



**Nicholas Institute** for Environmental Policy Solutions  
Nicholas School of the Environment and Earth Sciences • Duke University



# Climate Change Policy: Overview

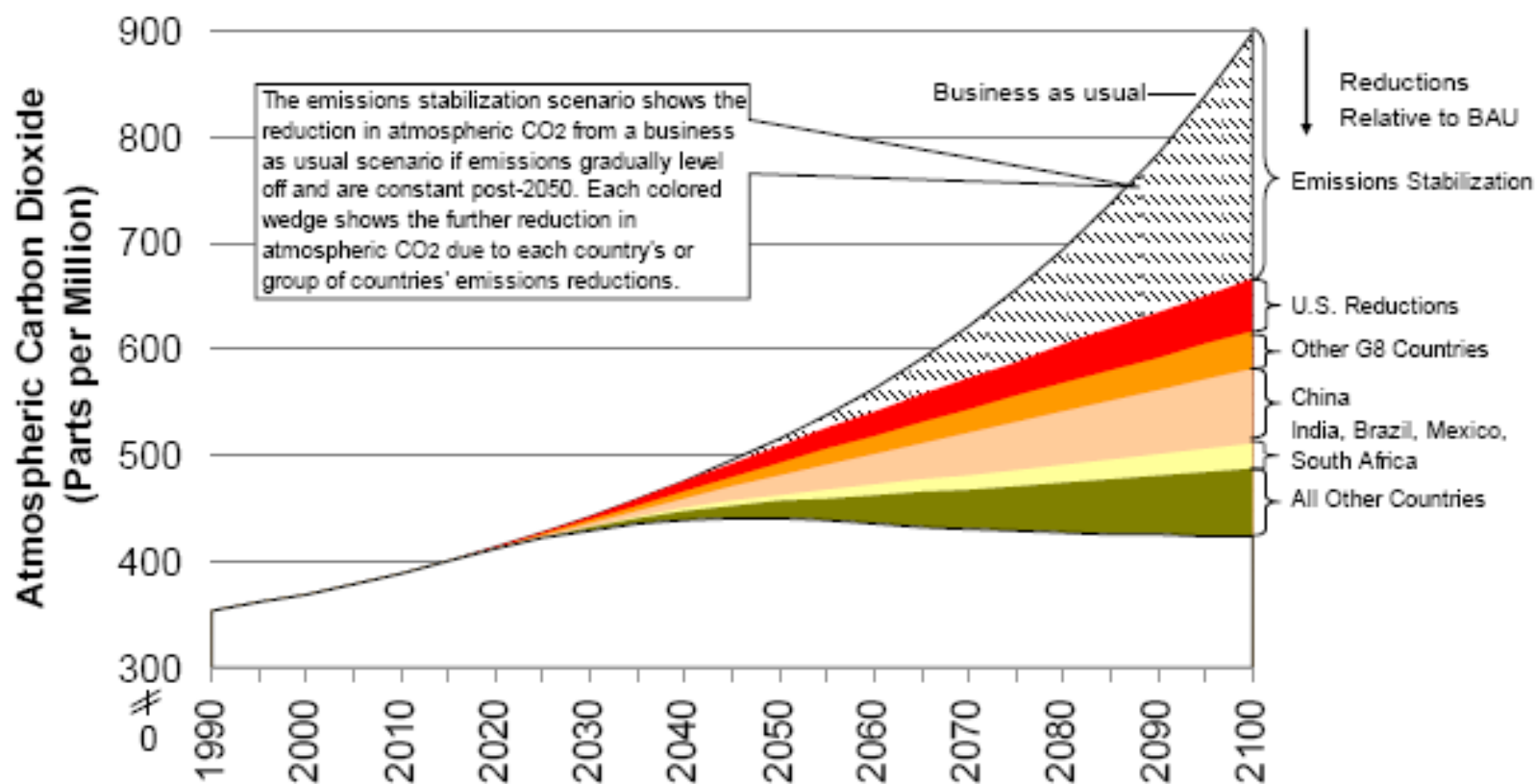
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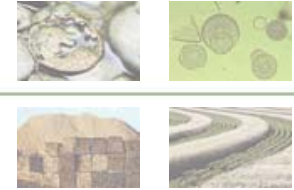




