: CCAP, updated

# ... But Outlook for Developing Country Emissions Growth Remains Substantial

## CO<sub>2</sub> Emissions by Region - 2000 & 2050



<sup>1</sup> Includes Fossil and other industrial CO<sub>2</sub>.

Source: U.S. Climate Change Science Program. 2007. *Scenarios of Greenhouse Gas Emissions and Atmospheric Concentrations* (MINICAM Results).

# The Sectoral Study

- CCAP is leading a “**proof of concept**” study of sectoral programs in China, Mexico and Brazil (w/ parallel efforts in India & Indonesia)
  - » Funded by EC, Hewlett Foundation, BP Foundation, UK Special Programme Fund
  - » Partners are CEPS, ZEW, CCC, IDDRI
  - » Sectors: power, cement, iron & steel, aluminum, oil (Mexico only)
- Key questions/issues:
  - » What data is available (technologies, costs, emissions, fuel use?)
  - » Can potential sectoral goals and financing needs be determined from the available data? If so, how?
  - » How big an impact can sectoral programs have on global emissions?
  - » How can sectoral programs fit into the Copenhagen agreement?
- First attempt at developing potential sectoral goals in Mexico and China

# Setting Sectoral Goals

- Accounting for **national circumstances** is the key to setting equitable and feasible sectoral goals.
- Basic analytical procedure:
  - » Collect data
  - » Develop a BAU baseline
  - » Analyze mitigation options (emission reduction potential, costs)
  - » Determine/examine the **barriers** to implementing each option
  - » Set the goals (emissions intensity and technology deployment)
    - Unilateral
    - Conditional (including assistance needed)
  - » Design the implementation strategy – **flexibility** is key
- Includes determination of the **capacity-building** needed for analysis and implementation

# Broad Sectoral Approach Lessons

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- Sectoral approaches should:
  - » have clearly defined objectives
  - » build on ongoing unilateral mitigation actions
  - » produce material participation and material emission reductions across sectors and countries
  - » support national sustainable development strategies
  - » be flexible and take national and local circumstances into account (e.g., with respect to sector boundaries)
  - » produce technological innovation and transfer
  - » offer sufficient incentives to both governments and industry in both developing and developed countries

# International State of Play

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- Bali Action Plan calls for verifiable nationally appropriate mitigation actions (NAMAs) by developing country (DC) Parties in the context of sustainable development
- NAMAs are supported and enabled by verifiable technology, financing, and capacity-building support from Annex 1 countries
- Developing countries would submit climate plans (e.g., low-carbon development strategies) that list their intended NAMAs and associated requests for support
- **Sector-wide NAMAs would be no-lose targets that are carbon intensity based so as not to limit growth and sustainable development**

