Climate Change Policy After Copenhagen

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The Global Climate Policy Challenge

- Kyoto Protocol came into force in February 2005, with first commitment period, 2008-2012
- Even if the United States had participated, the Protocol's direct effects on climate change would be very small to non-existent
- Science and economics point to need for a credible international approach
- Climate change is a classic global commons problem — so it calls for international cooperation

2

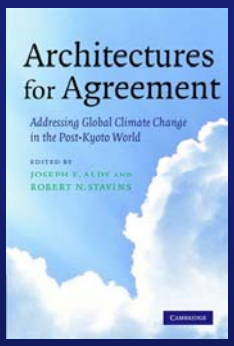
Can the Kyoto Protocol Provide the Way Forward?

- The Kyoto Protocol has been criticized because:
  - The costs are much greater than need be, due to exclusion of most countries, including key emerging economies – China, India, Brazil, Korea, South Africa, Mexico (conservative estimate: costs are four times cost-effective level)
  - The Protocol will generate *trivial* climate benefits, and *fails* to provide any long-term solution
  - Short-term targets are excessively ambitious for some countries
  - So, the Kyoto Protocol is "*too little, too fast*"
- Nevertheless, can structure of the Kyoto Protocol provide the way forward?

3

Searching for the Path Forward for Post-2012

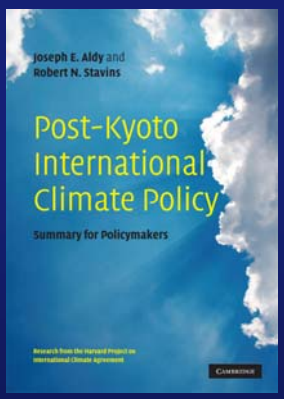
- The Harvard Project on International Climate Agreements
- Mission: To help identify key design elements of a scientifically sound, economically rational, and politically pragmatic post-2012 international policy architecture for global climate change
- Drawing upon research & ideas from leading thinkers around the world from:
  - Academia (economics, political science, law, international relations)
  - Private industry
  - NGOs
  - Governments



4

Developing Insights for Post-2012 Climate Regime

- 35 research initiatives in Europe, United States, China, India, Japan, & Australia
- Outreach with governments, NGOs, and business leaders throughout the world (working with heads of governments & ministers in many countries)
- **Summary for Policymakers** builds upon lessons emerging from research initiatives
  - Key principles for a new international agreement
  - Promising global climate policy architectures
  - Key design issues and elements



5

Potential Global Climate Policy Architectures

- **Harvard Project does not endorse a single approach**
  - Decision to adopt particular architecture is ultimately political, and must be reached by nations of the world, taking into account complex factors
- **Promising policy architectures under three categories**
  - Targets & Timetables (as in Kyoto Protocol)
    - *Formulas for Evolving Emission Targets for All Countries*
  - Harmonized National Policies
    - *Harmonized Domestic Carbon Taxes, Cap-and-Trade, or Other Regulations*
  - Independent National Policies
    - ***Portfolio of Domestic Commitments***
    - ***Linkage of National & Regional Tradable Permit Systems***

6

Portfolio of Domestic Commitments

- **Each participating nation registers to abide by its domestic climate commitments**
  - Australia, EU, China, India, Japan, New Zealand, and U.S. announced domestic commitments or plans *prior to Copenhagen* (December 2009)

- **Support for Portfolio (or Schedules) Approach**
  - prior to Copenhagen from a diverse set of counties, including Australia, India, and the United States

- **But can this bring about sufficient stringency?**

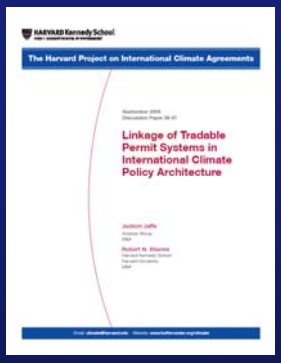
- **An effective bridge to further steps?**

