Post-Paris Pivot to Fast Climate Change Mitigation

Durwood Zaelke

It's a fantasy to think that holding warming to 2°C above pre-industrial levels will keep the world safe. We've warmed the world by about half that and climate impacts are already here, and the initial warming is feeding upon itself and causing still more warming. Already, disappearing Arctic sea ice is shrinking the protective white shield that reflects heat back to space, the permafrost line is moving north and releasing stored methane and carbon dioxide, forests are drying out and burning up and releasing the carbon dioxide stored in the biomass and soils, and ocean carbon dioxide storage is slowing down. Maybe James Hansen is right and warming of 1.5° C will keep us relatively safe, but even this looks optimistic today.

Whatever the outcome at COP-21 — a global agreement with ambitious national commitments, or a stalemate that keeps us dancing around the few remaining musical chairs left on high-ground after rising seas and pounding storms wash away the rest — we need to pivot after Paris to fast-mitigation strategies in all venues that can help cut climate pollution.

Solving a fast-moving problem like climate change requires fast-mitigation. The climate game could be lost before the anticipated UN agreement goes into effect in 2020. Fast-mitigation is essential for slowing impacts and facilitating adaptation, and needs to be pursued in all possible venues at the local, national, and international level.

The ultimate objective of the UN climate process is to prevent dangerous interference with the climate, and to do so "within a timeframe sufficient to allow ecosystems to adapt naturally" and "to ensure the food production is not threatened." Within the UN climate process, the parties recognize the need for fast, pre-2020 mitigation, and in 2011 set up a process to focus on pre-2020 ambition, including identifying robust mitigation strategies, especially those with co-benefits for adaptation, health, and sustainable development.

The fastest mitigation available at scale is to amend the Montreal Protocol — the world's best environmental treaty — to virtually eliminate one of the six main greenhouse gases by phasing down production and use of refrigerants know as hydrofluorocarbons, or HFCs, leaving accounting and reporting of HFC emissions in the UN climate process. This can cut the equivalent of 100 to 200 billion tonnes of carbon dioxide by 2050 and avoid up to 0.5°C of warming by the end of the century. Already, 95 parties have submitted formal proposals to phase down HFCs, and most other parties are supporting, including China, India, and Brazil. The few parties yet to join the consensus include Saudi Arabia, Kuwait, and Pakistan, although Pakistan may be moving in a positive direction.

Improvements in the energy efficiency of appliances that a phase-down of HFCs is expected to catalyze can provide the equivalent of another 100 billion tonnes of carbon dioxide avoided, according to a recent report from Lawrence Berkeley National Laboratory. These efficiency gains will save energy equal to doubling the current global fleet of power plants.

Other fast-mitigation strategies include using national and regional laws and institutions to cut black carbon and the air pollutants that produce ozone in smog, powerful warming pollutants that are not included in the UN climate discussions, but kill more than seven million people every year and destroy over one hundred million tons of crops. California has shown the world the way, cutting its black carbon concentrations by 90 percent since 1966, without any noticeable disruption to the citizens of California, but with tremendous benefits to their health as well as to climate protection.

The Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants, which now has more than 48 countries and 60 international organizations and non-state partners including the World Bank and World Health Organization, is helping to fill the gap with actions to reduce black carbon, methane, and HFCs. Cutting these climate pollutants can cut the rate of global warming in half in the near-term through mid-century, and by two-thirds in the Arctic. This can avoid up to 0.6°C of warming by 2050, and up to 1.5°C by end of century. In contrast, aggressive carbon dioxide mitigation, while essential, can avoid only 0.1°C of warming by 2050 and 1.1°C by end of century. It's not possible to stay below the 2°C barrier, let alone the more appropriate 1.5°C limit, without aggressive cuts to both the short-lived climate pollutants and to carbon dioxide.

Reducing the rate of warming by half is essential for adaptation, as it's always better to prevent damage so that there is less damage to adapt to. Support from heads of state and government and a comprehensive plan of action for fast pre-2020 mitigation to complement the UN agreement can start to answer the legitimate demands of all citizens for their governments to avoid an irreversible climate crisis, and to do so fast enough to protect food production and allow ecosystems to adapt.

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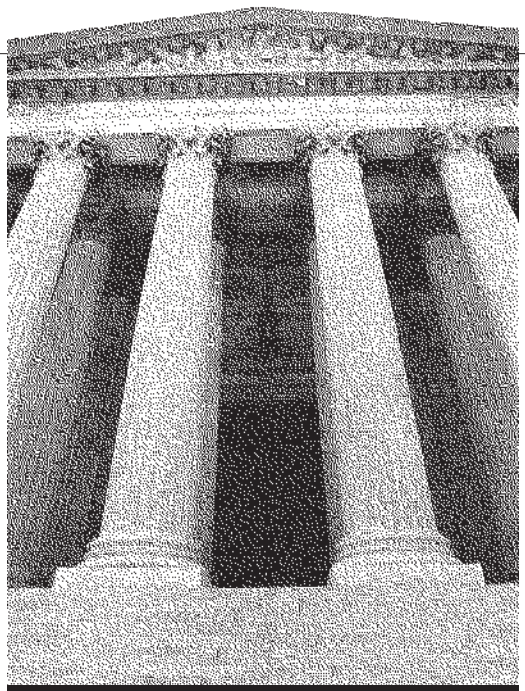

THE DEBATE

How Can the U.S. Lead in Paris to Achieve a Climate Agreement We Can Live With?

In a few weeks, the 21st Conference of the Parties of the UN Framework Convention on Climate Change will convene in Paris to hammer out for the first time an accord that will have binding targets for nearly all nations, industrialized and developing alike.

The United States is a party to the climate convention, but it famously flamed out on the Kyoto Protocol, an enforceable mandate for rich nations alone, which Al Gore signed but the Senate failed to approve under those grounds. Even the signatory status was withdrawn by the Bush II administration, leaving the United States, then the biggest emitter, with no commitments.

Now, the United States has a chance to lead again. Many of its concerns have already been resolved in the negotiating framework, particularly the commitment of developing countries.

We polled some of the leading thinkers and activists involved in the climate change negotiations, asking them what the United States needs to do to realize an agreement that we can live with — one that protects the environment and also wins favor in the Senate and among the American public.

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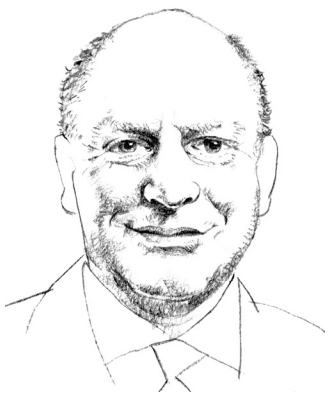

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