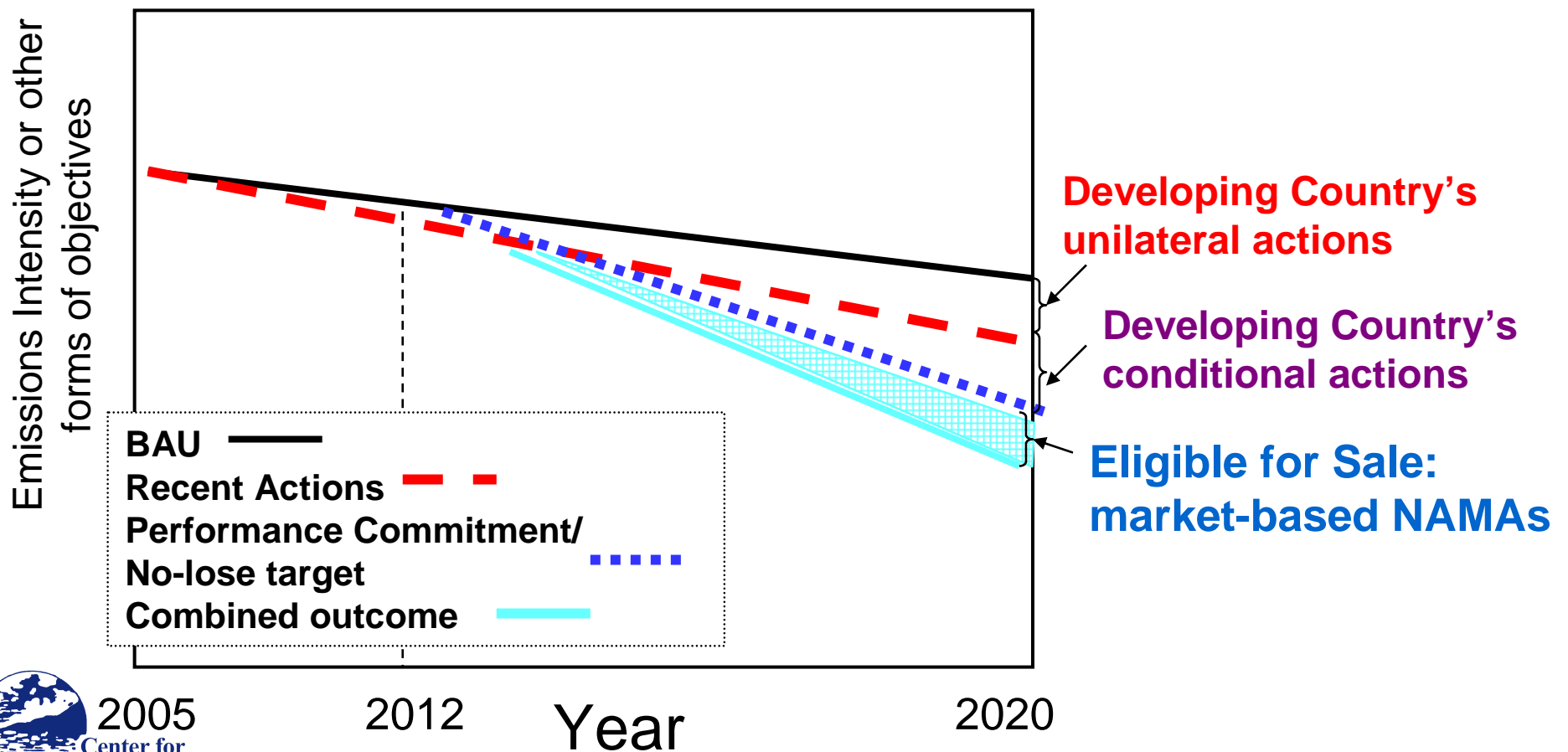
# What are Nationally Appropriate Mitigation Actions (NAMAs)?

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- International debate centers on three types of NAMAs:
  - » Unilateral
  - » Conditional/Cooperative
  - » Credit-generating
- Goal of unilateral and conditional NAMAs is to produce developing country (DC) emissions reductions that are not offsets – DCs' contribution to climate protection
- 6-10 large developing countries are responsible for 80-90% of DC emissions in key sectors

# Developing country contribution to GHG mitigation: three categories of NAMAs



# Conditional NAMAs vs. Credit-Generating NAMAs

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- Conditional NAMAs provide up-front finance while credit-generating NAMAs provide carbon credits after the reductions are achieved
- Unilateral and conditional NAMAs are designed to allow developing countries to capture “the low hanging fruit” as their contribution to protection of the climate
- Credit-generating baselines are designed to offer higher cost reduction options to the carbon market as offsets
- Conditional NAMAs can create a “race to the top” as proposals from different developing countries compete for up-front financing

# Technology & Finance Assistance to Encourage Stronger Actions

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- Technology & finance assistance could be provided:
  - » **To build capacity**
  - » **To overcome financing barriers**
  - » **To reduce the cost of policies (e.g. feed-in tariffs)**
  - » **To build first-of-a-kind advanced technologies which are not cost effective today**
  - » **To accelerate deployment by bringing down the cost of advanced technologies**
  - » **As incentive for participating developing countries to establish more aggressive “performance goals”**

# Sources for Technology Finance

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- Countries could provide financing by setting aside a portion of allowances or auction revenues in domestic trading systems, e.g.,
  - » German Parliament has earmarked 30% of auction revenues
  - » Norwegian Finance Minister has proposed use for international programs including adaptation, technology, and reducing deforestation
  - » Waxman-Markey (ACES) bill uses such an approach for int'l forestry, technology and adaptation
    - 5% of allowances set aside to achieve 10% additional global redux
- Structure of governance is critical – who decides what NAMAs get support and who distributes the support?

