

Energy and Climate Change Report Provides Options for the White House

A newly approved energy and climate change report prepared by the President's Council of Advisors on Science and Technology (PCAST) provides a menu of options for President Barack Obama to consider in dealing with climate change and includes components for a national climate preparedness strategy. The report was approved at a 15 March PCAST meeting in Washington, D. C., and is subject to final edits. It is the first report by the advisory council that focuses exclusively on climate, according to PCAST member Daniel Shrag, who provided a presentation about the document at the meeting.

The final release date of the report is not yet set and depends on the final editing and review process. PCAST is a federal advisory committee that is cochaired by White House science advisor John Holdren and that includes leading scientists and engineers who advise the president and the Executive Office of the President.

Among the climate preparedness strategy components addressed in the report are mechanisms to create and communicate national climate preparedness plans, including regional assessments, and measures to create and communicate indices of extreme events that capture leading indicators of climate change, Shrag noted during his presentation. Shrag, who is the Sturgis Hooper Professor of Geology at Harvard University and director of Harvard's Center for Environment, said the report also includes other strategy components, such as maintenance and improvement of the nation's weather forecasting and climate change prediction, plans for infrastructure modernization that incorporate the impact of future climate change, and changes to federal disaster relief and insurance policies.

Noting that disaster relief is in many ways an insurance of last resort, Shrag said, "We have to ensure that the economic incentives are aligned with long-term safety and security and moving the country toward reducing its vulnerabilities. Right now, we have too many programs that essentially provide financial incentives for people to live in harm's way, and we have to ultimately reform those over time." He added that when there is an opportunity to rebuild following a disaster, such as Hurricane Sandy, "we shouldn't just rebuild; we need to rebuild better."

The report includes specific recommendations, although Shrag said the intent of the report is to offer "some options for the president in the start of his second term going forward." He said the report "provides the president a menu of choices that he can choose from." Among the recommendations Shrag noted are to create a

National Commission on Climate Preparedness that would be charged with proposing an overall framework and blueprint for ongoing data collection, planning, and action; to develop an infrastructure renewal plan that integrates climate preparedness "and other benefits to the Nation's economy"; and to improve the coordination and support for research efforts on climate change preparedness.

In addition, Shrag noted that the report calls for supporting the continued expansion of shale gas production, "ensuring that environmental impacts of production and transport do not curtail the potential of this approach"; continuing the implementation of Clean Air Act requirements on pollutants such as sulfur dioxide, nitrogen oxide, and mercury and creating new performance standards for carbon dioxide emissions from existing stationary sources; accelerating efforts to reduce regulatory obstacles for carbon capture and storage; and leveling the playing field for clean energy and energy efficiency technologies by removing regulatory obstacles, adjusting tax policies, and other measures.

The report also focuses on mitigation and adaptation. "As the Nation continues to address the challenges of preparing for the impacts of climate change, we cannot lose sight of the overarching importance of mitigating the pace and ultimate magnitude of the changes in climate that will occur," according to Shrag's presentation about the report. "Without very substantial mitigation, which must occur worldwide, adaptation efforts will ultimately be overwhelmed and will be extremely costly."

"The whole study and exploration of adaptation is very nascent compared to mitigation," said PCAST member Rosina Bierbaum, dean of the School of Natural Resources and Environment at the University of Michigan, who provided comments about that aspect of the report at the PCAST meeting. "This report highlights that they are both urgent and needed co-equally."

Global actions Shrag noted in the report include exploring the possibility of a new North American climate agreement and continuing to work toward increased cooperation with China on climate change, along with ongoing State Department efforts related to climate change. PCAST member Mario Molina, professor of chemistry and biochemistry at the University of California, San Diego, commented that a North American climate agreement could have a number of benefits, including helping Mexico establish environmental standards for shale gas development.