

# The President's Climate Action Plan: Right on the Money

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This week President Obama announced a far-reaching Climate Action Plan that will support achievement of the U.S. commitment to reduce national carbon pollution in the range of 17 percent below 2005 levels by 2020 while redirecting our international development aid to foster clean energy choices in other countries. With the promised expeditious implementation of these measures, the President's package will spur the reduction of carbon pollution from the power sector in the United States and provide new momentum to the international climate negotiations.

## **Addressing the 40 Percent of U.S. Emissions from Power Plants**

The cornerstone of the domestic climate package is a memorandum directing the Environmental Protection Agency to work expeditiously to complete flexible carbon pollution standards for both new and existing power plants that builds on the progress already being made by states. Included was the directive to ensure, to the greatest extent possible, that the approaches developed allow states to use market-based instruments, performance standards and other regulatory flexibilities. Flexibility is critical to achieving the top-line goals of reducing carbon pollution while limiting compliance costs and providing the reliable and affordable electric power needed to sustain a vibrant economy. Flexibility will also allow states to select approaches that advantage their own industries and are most consistent with their available energy resources.

Long overdue, completion of carbon pollution standards for both new and existing power plants can move our electric production onto a more sustainable trajectory that locks in recent environmental improvements—including economically driven shifts from coal- to gas-fired power generation—and supports additional growth in the natural gas and clean energy sectors. Already, new natural gas technologies have contributed to a 15 percent reduction in power sector CO<sub>2</sub> emissions from 2005 levels (equal to roughly a 6 percent reduction in national greenhouse gas emission levels below 2005 levels), and more emissions reductions are possible as we continue to shift electric generation away from antiquated, inefficient technologies and towards cleaner energy solutions available today. In fact, a study released in 2011 by the Massachusetts Institute of Technology found there was sufficient surplus natural gas combined cycle (NGCC) capacity to displace roughly one-third of U.S. coal-fired electric generation, reducing CO<sub>2</sub> emissions from the power sector by 20 percent. Even with last year's historically low natural gas prices, capacity factors at NGCC facilities in the U.S. averaged only about 50 percent,<sup>1</sup> much lower than the design value of 85 percent, suggesting significant head room exists to further ramp up the utilization of these units.

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<sup>1</sup> MIT. *The Future of Natural Gas*. June 6, 2011.

Combined heat and power (CHP) technology—where heat and power are produced together in a single boiler with greater overall efficiencies than when heat and power are produced separately—offers another promising strategy to comply with new power sector standards while at the same time boosting the efficiency and competitiveness of U.S. manufacturing. McKinsey & Co. has estimated that there are 50.4 gigawatts (GW) of cost-effective CHP that can be deployed by 2020, half of which are in industrial facilities.<sup>2</sup> The Department of Energy estimates that 40 GW of CHP would result in \$10 billion per year in savings to energy users and 150 million metric tons (MMT) in CO<sub>2</sub> emissions reductions per year—equivalent to emissions from 42 coal-fired power plants.<sup>3</sup> This could produce an additional 6 percent reduction in national greenhouse gas emissions below 2005 levels. Under a flexible carbon pollution standard for existing power plants that allows states to take advantage of the full suite of technological options that are adequately demonstrated, CO<sub>2</sub> emissions reductions from new investments in CHP technology can be credited towards compliance. This would create a new revenue source for efficient energy production through CHP without needing special budget allocations.

Increased production of natural gas stemming from new shale gas technologies has already had an important impact on the U.S. economy, resulting in employment and tax revenues in the communities and states with access to these resources, particularly in the industrial Midwest. Further development of natural gas would be expected to accelerate these benefits. Similarly, relying more on efficient energy production through CHP and industrial energy efficiency has the potential to improve economic competitiveness and expand job growth in key industrial regions of our country.

To ensure that full implementation is achieved and the regulatory objectives are realized, the EPA will need to move quickly to propose and finalize standards ahead of the deadlines called for in the President's Memorandum. Rapid action up front will give states the time they need to pass legislation where this is needed while still affording time for the current Administration to evaluate and approve or reject the state standards before the end of 2016.

## Smart Approaches to Spur Cleaner Energy Choices Overseas

Another important feature of the President's climate speech this week is his call "for an end of public financing for new coal plants overseas." As an important contributor to development aid, both directly and through multilateral development banks, our diplomats and negotiators now have direction from the highest level to influence these spending decisions in favor of clean energy solutions consistent with addressing the global climate challenge.

And as with the domestic policy initiatives, in supporting international low carbon investments, the President is directing his Administration to get the most "bang for the buck" by "combining our public resources with smart policies to mobilize much larger flows of private investment in low-emissions and climate resilient infrastructure." We've been calling these types of policies that direct private sector investments within a

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<sup>2</sup> McKinsey & Co. *Unlocking Energy Efficiency in the U.S. Economy*. 2009.

<sup>3</sup> This assumes each power plant displaced emits 3,533,098 metric tons of CO<sub>2</sub>, based on the average emissions per plant in EPA's eGRID database.

sector and are facilitated with international financial support “transformational NAMAs,” which stands for nationally appropriate mitigation actions. Whatever the term, the critical thing is that the President recognizes that achieving the needed scale of international ambition requires mobilizing the full force of the private sector and development aid behind sustainable, low carbon investment. Through smart policies and investments targeted to overcome specific barriers to private sector and development bank investments in low carbon technologies and infrastructure, climate finance can direct these larger resources to support low carbon development strategies across developing countries worldwide.

## **Safeguarding the American People from the Effects of Climate Change**

On adaptation, the President’s plan strikes a visionary tone by directing investments in policies, science and technical assistance that that will help safeguard and strengthen communities. The adaptation plan directs federal agencies to incorporate climate risks into planning, invest in natural areas and strengthen guidelines for more resilient buildings and infrastructure. Some of the specific measures call on federal agencies to identify vulnerabilities and promote resilience of key sectors such as energy and public health, and improve insurance policies to reduce exposure. Finally the adaptation plan will promote the use of sound science to help local governments manage climate impacts.

If we are successful in transforming the energy sector and driving emissions reductions in the United States and in developing countries, this will support a global agreement where all countries are able to commit to legally binding climate mitigation targets. We look forward to working with the President and his Administration in the United States and countries around the world to support effective, cost-effective and timely implementation of his Climate Action Plan.