Architectures for Agreement: Addressing Global Climate Change in the Post-Kyoto World

Joseph E. Aldy Resources for the Future Harvard Project on International Climate Agreements

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#### Architectures for Agreement

- Current International Framework
- Architectures for Agreement

#### • Harvard Project on International Climate Agreements



#### **Current International Framework**

• UN Framework Convention on Climate Change

Kyoto Protocol

• Bali Action Plan





## UN Framework Convention on Climate Change

- Signed at Earth Summit in 1992
- Two key provisions:
  - stabilize GHG concentrations at a level to "prevent dangerous anthropogenic interference" with the climate
  - "Common but differentiated responsibilities"





# Kyoto Protocol: Strengths and Weaknesses

#### **Strengths**

- Market-based approach, potentially cost-effective
- Flexibility for nations to comply with commitments
- "Fair" focuses on wealthiest countries and those with greatest historical emissions
- Has come into force

#### Weaknesses

- Some of the largest emitters were not constrained
- US has not ratified
- Potential for "emission leakage"
- Concerns about nature of emission trading, including CDM
- Compliance mechanisms sufficient?



## Bali Action Plan

- Two-year process to address the following:
  - Long-term global goal
  - Mitigation commitments/actions
  - Actions to promote adaptation
  - Development and transfer of technology
  - Financial mechanisms to support these objectives





#### Architectures for Agreement

- Presents six proposals for post-Kyoto climate policy architecture
  - **Targets and Timetables**
  - Harmonized Domestic Actions
  - **Coordinated and Unilateral Policies**
- Two commentaries evaluate each proposal
- Foreword by Larry Summers and Epilogue by Tom Schelling
- Introduction of the issue and synthesis of major themes

#### Architectures for Agreement

Addressing Global Climate Change in the Post-Kyoto World

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CAMBRIDG



#### **Targets and Timetables**

- Basic architecture underlying Kyoto Protocol
- Set country-level quantitative emission targets over specified timeframes
- Allow emission trading across countries
- Novel ideas presented in proposals
  - Set targets through formulas
  - Developing countries "graduate" into targets as they grow





## Harmonized Domestic Policies

- Focus more on policy actions instead of goals
- Countries agree on similar or interlinked domestic policies
- Novel ideas presented in proposals
  - Countries adopt similar national level cap-and-trade programs
  - Promote regional-level "carbon clubs" that could evolve like regional trade agreements
  - Integrate climate policy in development efforts





### Coordinated and Unilateral Policies

- Bottom-up approach to climate policy
- Relies on domestic politics to drive incentive for participation and compliance
- Novel ideas presented in proposals
  - Countries pledge actions and undergo periodic review without formal penalties
  - Suite of actions: emission mitigation, adaptation, R&D, geo-engineering





### Major Themes from Proposals

- Focus on policy infrastructure instead of goals
  - Get institutions right, then aim for ambitious goals
- Market-based implementation supported
  - Harmonization of emission prices can occur through
    - International cap-and-trade
    - Coordination of domestic cap-and-trade policies
    - Emission taxes
  - Can an international system work without a supranational authority?





## Major Themes from Proposals

- Need for a "fair" climate policy
  - Progressive targets for developing countries
  - Integrate with development, trade policies
  - Adaptation merits additional attention
- Promoting participation
  - Engage domestic constituencies
  - Focus on effort, not outputs, through pledge and review
  - Expand negotiations to integrate development, trade
  - Narrow negotiations to small number of key nations





# The Harvard Project on International Climate Agreements

- **Starting Point:** Architectures for Agreement
- **Goal**: Inform the design of a scientifically sound, economically rational, and politically pragmatic post-2012 international climate policy architecture
- Method: Draw upon research and ideas of leading thinkers from academia, industry, government, and NGOs
  → Provide policy guidance in Fall 2008





# Questions Raised by the Bali Action Plan to be Addressed by the Harvard Project

- How do we set a long-term goal?
  - How do we account for uncertainty?
  - How do we adjust goal as we learn?
- How do we structure commitments that deliver climate benefits and economic development?
  - Issue for developed and developing countries
  - Much has changed since 1992 when world divided in two
  - Need to integrate climate policy in development agenda

#### • Is adaptation just "good" development policy?





Questions Raised by the Bali Action Plan to be Addressed by the Harvard Project

- How can we promote technology transfer?
  - Need to move beyond ODA and CDM
  - Need policies to leverage more private sector capital
- R&D coordination
  - CO<sub>2</sub> capture and storage
  - Geoengineering
- Measuring effort
  - How do we assess comparability, adequacy of effort?
  - What institutions are necessary?





Specific Policy Architectures Under Consideration in Harvard Project

- Portfolio of approaches
- Harmonized national carbon taxes
- EU emission trading scheme as a model for the global regime
- Linkage of domestic cap-and-trade programs
- Sectoral-based international agreements





Specific Policy Elements Under Consideration in Harvard Project

- Metrics for assessing comparability of effort
- International technology agreements
- Policies to address deforestation
- Development and climate change
- International trade and climate change



Invitation to Participate in the Harvard Project on International Climate Agreements

To get more information about the Project, sign up for e-alerts, etc., please visit the Harvard Project website: <u>www.belfercenter.org/climate</u>



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