# Climate Change Policy and the Role of Carbon Offsets

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### Climate Policy: State of Play

- Mandatory reduction pledges in all developed nations, but United States
- Project-level reductions in developing world
- Mandatory cap-and-trade programs in Northeastern United States, European Union



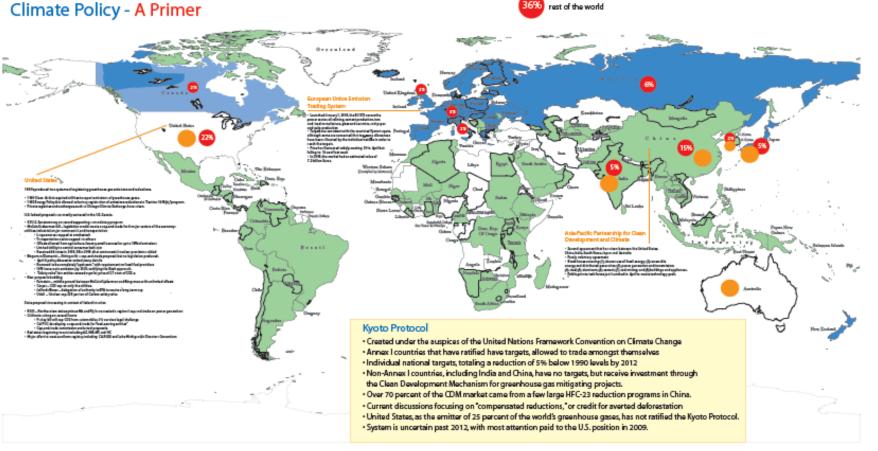








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Top 10 Countries: CO2 Emissions from Fossil Fuel Combustion, 2003

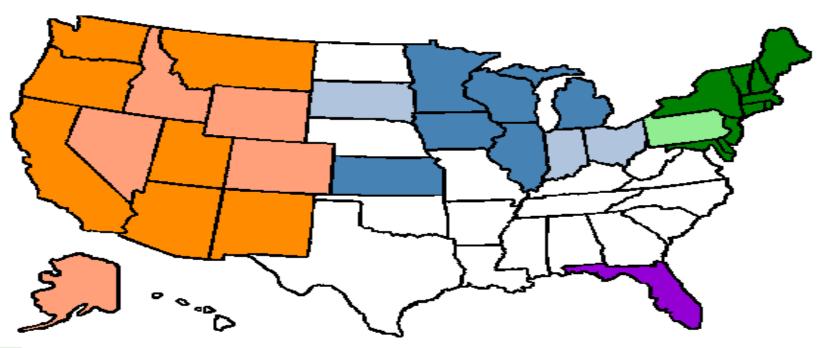








#### Regional Cap-and-Trade Systems



- Regional Greenhouse Gas Initiative RGGI
- RGGI Observer
- Midwestern Regional GHG Reduction Accord
- MRGHGRA Observer
- Western Climate Initiative
- Western Climate Initiative Observer
- Individual State Cap-and-Trade Program









European
Union
Emissions
Trading
System





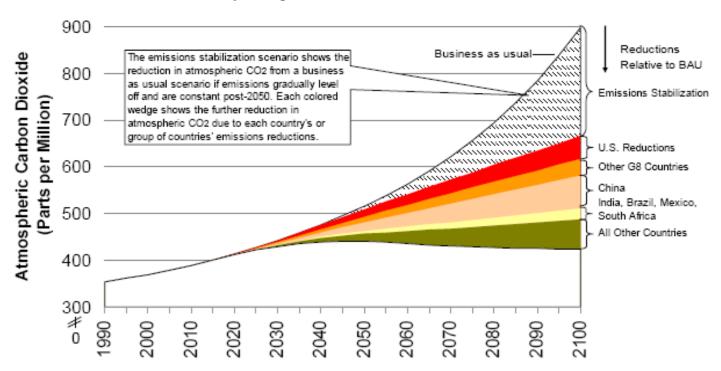






### Status Quo is Not Enough

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  $CO_2$  concentrations relative to the BAU scenario, due to emissions stabilization post-2050. Each colored segment shows depicts additional reductions in atmospheric  $CO_2$  due to emissions reductions in one or more countries.

#### The Change Agent:





#### **Congress: Somewhat Chaotic**



#### U.S. Senate:

- What Committee is in Charge?
- One Bill or Three?

#### U.S House:

- Chairman Waxman?
- One Bill or Three?

