

Principles for Energy and Environmental Policy

- The United States should adopt and pursue energy policies that encourage environmentally-responsible development of the full range of the nation's energy resources. Renewable and nuclear energy will be essential to meeting our nation's climate change goals, as these may be redefined in light of EPA's prospective reconsideration of the Clean Power Plan. The U.S. and the rest of the world will continue to rely heavily on fossil fuels to power their transportation, electric generation, and energy-intensive industrial sectors.
- The transition to a low-carbon economy depends on enhanced investments in the technologies that will enable the U.S. and the world to adopt to new forms of industrial production and energy generation without sacrificing the stability and reliability of electric power supply systems, or the millions of jobs dependent on mining, transportation, and electric power generation.
- Enhanced investment in the commercial demonstration and use of carbon capture, storage, and use (CCUS) technologies will be central to our longer-term ability to utilize our vast remaining resources of natural gas and coal. The development and commercial application of CCUS technology could lead to the creation of hundreds of thousands of new jobs in the electric generation and coal mining sectors.
- Utilities are reluctant to invest in new CCUS projects due to the high costs of first-generation carbon capture technology. Current U.S. DOE funding for second- and third-generation CO₂ removal technologies must be dramatically expanded. In FY2016, DOE allocated less than \$50 million to advance carbon capture technologies. DOE's funding for CCUS RD&D projects should be increased to levels similar to those Congress approved through the American Recovery and Reinvestment Act of 2009 — some \$3.4 billion — while increasing 45Q tax credits and other incentives for CCUS applications by electric utilities and other industrial sectors. The Heitkamp-Whitehouse bill is a meaningful and essential first step in this direction.
- Increased support for CCUS technologies also is critical to providing policy and tax parity among domestic energy sources — some of which currently receive huge corporate and individual tax benefits. Equally important, CCUS deployment

offers a way forward for unions to participate in the construction, maintenance, and operation of the next generation of technologies needed to upgrade our electric supply and distribution systems. Current utility generation planning relies disproportionately on new natural gas and renewable energy technology. Energy policy parity is needed to restore coal as an economic choice for new baseload electric generation.

- Tens of thousands of skilled union jobs have been lost in the electric utility, mining, and railroad sectors, along with the jobs that support those sectors, as utilities have retired more than 60 Gigawatts of coal-based generating capacity since 2012 in response to lower natural gas prices and more stringent Clean Air Act standards. DOE/EIA estimates that some 40 GW of this capacity has been retired solely due to the high capital costs of compliance with U.S. EPA's 2012 mercury rule.
- Congress must enact the Miners Protection Act to secure the retirement and health care benefits of America's coal miners. New legislation and substantial appropriations are needed to develop comprehensive worker protection, retraining, and community revitalization programs for the areas that have experienced large job losses.
- Withdrawal and reconsideration of the Clean Power Plan will avoid the loss of an additional 60 GW of coal-based electric generating capacity according to U.S. EPA. DOE/EIA estimate that compliance with the CPP would result in the loss of an additional 230 million tons of coal production. If the CPP is modified in response to EPA review, its compliance deadlines should be extended and effective incentives should be added for states and electric utilities to deploy CCUS technologies as a compliance mechanism.
- The Paris Agreement sets non-binding CO₂ reduction targets of 26%-28% below 2005 emissions by 2025. Utilities already have achieved some two-thirds of the CO₂ reductions called for by the Obama Administration's Clean Power Plan. Projected emission reductions in the auto sector may be less than anticipated due to relaxation of CAFE standards and public demand for larger vehicles. Overall, it is unlikely that the U.S. will meet its Paris pledge without imposing additional job-destroying CO₂ reduction requirements. While there are benefits to remaining at the table in international climate negotiations, the U.S. should proceed cautiously with respect to any new or legally-binding climate-related obligations.

- Reducing the burdens of premature carbon control initiatives such as the Clean Power Plan will help to avoid future job losses, but will not ensure a long-term future for clean coal technologies. Even with extensive regulatory relief, new coal generation will not be constructed until the costs of controlling carbon are reduced to the point that coal is a long-term economic choice independent of climate change policies. Only extensive investments in advanced carbon capture R&D can provide a clear path forward for the construction of the next generation of advanced coal-based baseload generation.