

BEYOND 2015: AN INNOVATION-BASED FRAMEWORK FOR GLOBAL CLIMATE POLICY



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Summary of Policy Reforms



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For too long international climate policy has been focused on carbon targets, pricing, and subsidies to drive the deployment of existing clean energy technology in the name of climate change mitigation. Unfortunately these efforts have not made a dent in the challenge—global carbon emissions have grown faster since 2000 (2.2 percent per year) than from 1970 to 2000 (1.7 percent per year) with no signs of abating. Perpetuating these failures in the next round of climate negotiations is unacceptable.

The primary goal of climate policy should be to make the unsubsidized cost of clean energy cheaper than fossil fuels. To do this requires significant investment in innovation of better technologies—not just dependence on deployment—which requires substantial reforms to national and international approaches to climate and energy policy. The following is a summary of the proposed policy reforms to enhance international energy innovation capacity to confront global climate change.

Reforms for High-Income Countries

- Countries should be offered the option within global climate negotiations to meet increasing government clean energy RD&D intensity targets in lieu of, or as a complement to, meeting carbon emission targets.
- Countries should adopt "revenue-raising" policies, such as a modest carbon tax or oil and gas
 drilling fees, and direct the revenue toward clean energy innovation programs.
- Countries should eliminate subsidies for mature fossil fuel technologies and redirect those savings toward supporting clean energy innovation programs.
- Countries should support smart clean energy deployment by implementing performance-based subsidies or incentives that steadily decrease over time, requiring technologies to compete on technological merit and innovation, not government largesse.
- Countries should combat green mercantilism with tariffs on mercantilists' products in the short term and also work toward international trade agreements on clean energy technologies that remove domestic protectionist policies and level the global playing field.

Reforms for Emerging and Low-Income Countries

- Countries should be offered the option within global climate negotiations to meet increasing government clean energy RD&D intensity targets in lieu of, or as a complement to, meeting carbon emission targets.
- Countries should adopt "revenue raising" policies, such as a modest carbon tax or oil and gas drilling fees, and direct the revenue toward clean energy innovation programs.
- Countries should coordinate with high-income countries and international institutions to facilitate clean energy test-bed, demonstration, and smart deployment projects.
- Countries should avoid resorting to green mercantilist practices in favor of a strong global innovation ecosystem.

Reforms Requiring IEA Action

- The IEA should coordinate an energy innovation ecosystem mapping initiative for low-income and emerging economies to inform better international clean energy innovation collaborations for developing technology test-beds and facilitating smart deployment.
- The IEA should implement "Clean Energy Innovation Agreements," modeled on the Agency's "Technology Implementing Agreements," to encourage low-income countries to test, pilot, and demonstrate emerging technologies.

Reforms Requiring UN Action

- The UN should recommend in the next climate negotiations the inclusion of an option for countries to commit to an energy RD&D investment target in lieu of, or as a complement to, meeting carbon emission targets.
- The UN should facilitate affordable clean energy innovation-based technology leapfrogging in low-income countries, where possible, as a chief method of achieving energy access and mitigating climate change.
- The UN should work to facilitate negotiations through the UNFCCC process on an international climate agreement that doesn't include compulsory licensing or assume clean energy falls under the Doha Declaration of the TRIPS agreement.
- The UN's SE4ALL initiative should explicitly include improving energy access in a modern context equivalent to what high-income countries benefit from today.

Reforms Requiring World Bank Action

- The World Bank should use its IBRD policy loans to support the implementation of clean energy innovation policy strategies in lower-middle income and emerging countries, moving beyond carbon prices, targets, and subsidies.
- The World Bank should influence the redesign of the Clean Technology Fund to represent the premier "clean energy innovation" financial mechanism for low-income and emerging countries to coordinate the testing and demonstration of advanced clean energy technologies.
- The World Bank should immediately stop funding projects that include provisions for compulsory licensing or domestic content requirements and also shift partial funding away from countries that practice green mercantilist policies and toward countries that do not.
- The World Bank should use its IDA lending program to continue to make credit available to low-income countries for developing energy-generating systems that are the most affordable option, even if they are fossil fuel-based.