**Figure 1. The Impact of Fossil Fuel CO<sub>2</sub> Emissions Reductions of 2% per Year for 40 Years, with a 10 Year Delay in Implementation for Non-G8 Countries.**



*Note: The hatched segment in Figure 1 depicts the predicted incremental reduction in atmospheric CO<sub>2</sub> concentrations relative to the BAU scenario, due to emissions stabilization post-2050. Each colored segment shows depicts additional reductions in atmospheric CO<sub>2</sub> due to emissions reductions in one or more countries.<sup>7</sup>*

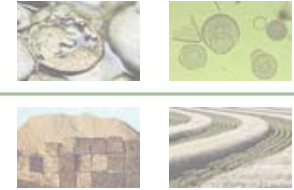


## Chain of events in process

If U.S. is necessary to stimulate global action, then . . .

- First, U.S. states activity puts pressure for federal uniformity, esp. as big emitting states begin to act
- Second, U.S. unilateral action allows constructive debate in U.N.





# The U.S. is both changing every day and frozen until 2009

## “Changing every day”

- Mandatory state programs growing across country
- Legislature finally serious about legislating
- Bush Administration acknowledging problem

## “Frozen until 2009”

- First state programs not slated to start until 2009
- Legislature appears not ready to act until next Congress
- Bush Administration not ready to mandate reductions and does not have power to do so





# States – The Climate Registry

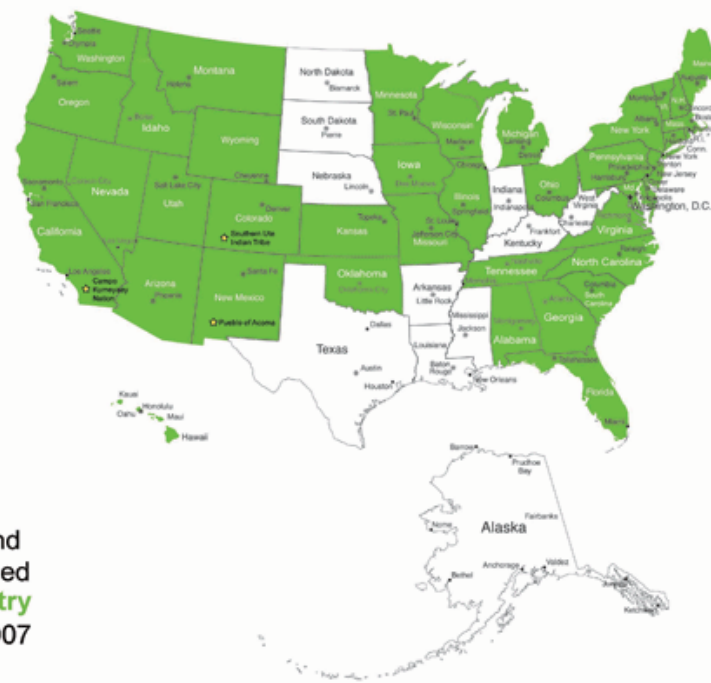
- May 9: 31 states to develop a common registry of greenhouse gas emissions
- As of August 9, 39 states and 2 Canadian and 1 Mexican providence have joined.



• British Columbia  
• Manitoba



• Sonora



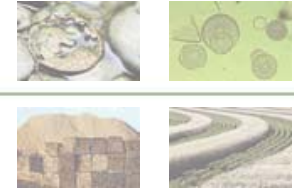
States, Provinces and Tribes that have joined **The Climate Registry** as of August 9th, 2007





# States with Emissions Targets

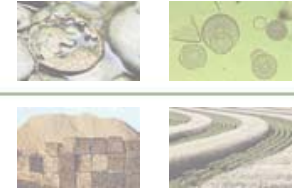




# Movement towards climate policy in the United States since 2001 has been dramatic

- At the outset of the Bush Administration, there was no consensus for action on climate change.
  - The most recent vote on mandatory action, conducted in the context of the Kyoto Protocol in 1997, was 95-0.
  - 2003 – Senators McCain and Lieberman get 44 votes for a mandatory proposal
  - 2005 – 53 U.S. Senators call for mandatory action
- All signs are that the U.S. Congress will create a market in greenhouse gases to secure emissions reductions.





