

The Harvard Project on International Climate Agreements

**Architectures for Agreement:
Issues and Options for Post-2012 International Climate Change Policy**

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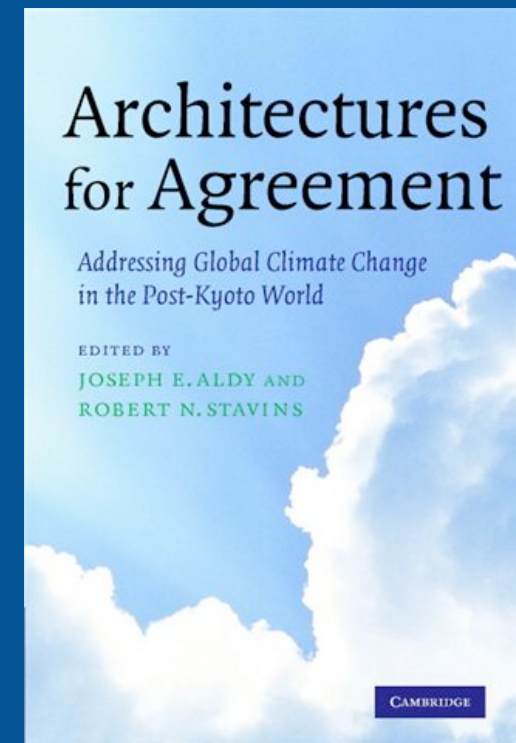
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Conference of the Parties, Bali, Indonesia
December 10, 2007



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 leading thinkers from academia, private industry, government, and non-governmental organizations.

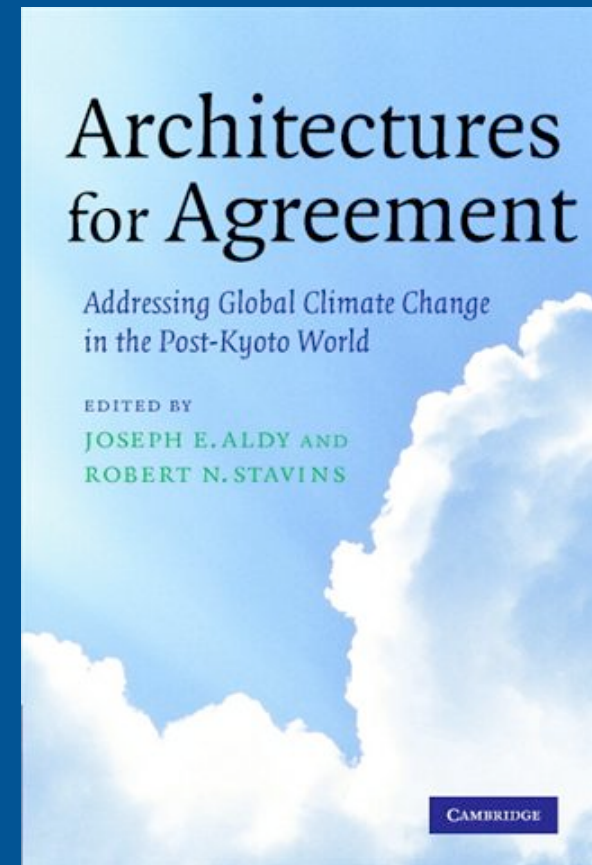


Issues and Options for Post-2012 International Climate Change Policy

- Introduction
- *Architectures for Agreement* (JA)
- Three Examinations of Post-2012 Architectures
 - Targets & Time Tables: Three-Part Architecture (RS)
 - Economic Policy Measures: Incentives & Institutions (CC)
 - The Merits of Bottom-Up Approaches (WP)
- Harvard Project on International Climate Agreements