7

Linkage of National & Regional Tradable Permit Systems

- **Cap-and-trade systems are preferred approach in many countries and regions**
  - Linking these cap-and-trade systems reduces overall costs, market power, and price volatility
  - But linking causes automatic propagation of cost-containment design elements: banking, borrowing, and safety valve
  - Therefore, advance harmonization required

- **The Emerging International Regime**
  - If cap-and-trade systems link with common emission-reduction-credit system, such as CDM, the cap-and-trade systems are indirectly linked
  - All the benefits of linking are achieved – cost savings, etc.
  - But propagation of design elements across systems greatly diminished
  - May be evolving as part of *de facto* post-Kyoto architecture



8

Placing Copenhagen in Perspective

- Cliché about baseball season applies to international climate change policy: it's a marathon, not a sprint
  - Scientifically: stock, not flow environmental problem
  - Economically: cost-effective path is gradual ramp-up in target severity (to avoid unnecessary capital-stock obsolescence)
  - Economically: technological change is key, hence long-term price signals
  - Administratively: creation of appropriate international institutions is essential
- International climate negotiations will be an ongoing process – much like trade talks – not a single task with a clear end-point.
- Bottom-Line: sensible goal for Copenhagen was progress on sound foundation for meaningful long-term action, not some notion of immediate "success"

9

Definitions of "success" at COP-15

- It would have been possible, even easy – but actually unfortunate – to achieve what some people would have defined as "success" in Copenhagen:
  - A signed international agreement, glowing press releases, & photo opportunities
- Such an agreement could only have been the "Kyoto Protocol on Steroids"
  - More stringent Annex I targets, & no meaningful action by key developing countries
  - Signature but no ratification by U.S. (just like Kyoto)
  - No real progress on climate change
  - Remarkably, some groups would actually have applauded such a step
- Fortunately, some key nations – including the United States – were more interested in *real progress* than *symbolic action*

10

What were reasonable hopes for COP-15?

- Political agreement on some key principals underlying next architecture, such as making "common but differentiated responsibilities" meaningful through
  - All countries recognize their *historic* emissions; *and a*ll countries *responsible* for their *future* emissions.
  - Vast improvement over "QWERTY keyboard" of international climate negotiations: Annex I dichotomous distinction
  - Replace the Annex I dichotomy with a continuous spectrum of participation
  - Bring all important countries under the umbrella of action
- Political agreement on a "Portfolio of Domestic Commitments"
  - Including the EU, the United States, and the key emerging economies
- So, what happened in Copenhagen?

11

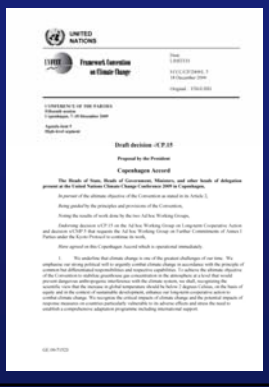
What happened in Copenhagen?

- Organizational failure
- Political grandstanding & lack of consensus
- But last-minute, direct negotiations among key national leaders
  - President Obama with leaders of China, India, Brazil, and South Africa
  - Virtually unprecedented in international negotiations
  - Saved COP-15 from complete collapse
  - Produced a significant political framework, the Copenhagen Accord
- Accord is a "portfolio of domestic commitments" approach
  - Addresses two key deficiencies of Kyoto Protocol: (1) expands coalition of meaningful commitments to include all major emitters; and (2) extends time-frame of action

12

The Copenhagen Accord

- The "good news"
  - Provides for real cuts in greenhouse gas emissions by all major emitters
  - Establishes a transparent framework for evaluating countries' performance against their commitments
  - Initiates a flow of resources to help poor, vulnerable nations carry out both mitigation and adaptation
- The "bad news"
  - Announced commitments "not sufficient;" uncertainty regarding future
  - Annex I/non-Annex I distinction remains, in words (but blurred in action)
  - Future of UNFCCC threatened; G-77 spent as a unified force (bad news?)