## Since January 2007, the “lid is off the bottle”

- Hearings – dozens upon dozens of hearings
- Pledges – The House and Senate leadership both have pledged to produce climate legislation.
- Supreme Court decision – ruling flips the debate with presumption of executive power.
- Presidentials – competing for green mantle.
- New constituencies calling for action – companies, religious groups, farmers.







## Range of proposals and systems

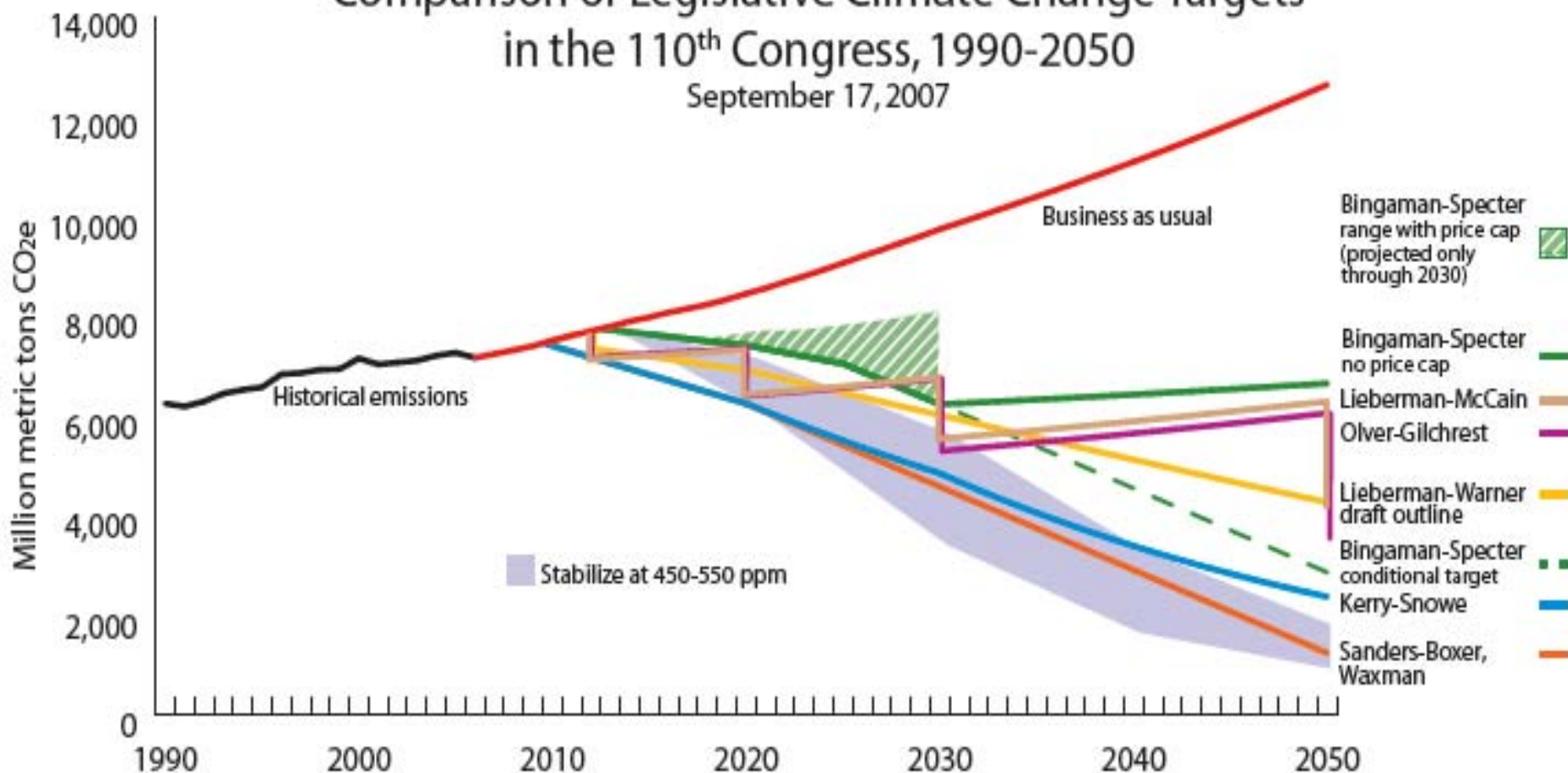
- Lieberman/Warner – “hybrid” cap-and trade, with obligation on “downstream” point sources and “upstream” oil refiners
- Bingaman/Specter – “upstream” on fossil fuel generators with safety valve.
- Carper – utility only
- Dingell – Carbon tax
- Dingell/Boucher – cap-and-trade





