Interim Report of the Harvard Project on International Climate Agreements

by **Joseph E. Aldy** and **Robert N. Stavins**

Overview

With the Kyoto Protocol due to expire in 2012, a way forward is needed for international efforts to address global climate change. The Harvard Project on International Climate Agreements aims to help identify core design principles for a scientifically sound, economically rational, and politically pragmatic post-Kyoto climate policy. The Project taps leading thinkers from academia, private industry, government, and NGOs and includes 28 research teams in different parts of the world. This interim report summarizes project findings to date.

Discussion

Whether the Kyoto Protocol was a good or bad first step, a next step is needed. A new international agreement will have to address Kyoto's weaknesses—notably, its failure to elicit greenhouse gas reductions from some of the world's largest emitters—while building on its strengths, which include a reliance on market-based approaches and sensitivity to issues of equity, burden-sharing, and national sovereignty. In addition, a new agreement will have to be practical and realistic, spur significant technology innovation and transfer, and create effective incentives for compliance and participation.

The Harvard Project has identified several potential architectures for a post-Kyoto international climate regime. Recognizing that the choice is ultimately a political one and that governments must take into account a complex array of factors, we do not endorse a particular option. Rather, by exploring the advantages and drawbacks of different approaches we hope to illuminate key features and design principles for a new agreement. This report focuses on four frameworks:

1. *A targets and timetables approach with evolving emissions targets* based on a formula that reflects differentiated responsibilities for developed and developing countries, political realities (in the form of limits on the maximum cost countries are asked to bear), and long-term equity considerations (in the form of a gradual progression toward equal per-capita targets).

2. *A set of harmonized domestic policies, together with a portfolio of international agreements* that separately address various sectors and emission sources as well as key issues like technology R&D, deforestation, and adaptation.

3. *A system of harmonized national taxes on greenhouse gases* in which all countries impose the same level of tax and keep resulting revenues. Equity concerns would be addressed by side-payments or other assistance from developed to developing countries.

4. *A system of national or regional cap-and-trade programs that are linked,* either directly (in the sense that allowances from either program are valid for compliance in the other program) or indirectly, through an emission-reduction-credit program like the existing Clean Development Mechanism (CDM). This approach may emerge as the de facto post-Koyto architecture if current trends continue.

Key Findings & Recommendations

Regardless which policy architecture is chosen, a number of key design issues stand out as particularly important. All of them are closely tied to the relationship between climate policy and economic development.

➢ *Burden-Sharing:* This is perhaps the most challenging aspect of establishing a post-Kyoto international climate regime. One approach is to start by focusing on what is politically possible and allocate responsibility—with appropriate changes over time—in a way that allows countries to feel they are only doing their fair share. Framework #1, above, exemplifies this approach.

➢ *Technology Transfer:* The scale of the technology challenge implicit in effectively responding to climate-change concerns is enormous. A suite of policies—including international carbon markets that establish a clear price signal for reducing emissions, technology transfer to developing countries, and coordinated innovation and commercialization programs—is needed.

➢ *CDM Reform:* Serious concerns have emerged about the integrity of the existing CDM, most of them centered on whether the reductions being credited are indeed "additional, real, verifiable, and permanent." Given the importance of having an effective mechanism to help manage costs, promote technology transfer, and create inducements for developing-country participation, changes to the CDM should be included in any new agreement. Among other improvements, more dramatic reforms—such as moving away from a project-based approach to also recognize policy changes and pursuing country-specific "Climate Accession Deals"—merit consideration.

➢ *Deforestation:* Because forests have enormous impacts on the global carbon cycle, the next international climate agreement must address deforestation. One promising option is to develop a national inventory approach, in which nations receive emission credits or debits for measured changes in forest cover relative to a pre-negotiated baseline.

➢ *Compatibility with Global Trade Policy:* Global climate policy must not be allowed to collide with global trade policy. All parties have an interest in ensuring that country-level efforts to address concerns about emissions leakage and competitiveness are carefully designed so as to be compatible with World Trade Organization (WTO) rules. Multi-laterally developed guidelines and greater reliance on independent third-party judgments may be very helpful in this regard.

CONCLUSION

The challenges that confront nations seeking to establish an effective and meaningful international post-2012 climate regime are very great. But some important principles, promising policy architectures, and guidelines for essential design elements have begun to emerge. As the Harvard Project continues to explore these issues and expand its discussions with various audiences, we welcome feedback on all aspects of our work—including on this interim report.

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ABOUT THE HARVARD PROJECT ON INTERNATIONAL CLIMATE AGREEMENTS

The goal of the Harvard Project on International Climate Agreements is to help identify key design elements of a scientifically sound, economically rational, and politically pragmatic post-2012 international policy architecture for global climate change. It draws upon leading thinkers from academia, private industry, government, and non-governmental organizations from around the world to construct a small set of promising policy frameworks and then disseminate and discuss the design elements and frameworks with decision-makers. The Project is co-directed by Robert N. Stavins, Albert Pratt Professor of Business and Government, John F. Kennedy School of Government, Harvard University, and Joseph E. Aldy, Fellow, Resources for the Future. Major funding for the Harvard Project on International Climate Agreements is provided by a generous grant from the Climate Change Initiative of the Doris Duke Charitable Foundation.

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