# What International Financing Would U.S. Legislation Provide?

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Establishes a Clean Technology program to provide financing and capacity building assistance.

- » 1% of allowance value set aside; grows to 4% in 2027 (\$1 – 6 billion/yr).

Establishes an international adaptation fund.

- » 1% of allowance value set aside; grows to 4% in 2027.

Establishes a program for the purchase of emissions reductions from avoided deforestation equal to 10 percent of 2005 levels in 2020.

- » 5 percent of allowance value set aside; begins declining in 2026, reaches 2% in 2031 (\$5 billion per year).

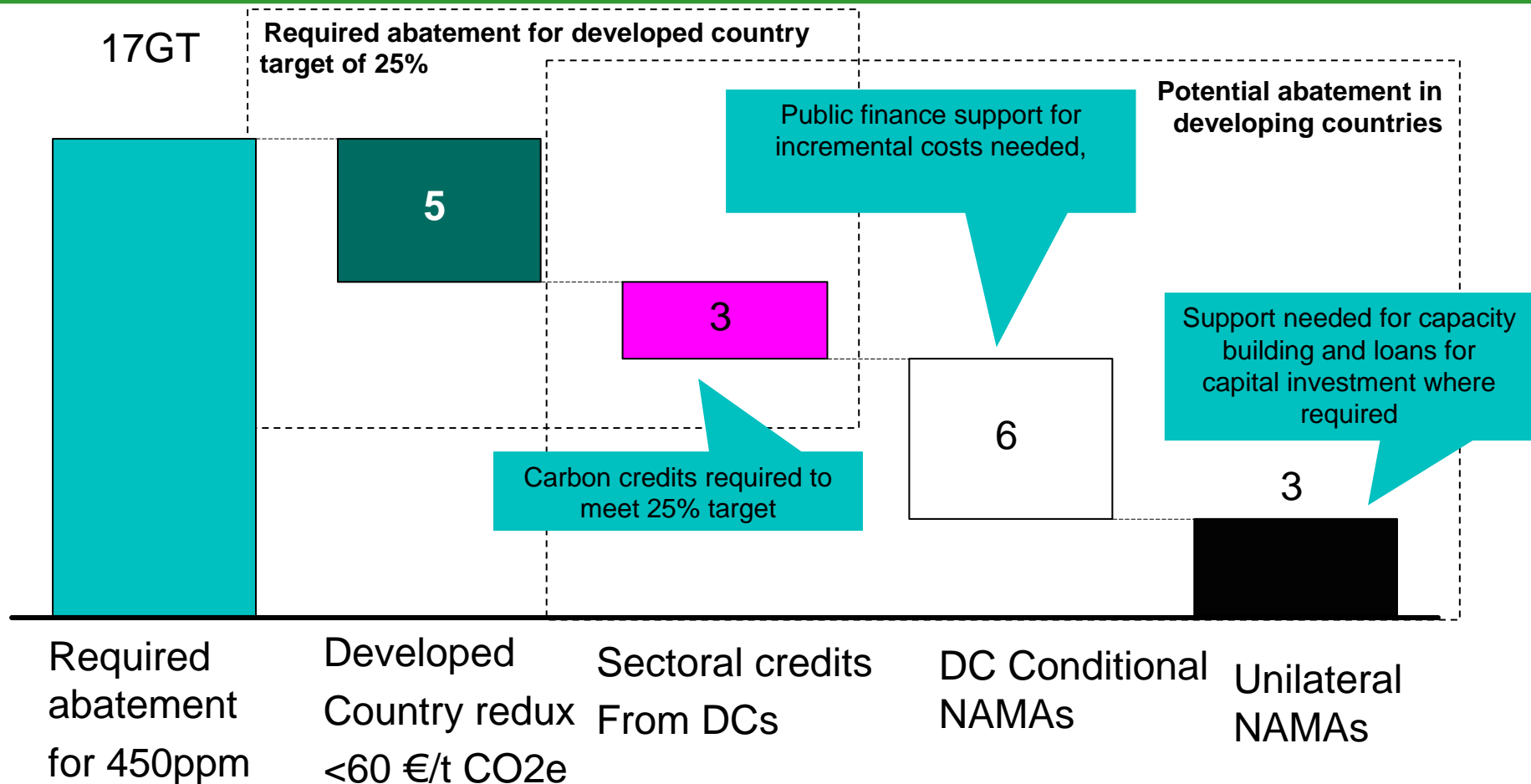
# Future of the CDM

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- Both U.S. legislation and European Climate Package propose elimination of CDM for major developing countries in key internationally competitive sectors (cement, steel, oil refining, pulp & paper, chemicals)
- U.S. legislation would require that all facilities in a sector participate in a sector-wide program that establishes a sector cap. CDM would be permitted only for minor sectors or for least developed countries
- CDM would also be replaced by up-front financing for NAMAs in U.S. and Europe – Japan, Aust, NZ likely

# Project Catalyst Assumes bulk of 2020 reductions are financed by Developed Countries



# U.S. Concern: Leakage of Emissions and Jobs to Developing Countries if no DC Action

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**Timing:** U.S. proposed actions begins in 2012, with most trade sensitive industries covered in 2014. Developing country actions may take longer to design and implement.

**Cost:** In the short-run, U.S. industries will pay a price for GHG emissions, whereas developing country industries may pay just for emissions reductions.

Policies are needed to address competitiveness and leakage concerns until developing countries take significant action.

# U.S. Legislation Proposes Two Mechanisms to Prevent Emissions and Jobs Leakage?

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## ***Two Integrated Provisions:***

***Allowance Rebate Program:*** Temporary rebates (guaranteed through 2025 & phased out by 2035\*) for energy-intensive, trade-exposed industries on an output basis.

***International Reserve Allowance Program:*** Border adjustment measures (border taxes) starting in 2020 on imports in specific sectors if international negotiations and actions are not sufficient and allowance rebates do not fully compensate affected industries.

# How Can a Country/Sector Avoid Border Tax Requirements?

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A country meeting one or more of the following criteria qualifies as having taken sufficient action to avoid imposition of border tax provisions:

- 1) The country is party to an international agreement that includes a nationally enforceable GHG reduction commitment at least as stringent as that of the US;
- 2) The country has a multilateral or bilateral sectoral emission reduction agreement with the US; or
- 3) The country has an annual energy or GHG intensity for the sector that is equal to or less than the energy or GHG intensity for that sector in the US.

# The Sectoral Study in Mexico

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- Analysis presented at this workshop is preliminary
- Current analysis is only meant to examine proof-of-concept of sectoral approaches
  - » **NOT intended to be used for international negotiations or to set domestic policy**
- Sectoral goals have been proposed for various sectors in Mexico to illustrate and develop the goal-setting process
- Future work in Mexico will seek to:
  - » Acquire better data (BAU, mitigation potentials, costs, etc.)
  - » Revise the goal-setting methodology
  - » Dig more deeply into the barriers to mitigation
  - » Develop policy recommendations and robust, feasible, equitable sectoral goals

# Conclusions

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- Mexico is a key player in the international negotiations – the green fund proposal is key to the outcome in Copenhagen and beyond
- Conditional NAMAs offer a new opportunity for up-front financing to encourage further innovation in key industries
- Sectoral crediting (including cap & trade) will likely replace CDM as the source of carbon market finance for Mexico
- CCAP's study is designed to explore with industry the feasibility of conditional NAMAs and cap & trade for key industries in Mexico

# Conclusions

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- By continuing to build on its efficient performance, the Mexican cement and steel industries can likely avoid U.S. border tariff provisions and take advantage of U.S. up-front finance and access to the U.S. cap & trade market
- In order to get an agreement in Copenhagen and to win passage of U.S. climate legislation, the issue of international competitiveness needs to be resolved
- Cooperative approaches that avoid emissions and job leakage are the preferred path over setting up new trade barriers

# Key Questions

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- Conditional NAMAs and sectoral crediting (cap and trade) are the likely paths to access international support for Mexican climate action in the post 2012 period. Is one preferred over the other or should Mexico pursue both avenues?
- Where would up-front international assistance be most useful for Mexico's mitigation efforts?
- Can we develop the data in collaboration with industry to set realistic sectoral intensity targets for conditional NAMAs and/or for caps?

Thank you!

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***For more information:***

[sectoral@ccap.org](mailto:sectoral@ccap.org)