## Comparison of Legislative Climate Change Targets in the 110<sup>th</sup> Congress, 1990-2050

September 17, 2007



Courtesy of WRI



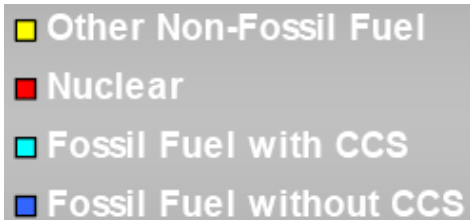
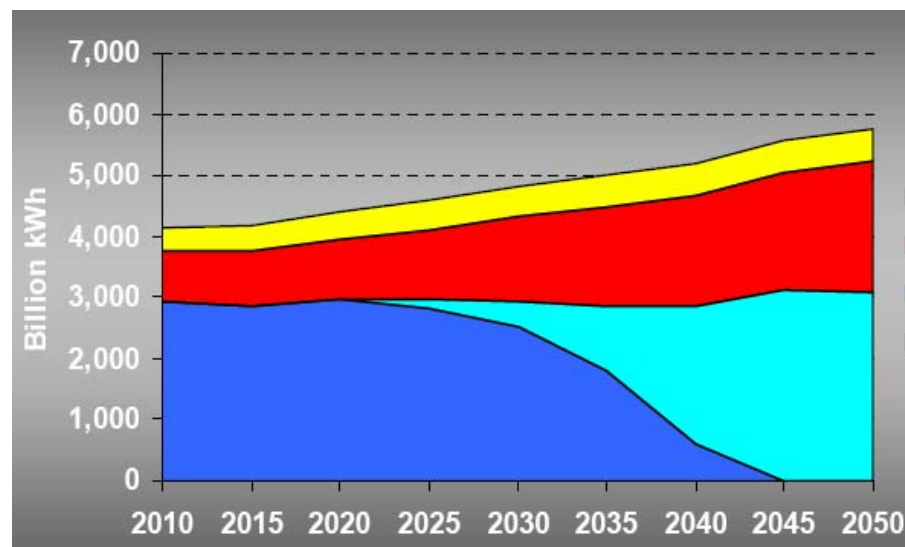
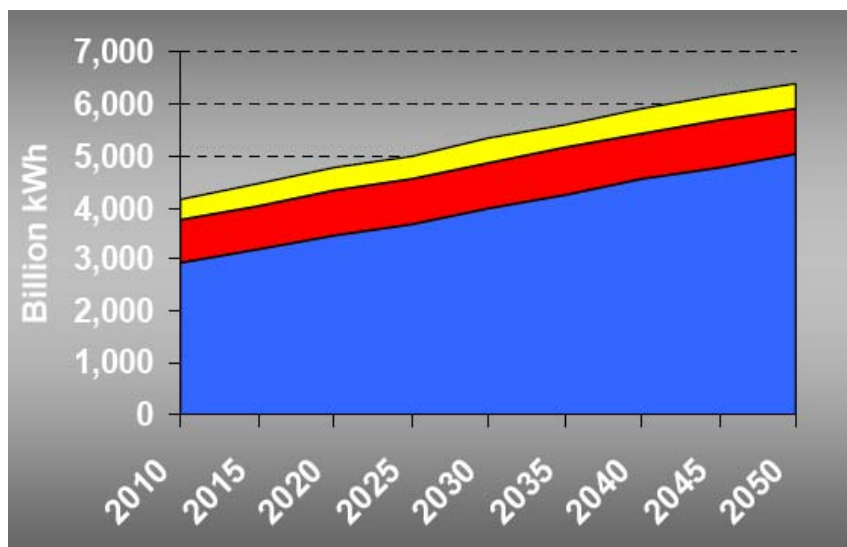
# The Senate is the Center of the Debate