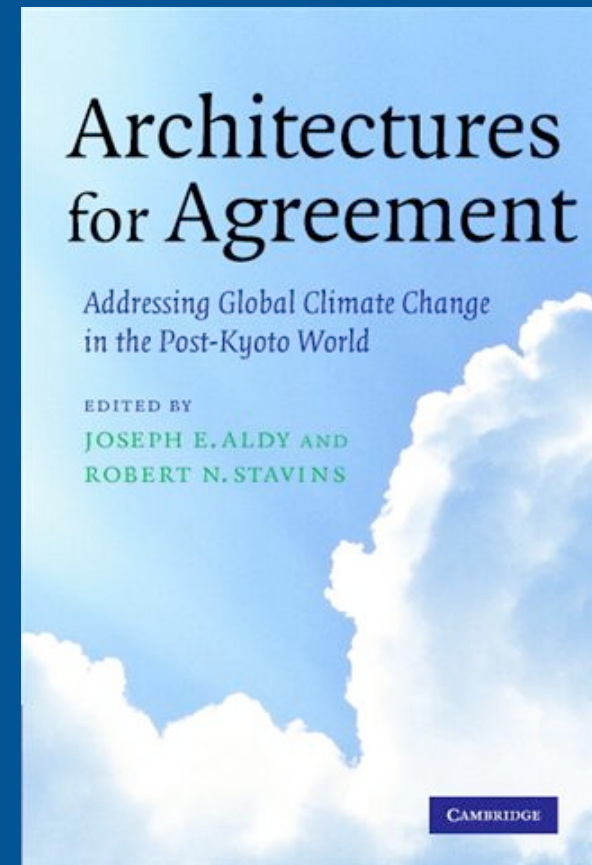
Architectures for Agreement

- The Kyoto Protocol commitment period was the first step
 - A second step is required
- UN Process
 - Under UNFCCC
 - Post-2012 Successor
- Complementary Processes
 - Big Economies Meeting (U.S. White House September 2007)
 - G8 + 5 Gleneagles Process
- *Architectures for Agreements* offers variety of post-2012



Architectures for Agreement

- Presents six proposals for post-2012 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



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



Getting Serious About Global Climate Change: A Three-Part International Policy Architecture

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Conference of the Parties

Framework Convention on Climate Change

Bali, Indonesia, December 10, 2007

A Three-Part Global Climate Policy Architecture

 **All Key Nations Involved**

 **Long-Term Time Path of Targets**

 **Market-Based Policy Instruments**



Part One: All Key Nations Involved

- **Global commons nature of the problem calls for a multi-national, if not fully global, approach**
- **Key developing countries must be fully involved because of:**
 - **Rapid growth**
 - **Low-cost emission reduction opportunities**
 - **Emissions leakage**
- **But developing countries can't be expected to pay in the short term**
- ***One solution:* “Growth targets” that become more stringent as countries become more wealthy (combined with international tradable permits)**