UNITED NATIONS

Framework Convention on Climate Change

Draft decision -/CP.15

Proposal by the President

Copenhagen Accord

13

Another Consequence of Copenhagen: Reflecting on the Institutional Path Forward

- Copenhagen illustrated problems with process under United Nations (Framework Convention on Climate Change – UNFCCC)
  - Size: 197 countries, when 20 account for about 90% of global emissions
  - UN culture polarizes factions: industrialized vs developing world
  - UNFCCC voting rule: unanimity required
    - Lack of consensus behind Copenhagen Accord due to just 5 countries *(not* major emitters), and their accusations of "undemocratic" procedures:
      - Bolivia, Cuba, Nicaragua, Sudan, Venezuela
  - Problematic leadership (substantively and administratively)

14

Alternative Institutional Venues Going Forward

- Major Economies Forum – accounts for 90% of global emissions; initiated and led by U.S.
  - Australia, Brazil, Canada, China, *European Union*, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Russia, South Africa, United Kingdom, and United States
- G20 – finance ministers; since 1999; have met on climate change
  - *Argentina*, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Russia, *Saudi Arabia*, South Africa, *Turkey*, United Kingdom, and United States
- Other multilateral; bilateral, including China-U.S.
- UNFCCC – too soon for obituaries
  - Kyoto Protocol continues *at least* through 2012; CDM, annual reporting functions likely to continue
  - Substantial constituency
  - International legitimacy, and potentially key for implementation

15

The Way Forward: Research

- Active areas of work by Harvard Project on International Climate Agreements research teams
  - Metrics for evaluating commitments; compliance mechanisms
  - Afforestation & deforestation policy mechanisms
  - Facilitating international market linkage
  - Fostering technology transfer
  - Methods of negotiating & updating agreements
  - Incentives for developing country participation; carbon finance
  - Making climate policy compatible with international trade rules
  - Climate and cost implications of alternative architectures & designs
  - Institutional venues for international climate policy

16

For More Information

Harvard Project on International Climate Agreements

www.belfercenter.org/climate

Harvard Environmental Economics Program

www.hks.harvard.edu/m-rcbg/heep/

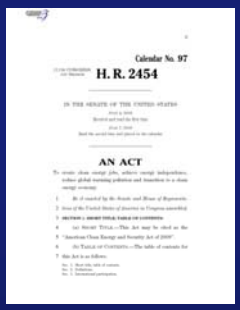
www.stavins.com

Appendix

U.S. Policy Action and the International Process

Core of Anticipated U.S. Action: Economy-wide Cap-and-Trade System

- Meaningful legislation (HR 2454/Waxman-Markey) with cap-and-trade passed by House in June by *small margin*
- Senate action
  - Boxer-Kerry and other bills
  - Politics difficult: 60 of 100 votes required
  - Bi-partisan opposition (coal & rural states)
- Major substantive issues remain
  - Ambition, allocation, offsets, cost-containment mechanisms, *international competition protection*, regulatory oversight, nuclear power provisions, offshore oil & gas provisions


Calendar No. 97

H. R. 2454

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19

Other Important U.S. Climate Policy Developments

- **Carbon Tax** – some real interest and some phony interest
- **Cap & Dividend** – CLEAR Act (Sen. Cantwell)
- **Stimulus Package** – $80 billion for renewables and energy-efficiency
- Automobile and Appliance Energy **Efficiency Standards**
- Court-Ordered **Regulation** under the Clean Air Act
  - U.S. Supreme Court decision & Obama "endangerment finding"
  - Regulation would be ineffective and costly – but will it force hand of Congress?

20

U.S. Political Timing:
A Challenge for the International Process

- Relatively new administration
- Recession (and unemployment)
- Other U.S. domestic policy priorities: health care and financial regulation
- Public perceptions
- Congressional deliberation, difficult politics, and challenging numbers
- U.S. mid-term elections (November, 2010) can work *against* bipartisanship, and make it more difficult to vote to raise energy prices

21