- Switch of momentum from House to Senate
- Lieberman/Warner – the current moving proposal in the Senate
  - Subcommittee approval last Thursday
  - Full committee before the Bali conference
  - Floor action when?
  - Akin to a Presidential election – how do you secure gains in the committee/primary that can still allow the bill to pass the floor/general?

# U.S. Electricity Generation: Lieberman/Warner

## Baseline Generation Mix

## Lieberman/Warner Scenario





## Yet things are still messy, with many issues to resolve

- Cost containment
- Trade/Competitiveness
- Transportation sector coverage
- Complementary technology programs
- Allocation of allowances
- Offsets
- Harmonization of state programs
- Political credit

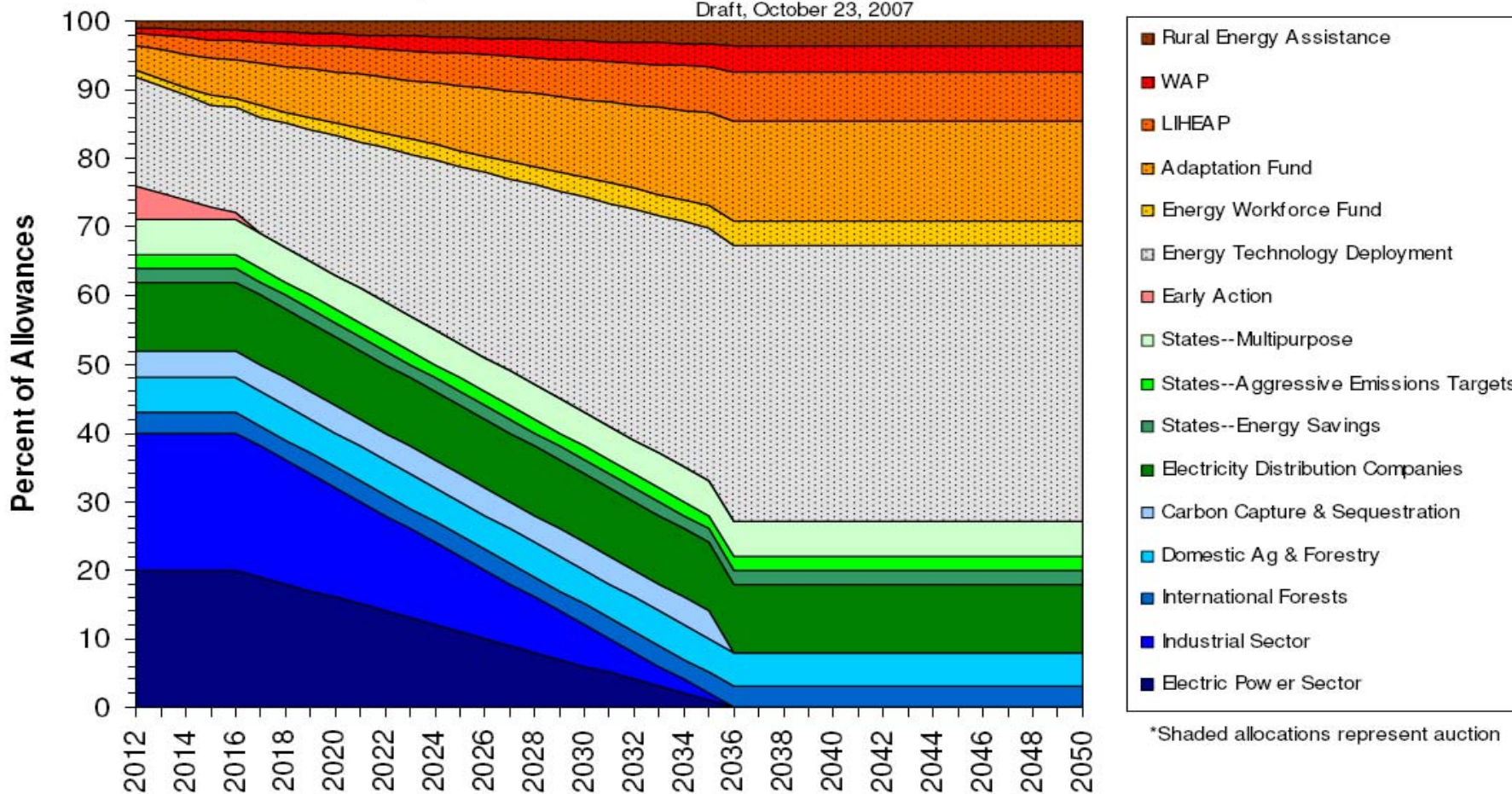


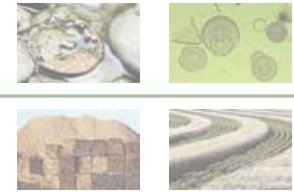


# Allocation: No Public Health Purpose

Allowance Recipients and Auctioning Under Lieberman-Warner as INTRODUCED

Draft, October 23, 2007





THE NATIONAL  
RELIGIOUS  
PARTNERSHIP  
FOR THE  
ENVIRONMENT



COALITION ON THE  
ENVIRONMENT  
AND JEWISH LIFE



US CONFERENCE  
OF CATHOLIC  
BISHOPS



NATIONAL  
COUNCIL OF  
CHURCHES  
OF CHRIST



EVANGELICAL  
ENVIRONMENTAL  
NETWORK

- Released agenda on October 31 with 4 major priorities:
  - Ensuring American low-income families do not shoulder a disproportionate financial burden
  - Ensuring disaffected workers are helped to adjust to the new economy
  - Ensuring disaffected communities in the developing world can adapt to climate change.
  - Ensuring that developing countries have the resources for economic developing and reducing greenhouse gases