#### **Two Futures:**



#### Scenario A: Presidential leadership

- President makes it a top agenda item, engages with Congressional leadership
- Leadership of both Houses forces engagement and equitable tradeoffs
- Legislation passes in the next Congress

#### Scenario B: Chaos

- No effective Presidential leadership
- Leadership vacuum in Senate draws in all ideas, good, bad and ugly
- Chairmanship fight in House undercuts progress
- 2009 spent posturing, without clear leadership.
- 2010 likely dominated by 2010 election positioning
- Climate policy may be left undone
- International negotiations are difficult or impossible



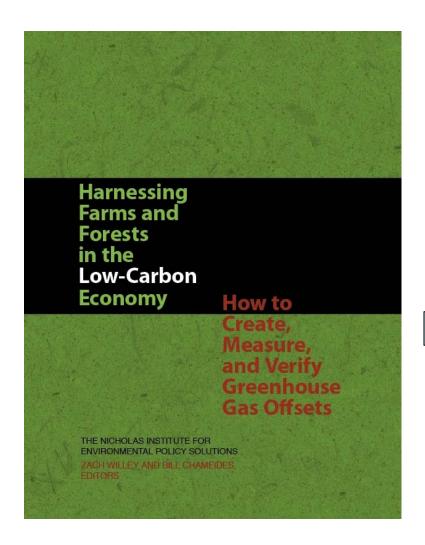


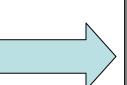




#### In both venues, many issues to resolve

- Cost containment
- Trade/Competitiveness
- Complementary technology programs, esp. nukes
- Allocation of allowances
- Building a trusted offsets market
- Building a state/federal partnership
- Market oversight and transparency
- Political credit

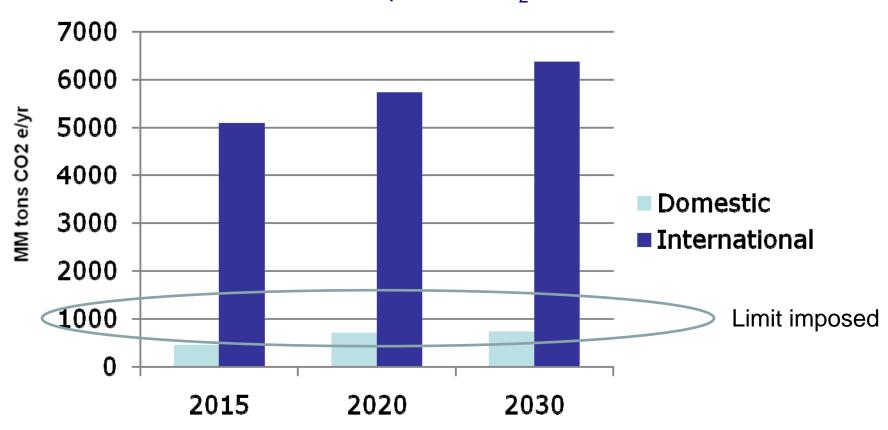






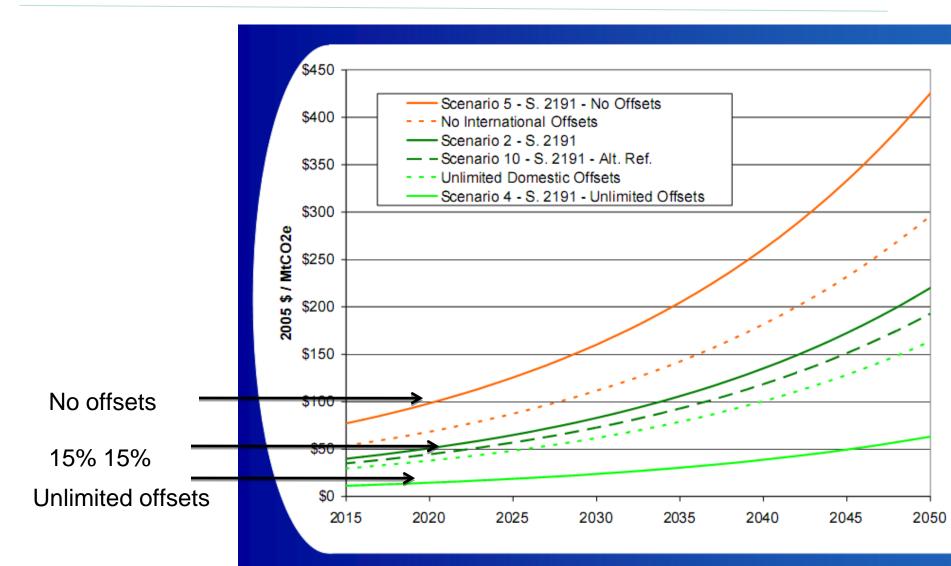
http://www.env.duke.edu/institute/ghgoffsetsguide/index.html