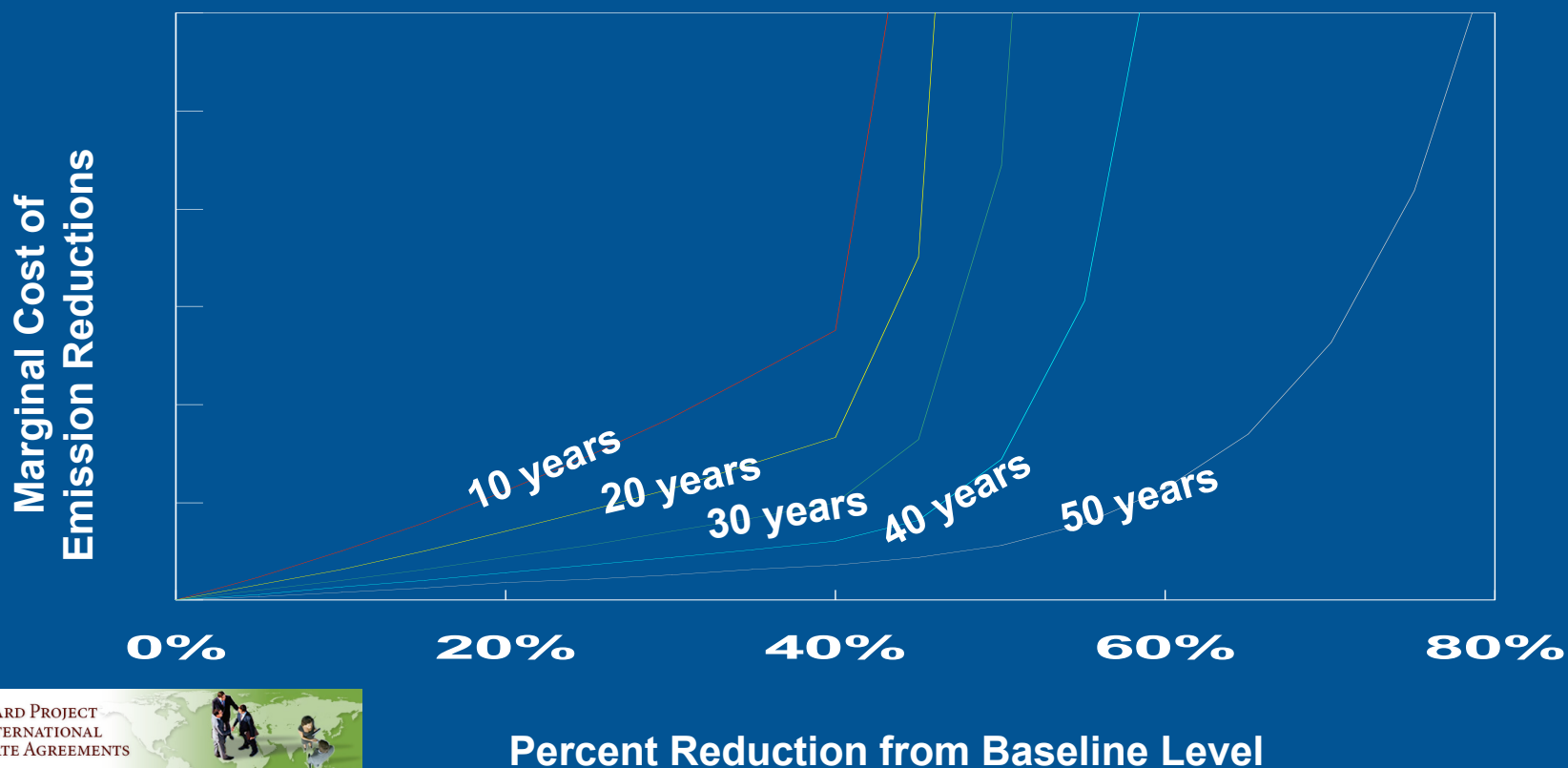
Part Two: Long-Term Time Path of Targets

- Short-term *moderate* ... but firm
- Long-term *much more stringent* ... but flexible
- Targets can be quantity or price-based
- Why this particular time-path of targets?



Part Two: Long-Term Time Path of Targets

- Technological changes *can* bring down costs in the long run
- So, large reductions *can* be achieved at lower costs in the long run
- Policies are needed *now* to motivate long-term technological change



Part Two: Long-Term Time Path of Targets

- Time path of targets that is *moderate but firm* in the short-term, and *stringent but flexible* in the long-term is:
 - Consistent with the science: the stock of GHGs is what matters
 - Consistent with the economics: cost-effective time path
 - Consistent with pragmatic politics (?)

Part Three: Market-Based Policy Instruments

- Emissions trading
- Carbon taxes
- Hybrids — “safety valve”
- Both domestically and internationally

Summary

- **Scientific and economic consensus points to the pressing need for a credible international agreement for the second commitment period that is:**
 - **Scientifically sound**
 - **Economically rational**
 - **Politically pragmatic**
- **Other promising policy architectures exist, I've outlined one that meets these three criteria**
- **Great challenges for adoption and implementation; but no greater than for other approaches**

For more information:

www.belfercenter.org/climate

or

The Harvard Environmental Economics Program

or

www.stavins.com

Presentations
by
Carlo Carraro
and
Billy Pizer



The Harvard Project on International Climate Agreements

- **Starting Point:** *Architectures for Agreement* is the foundation for the project
- **Goal:** Help inform the design of a scientifically sound, economically rational, and politically pragmatic post-2012 international climate policy architecture
- **Method:** Draw upon research & ideas of leading thinkers from academia, industry, government, and NGOs (project features an open, inclusive approach)

The Harvard Project on International Climate Agreements

- **Stage One** (2007): Use six proposals in book as basis for discussion about post-2012 alternatives with relevant stakeholders around the world.
- **Stage Two** (2008): Research Phase. Conduct policy and modeling analysis to identify key design elements and develop a small set of promising policy frameworks
- **Stage Three** (2008-09): Explore these key design principles and alternative policy architectures with domestic and international audiences

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:
www.belfercenter.org/climate