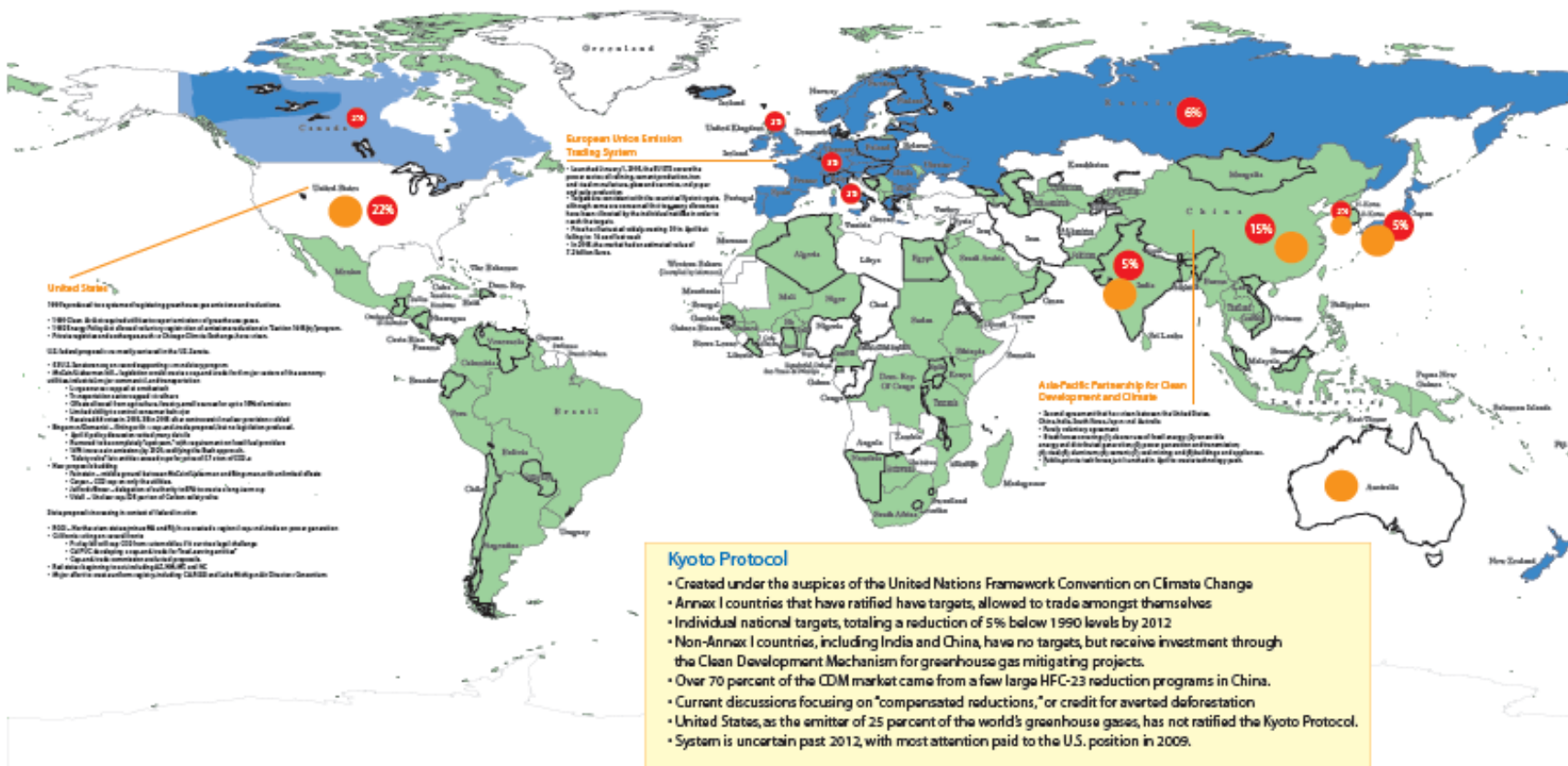
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## Climate Policy - A Primer

36% rest of the world



**Kyoto Protocol**

- Created under the auspices of the United Nations Framework Convention on Climate Change
- Annex I countries that have ratified have targets, allowed to trade amongst themselves
- Individual national targets, totaling a reduction of 5% below 1990 levels by 2012
- Non-Annex I countries, including India and China, have no targets, but receive investment through the Clean Development Mechanism for greenhouse gas mitigating projects.
- Over 70 percent of the CDM market came from a few large HFC-23 reduction programs in China.
- Current discussions focusing on "compensated reductions," or credit for averted deforestation
- United States, as the emitter of 25 percent of the world's greenhouse gases, has not ratified the Kyoto Protocol.
- System is uncertain past 2012, with most attention paid to the U.S. position in 2009.

● Kyoto Protocol nations; Non-Annex I (no emissions cap)    
 ● Kyoto Protocol nations; Annex I (capped emissions)    
 ● Asean-Pacific Partnership for Clean Development and Climate    
 ● Top 10 Countries: CO2 Emissions from Fossil Fuel Combustion, 2003







# International Negotiations

- Little chance of a post-Kyoto system until 2009
  - Who will play poker when you don't know who is going to sit at the table?
  - Possible progress on REDD/averted deforestation credited in the U.S. bills
  - Will the U.S. allow post-Kyoto process to go forward?
    - Opposition to international trading in the White House





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Thank you.

More information at:  
[www.nicholas.duke.edu/institute](http://www.nicholas.duke.edu/institute)



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