Forging a Climate Agreement That Works

By Robert N. Stavins and Joseph Aldy, Harvard University and Resources for the Future

Top climate negotiators from more than 180 countries convened in Bali, Indonesia last week to address one of the most pressing issues of our time: forging an international agreement on climate change. The first commitment period of the Kyoto Protocol -- the governing agreement on the reduction of greenhouse gases -- expires in 2012.

The Kyoto Protocol marked a first step to address the problem of climate change, but it should be viewed as just that—a first step. Now we need to take the second step.

Over the last year, the Harvard Project on International Climate Agreements has solicited ideas from leading thinkers on this subject. We have collected six different climate proposals – not intended as an end in themselves, but as a starting point for further discussion.

The Bali conference comes at a time when public awareness and understanding of climate change is at an all-time high. The world's leading scientists agree that evidence of warming is abundant, and that humans are likely the cause. Al Gore's movie drove that point home to millions of Americans.

Yet despite a general agreement that "something must be done," there is little consensus on next steps to take. The world's first attempt to address the problem, the Kyoto Protocol, did many things right. It promoted fairness by placing the bulk of the burden for change on wealthy, industrialized countries, which are responsible for the majority of the greenhouse gases now in the atmosphere. Kyoto also relied on a market-based approach, creating the potential for cost-effective emissions reductions.

Even so, Kyoto has several glaring weaknesses that must be addressed in any future agreement on climate change. Four of the five largest emitters in the world will not have to undertake any action to reduce their greenhouse gas emissions during Kyoto's 2008–2012 commitment period: the United States has not ratified the agreement, Russia received a very lax and effectively non-binding target, and China and India, with very fast rates of emissions growth, do not have emission commitments under the Protocol. By designing a system where some countries undertake emissions reductions and others do not, the world set itself up for "emissions leakage," whereby companies move their operations to countries where it is cheaper to operate (and emit greenhouse gases).

The reality is that meaningful reductions of carbon dioxide and other greenhouse gas emissions will be costly to achieve, particularly for the United States—approximately equivalent to the cost of complying with all other federal environmental regulations combined. That doesn't mean action should not be taken – indeed, the benefits may justify these costs – but it does mean that we should design effective and sensible policies to minimize the costs of mitigating climate change.

To that end, we have launched the Harvard Project on International Climate Agreements, an effort to identify key design elements of a future international agreement on climate change, drawing upon the ideas of leading thinkers from academia, private industry, government, and advocacy organizations. The project aims to help develop ideas that are "scientifically sound, economically rational, and politically pragmatic."

Our biggest lesson so far: As the nations of the world consider the next international climate agreement, they should not be limited by starting-point bias. In other words, although they should possibly consider an agreement that resembles Kyoto, they should also consider a wide range of other ideas, some of which bear very little resemblance to Kyoto. This would mark a significant change from the international community's current approach.

There are a wide range of options available to us to build on Kyoto, ranging from centralized, top-down agreements, similar to Kyoto, to completely decentralized approaches.

Just a few of the ideas submitted so far:
- To promote fairness among all countries, the world could set emissions targets based on mathematical formulas, which would take into account historic and current emissions, income per capita, population, and other factors. Developing countries could index their emissions targets to economic growth to avoid unexpectedly high costs. (Jeffrey Frankel, Harvard University)
- We could develop our climate policy in the same way as our trade policy evolved: We could first form agreements among a small, critical group of countries, and expand it regionally as time went on. (David Victor, Stanford University)
- To take into account the realities of the current world political system, we could make national action the centerpiece of an effective climate policy, not an internationally negotiated agreement. Countries would participate in a non-binding pledge-and-review process that provides a venue for countries to review others' commitments and lobby one another. (William Pizer, Resources for the Future).

There is widespread consensus about the pressing need for a credible international agreement that everyone – including the U.S., China and India – can sign on to. Promising options do exist. By putting our heads together, we can find one that will work.

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THE PROPOSALS

1) **For Fairness, Use Formulas: Use a mathematical formula -- not negotiations about targets -- to set binding emissions standards for each country based on factors like historical & current emissions, GDP, and population.** ***Jeffrey Frankel, Harvard University***

(U.S.)
2) [Make Kyoto Stronger]: Expand the idea of binding, country-specific emissions targets that let developing countries "graduate" to stricter standards as their economies develop. ***Axel Michaelowa, Perspectives Climate Change (Germany)***
3) [Create 'Climate Clubs']: Only the major-player countries need to negotiate, in small regional groups, and meeting their goals through emissions trading. ***David G. Victor, Stanford University***
4) [Let Countries Handle It]: Allow domestic (but not international) emissions trading, and let countries set their own national limits on emissions. ***Warwick J. McKibbin, Australian National University and Peter J. Wilcoxen, Syracuse University***
5) [Research More Flexible, Creative Solutions]: Countries pledge actions, not targets, to reduce emissions, and support flexibility, research and development. ***Scott Barrett, Johns Hopkins University (U.S.)***
6) [Be Realistic]: Ask countries to pledge what they can with strong domestic support, then rely on public shaming to keep them on track. ***William A. Pizer, Resources for the Future (U.S.)***

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