

Climate Change

Background: Pennsylvania is a bellwether with respect to the challenges and opportunities associated with climate change. As a state heavily reliant on fossil fuels for energy generation, coupled with exponential growth in natural gas production over the past several years, the transition to low emission and renewable energy sources will require a seismic shift in policies and practices. It will also have considerable commercial consequence, but failure to act carries equal risk, given anticipated impacts to Pennsylvania's environment and economy.

The Commonwealth's past policy efforts for advancing low impact energy investment, generation, and conservation (including the 2004 Alternative Energy Portfolio Standards [AEPS], Act 129 of 2008, and the Alternative Energy Investment Act of 2008) have clearly demonstrated reducing greenhouse gas emissions in Pennsylvania can also promote job creation and economic growth. For these reasons, the Wolf Administration should make a concerted effort to chart and implement reductions in greenhouse gas emissions through a variety of strategies.

Equally important to the implementation of strategies to reduce greenhouse gas emissions in Pennsylvania are the implementation of adaptation strategies to ensure the state's ability to manage those climate change impacts that are already occurring in the Commonwealth. The Climate Change Act of 2008, among other mandates, directed DEP to initiate a study on the potential impacts climate change may have on Pennsylvania. In 2009, a team of scientists from Penn State University released a report detailing the projected impacts to Pennsylvania from climate change. Those projected impacts included expected warmer temperatures throughout the 21st century, additional precipitation, more frequent and intense storms, including flooding, and longer dry periods, including droughts. You do not need to look any further than to the devastation caused in Pennsylvania from Tropical Storms Irene and Lee in 2011 to know the level of state resources that will be needed to address the impacts from climate change unless mitigation measures are put in place now to safeguard or lessen the impact climate change will have on Pennsylvania's natural resources, infrastructure, economy and human health and safety.

Pennsylvania's Challenges: In 2014, the U.S. Environmental Protection Agency proposed the Clean Power Plan rulemaking, which is scheduled to be finalized in the summer of 2015. The rulemaking, as proposed, requires cuts in carbon pollution by 30 percent from existing power plants nationwide from 2005 levels, and provides Pennsylvania with options in how these reductions will be achieved, including alternatives associated with the redispatch of natural gas and additional nuclear power, renewable energy efficiency programs, and coal-fired heat rate improvements. At proposed rulemaking, EPA set a carbon dioxide (CO₂) interim reduction goal of 23% for Pennsylvania by 2020, using 2012 emissions as a baseline and a final goal of 31% by 2030, also using 2012 emissions as a baseline. Proponents of Pennsylvania's coal industry claim that the rulemaking will have a devastating effect on the industry and will reduce coal consumption in the state from 2005 levels by 76% by 2030. Adding to the complexity of the Commonwealth's efforts in developing a carbon reduction strategy, or a State Implementation Plan, to comply with the eventual federal Clean Power Plan rule is the Pennsylvania

Greenhouse Gas Regulation Implementation Act, which was signed into law last year by Governor Corbett. The law adds an additional level of political scrutiny to the development of the plan by compelling DEP to submit Pennsylvania's carbon reduction plan to the General Assembly for approval before it is sent to EPA.

Policy Considerations: Given the significant environmental and economic consequences tied to energy generation and use in the Commonwealth, including the consequences associated with climate change, the CAC recommends the Wolf Administration renew emphasis on the development and implementation of a coordinated and thorough Commonwealth Energy Plan by dedicating the necessary resources and executive level personnel to support such a plan. A Commonwealth Energy Plan should guide Pennsylvania to a future that achieves cleaner energy production and more efficient use of power, while ensuring energy reliability, affordability, and security. The CAC recommends the Wolf Administration engage all Pennsylvanians in an open and thoughtful dialogue about opportunities to improve the ways in which our state produces, distributes and manages its energy resources. The CAC recommends the Wolf Administration work particularly close with the Pennsylvania General Assembly to achieve consensus and agreement on Pennsylvania's Energy Plan. To ensure Pennsylvania's status as a global leader in the transition to a new, low carbon energy economy, the CAC offers the following specific recommendations:

- Reinvigorate the Climate Change Advisory Committee (CCAC) under the DEP. DEP is required to produce its next action plan under the Pennsylvania Climate Change Act by October, and the next impacts assessment report by April. These requirements, along with improvements in how Pennsylvania conducts its inventory of greenhouse gases, represent a significant opportunity for the Wolf Administration to make climate change a priority for state government, and educate and engage stakeholders and citizens alike.
- Only two people in DEP's Bureau of Air Quality now work on climate change. This vital work needs to be bolstered and elevated in profile through budgeting and staffing at the Department.
- Seek better coordination between DEP, the Public Utility Commission, and other state entities to inform and improve decision-making with respect to energy choices.
- Determine how Pennsylvania can truly establish itself as a global center for innovative technologies and businesses associated with renewable energy—for example, deployment of cutting edge energy storage technologies.
- Better account for environmental impacts of existing energy development in our state, and suggest concrete policy strategies for avoiding or mitigating those impacts. For example, the proliferation of methane emissions from natural gas operations. The shale gas revolution should not be a bridge too far in our state's transition to low impact energy, nor should it fail to convey lower impacts than other fossil fuels like coal.
- Advance new goals for renewable and distributed energy production by updating the AEPs, and through innovative financing or tax incentives for deployment of renewables and distributed generation.
- Increase support for demand response strategies and energy efficiency efforts via Act 129 of 2008, and through innovative financing or tax incentives.

- Identify opportunities to mitigate or offset greenhouse gas emissions from existing fossil fuel generation.
- Explore options such as participation in multi-state or voluntary partnerships as a means to reduce compliance and reduction costs.
- The CCAC has not reconvened its sector-specific working groups on climate adaptation planning since 2011 when reports from the respective workgroups were combined and released into the “Pennsylvania Climate Adaptation Planning Report Risks and Practical Recommendations”. To ensure statewide and municipal preparation for the impacts already being felt by climate change, the Wolf Administration should reconvene the sector-specific working groups on climate adaptation planning (Infrastructure, Public Health and Safety, Natural Resources, and Tourism and Outdoor Recreation) and request these workgroups update their 2011 reports, with the overall goal of developing plans for statewide implementation.