### Estimated Scale of Domestic and International Offset Potential at \$30 per ton CO<sub>2</sub>

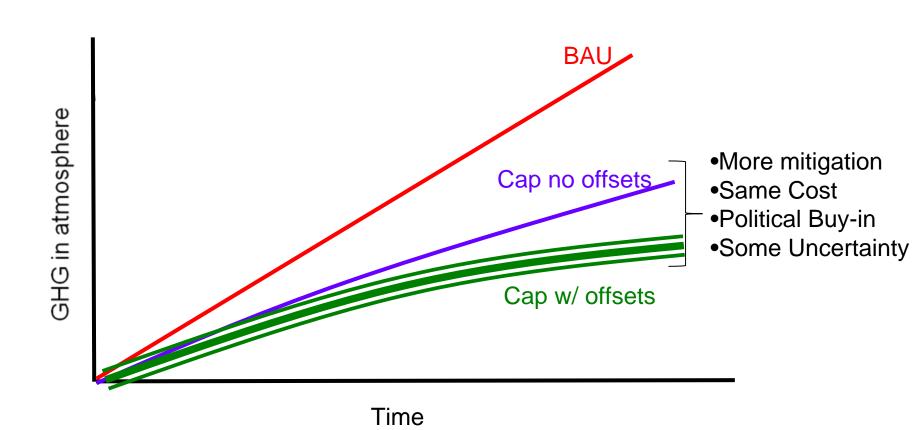


Source: From offset supply functions used by EPA in Lieberman-Warner Analysis (2008).

## Offsets Can Significantly Affect the Carbon Allowance Price



### Why Offsets?







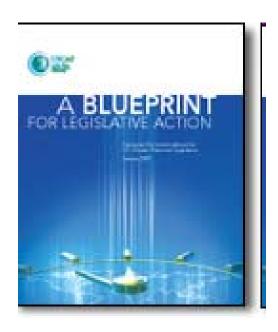




## Will Offsets be a Catalyst or a Barrier to Action?



## Catalyst for Legislation: The U.S. Climate Action Partnership



"To reduce risk from extreme short-term price volatility USCAP recommends that Congress authorize . . . ample amounts of offsets to be used for compliance purposes."

"Congress should set an overall upper level limit on the use of offsets for compliance in any year of 1.5 billion metric tons domestic and 1.5 billion metric tons international

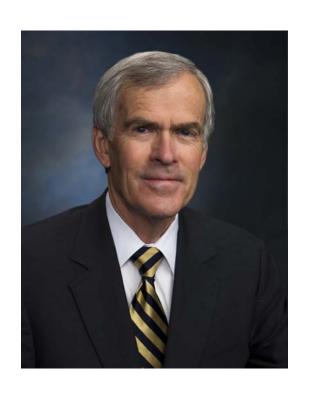
## Catalyst for Legislation: "Gang of 10? 15? 18?"



June 6, 2008 Letter --Principles to address in any final climate legislation:

• "Fully Recognize
Agriculture and Forestry's
Role . . . . Strong,
aggressive and verifiable
offset policies can fully
utilize the capabilities of
our farmers and foresters."

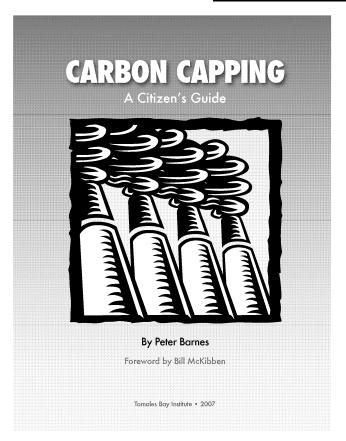
# Barrier to Legislation: Tarnishing the Brand



Recent Press Attention to Failures in Clean Development Mechanisms, Voluntary Markets have created political opposition amongst former allies

Senator Bingaman: "I think this whole issue of offsets, the more I've read about this issue . . . are fraught with opportunity for game playing, which will be fully exploited, I'm sure. We have a lot of creative people who can find ways to find offsets and to verify **offsets** if we open that door to occur."

## Barrier to Legislation: Grass-Roots Opposition



Cap-and-Dividend movement is ferociously opposed to offsets

"First, [offsets] imply that we can go about our lives as usual; all we need do is 'offset' the CO2 we emit."

"Second, in many cases, offsets don't actually subtract CO2 from the atmosphere."

# Solutions Exist to Minimize the Integrity Concerns

- Do Emissions "Leak" to other areas? Standards for sectoral leakage can be set
- Are projects "additional," or would they have happened anyway? Established protocols exist, or sectoral standards can be set.
- What to do about risk of reversals? Various risk management techniques can be used.
- Will landowners get credit to things they are already doing? Compensation can come from an "Early Actor" program.