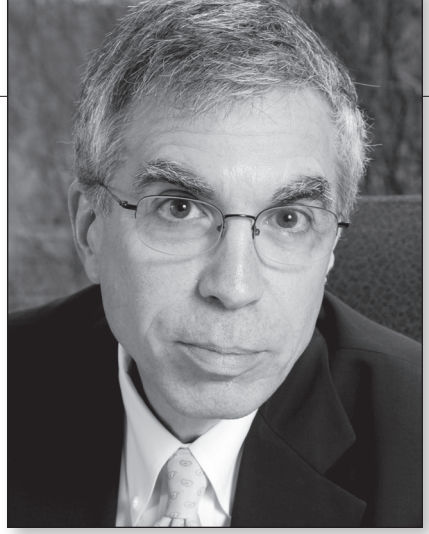

By Robert N. Stavins

When Leaders Meet in Paris

World leaders met last September at the United Nations in New York City for a summit that set the stage for global climate change negotiations that continued in December, in Lima, Peru, and will culminate in December 2015 in Paris. The negotiations are at an important crossroads.

Twenty some years ago, at the original Earth Summit in Rio de Janeiro, the nations of the world enacted the UN Framework Convention on Climate Change and established two key principles. One was the goal of stabilizing greenhouse gas concentrations in the atmosphere "at a level that would prevent dangerous anthropogenic interference with the climate system." The other was that the governments should protect the climate system "on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities."

This second principle signaled the conviction that although the climate problem is a global commons issue, with all countries contributing, rich nations had historically contributed more to the atmospheric stock of greenhouse gases than poorer countries. Listed in Annex I of the convention, the wealthy nations were committed to take actions.

Two years after the Rio summit, in the first decision of the first Conference of the Parties, the global community agreed to the Berlin Mandate, which interpreted "common but differentiated responsibilities and respective capabilities" as meaning that the Annex I countries alone would take on emission-reduction responsibilities. The Berlin Mandate, codified with numerical national targets and timetables in the 1997 Kyoto Protocol, produced a dramatic gap between rhetoric and reality.

By the time of the Berlin Mandate, greenhouse gas emissions of non–Annex I countries had come to surpass those of Annex I countries. By 2005, when the Kyoto Protocol entered into force, per capita fossil fuel CO_2 emissions of 50 non–Annex I countries exceeded those of the Annex I country with the lowest per capita measure. Likewise, the per capita income of 50 non-Annex I countries exceeded the per capita income of the poorest of the Annex I countries.

The six largest greenhouse gas emitters were not constrained by the Kyoto Protocol, because of lack of commitments (China, India, Brazil, and Indonesia), the nonbinding nature of its emission commitment (Russia), or failure to ratify the agreement (United States).

The greatest opportunity in 20 years to make progress on climate

Since 1990, the base year of the Kyoto Protocol, emissions have grown by approximately 5 percent annually in the non–Annex I countries, while remaining essentially flat in the Annex I nations. Furthermore, this structure of limited national participation effectively quadrupled the global cost of emission abatement necessary to stabilize atmospheric concentrations of greenhouse gases, relative to a cost-minimizing scenario. And, most problematic, the dichotomous structure of commitments rendered progress virtually impossible.

But prospects for change emerged in 2011 when an important departure from the dichotomous structure arose at negotiations in Durban, South Africa. There agreement was reached on a structure focused on the participation of all parties in the effort to mitigate greenhouse gas emissions. Under the Durban Platform for Enhanced Action, delegates agreed to craft a future legal regime that would be "applicable to all parties . . . under the convention." This presented the potential to eliminate the annex distinction for the first time, and was therefore a very important step toward potentially breaking the logjam that has prevented progress.

The goal now before negotiators is to produce a new international agreement — under the Durban Platform — in Paris in 2015, for implementation in 2020, as a successor to the Kyoto Protocol. This presents the greatest opportunity the world has had in 20 years to make meaningful progress on this exceptionally challenging issue.

Negotiators are converging on a hybrid policy architecture, which will combine bottom-up elements in the form of "nationally determined contributions" (to be specified independently by each country), together with top-down elements, such as for monitoring, reporting, and verification.

But will this politically attractive international policy architecture place the negotiations on a path toward eventually achieving cumulative emissions reductions that are sufficient to address the threat of global climate change? That is a question that will be answered only over the months and years ahead.

Robert N. Stavins is the Albert Pratt Professor of Business and Government at the John F. Kennedy School of Government, Harvard University, and Director of the Harvard Environmental Economics Program. He can be reached at robert_stavins@harvard.edu.