Pa.'s Climate Change Initiative: Important Step in Collaborative Journey

By **Kenneth J. Warren** | *The Legal Intelligencer*

On Oct. 3, Gov. Tom Wolf issued Executive Order 2019-17 directing the Pennsylvania Department of Environmental Protection (PADEP) to develop a proposed rulemaking package to limit carbon dioxide emissions from fossil fuel-fired electric power generators. Coupled with his Executive Order 2019-01 establishing targets for reducing net greenhouse gas emissions, Wolf has now made addressing climate change an important initiative of his administration.

This approach is in stark contrast to that of the Trump administration. The president's decisions to retreat from the Paris climate accord, repeal the Clean Power Plan, relax motor vehicle corporate average fuel economy standards and deny the scientific evidence showing that climate change is real and caused by human conduct elevates the importance of actions by state and local governments, businesses and individuals to reduce our nation's climate impacts.

The Oct. 3 directive is also symbolically significant because it represents a commitment by a state producing large quantities of coal and natural gas to reduce its greenhouse gas emissions. States with less stake in fossil fuel extraction may be more willing to address emissions from electric power generators and other sources if Pennsylvania steps forward to do its share.

The governor's directive instructs PADEP to develop a cap and trade program consistent with the model rule published by the Regional Greenhouse Gas Initiative (RGGI). RGGI is a cooperative effort among nine states in the mid-Atlantic and northeastern sections of the country to reduce carbon dioxide emissions from the power sector through a market-based system of tradeable emission allowances. Under the RGGI system, the total available emission allowances are subject to a regional budget or cap that becomes more stringent each year. Each large electric generator burning fossil fuels must purchase sufficient allowances to cover its carbon dioxide emissions.

Cap and trade programs have a proven track record of success. To address acid rain, the Clean Air Act Amendments of 1990 established a cap and trade program for sulfur dioxide emissions from coal-fired power plants that reduced their emissions in half over a 10-year period. Wolf's directive recites that RGGI states have reduced their carbon dioxide emissions from the power sector by 45% since 2005 while continuing to experience economic growth.

Consistent with the RGGI model rule, the Oct. 3 directive requires Pennsylvania's new regulation to provide for the auction of carbon dioxide emissions allowances and for the trading of allowances with holders in other RGGI states. These auctions establish the price for allowances, subject to maximum and minimum prices the states may elect to set through use of reserves and other mechanisms. Although not specified in the governor's directive, RGGI states ordinarily invest at least some of the auction proceeds in strategic energy initiatives or programs to reduce pollution or otherwise benefit consumers.

Pennsylvania's joinder of RGGI would improve the RGGI program by resolving a "leakage problem." Regardless of membership in RGGI, Pennsylvania and other states participate in a joint electric market managed by PGM Interconnection. At present, Pennsylvania generators supply approximately 30% of the PJM market and charge prices that do not include allowance costs. This increases the likelihood that Pennsylvania generators can undercut the costs of generators in RGGI states who must purchase allowances. If Pennsylvania joins RGGI, the cost of electricity sold by Pennsylvania would include the costs of the allowances purchased by generators in Pennsylvania, and this leakage ends. All consumers of electricity produced by large generators in Pennsylvania from fossil fuels, including out-of-state purchasers, would bear the cost of Pennsylvania's allowances.

The governor's directive triggered immediate pushback from Republican legislators and segments of the business community. In their view, the initiative would impose a regressive tax on Pennsylvanians, have little impact on global climate change, and increase costs to businesses and the public. They have also questioned whether the Pennsylvania Air Pollution Control Act (APCA) empowers the governor to establish a cap and trade system and participate in a regional system such as RGGI.

The APCA plainly authorizes rulemaking to reduce air pollution and regulate air emission sources. Particularly in light of the EPA's endangerment finding under the Clean Air Act that carbon dioxide and other greenhouse gases threaten health and human welfare, greenhouse gases appear to be pollutants that the APCA would allow PADEP to regulate. But whether a cap and trade system with interstate participation can be imposed without express legislative authorization remains to be decided by the courts.

This debate is symptomatic of the larger political fight that pits advocates of a quick transition to renewable energy sources against supporters of the fossil fuel industry. These disagreements are not limited to control of carbon dioxide emissions from electric utilities. Other sectors such as transportation are significant sources of carbon dioxide emissions, and targeting them for further regulation is also controversial. In addition, carbon dioxide is not the sole greenhouse gas contributing to climate change. Other greenhouse gases such as methane, although emitted in smaller volumes than carbon dioxide, are even more potent contributors to global warming. Yet proposals to regulate their emission likewise trigger polarized responses. So the governor's initiative, while valuable, is only one of the steps needed to address the full range of greenhouse gas emissions.

When more Americans recognize the enormity of the crisis posed by global warming, a consensus may develop to take actions going well beyond a cap and trade system addressing carbon dioxide emissions from large power generators. Fortunately, viable options already exist to reduce greenhouse gas emissions from a greater array of emissions sources. The proposed cap and trade system might be shaped like California's which is not confined to electric generators. The Clean Air Council and others proposed this approach in a petition to the Environmental Quality Board which remains pending.

Alternatively, Pennsylvania could levy taxes on the quantity of carbon emitted by sources, thereby using the market to incentivize energy efficiency and emission reductions. The Climate Leadership Council promotes this approach nationally. In addition, credit/offset systems could be established to provide benefits for emission reductions. And although less favored than in the past, command and control requirements such as emissions limitations or use of specific technologies could be prescribed by regulation.

At a more fundamental level, emission reductions sufficient to meet the governor's goals, and those of the Paris accord, will require technological changes. Some existing programs, such as a renewable energy portfolio mandating that a minimum percentage of electricity be generated from renewable resources, encourage a shift to renewable energy. Additional research and funding to reduce the costs of renewable energy, an end to government subsidy of the fossil fuel industry, and advances in carbon sequestration and other technologies would help effectuate emission reductions.

There is considerable room, however, to establish innovative programs to reduce emissions in areas other than power production and oil and gas extraction. In particular, reductions in emissions from the transportation sector and more efficient use of energy in buildings present significant opportunities. To the extent California and other states retain the ability to mandate or reach agreement with manufacturers to employ stringent fuel economy standards, emissions will be lessened. Encouraging production of electric vehicles may also lower aggregate motor vehicle emissions and work in tandem with reduction of emissions from electric power generators. Efficiency standards for new buildings and energy-oriented retrofits of existing buildings present additional opportunities.

While the government's role is important, the actions of businesses and citizens may prove most critical. If the public demands that greenhouse gas emissions be reduced, it may spur voluntary efforts having even greater impact than those mandated by the government. Consumers have the ability to reward companies who meet the public's expectations that sustainable practices be adopted, or that vehicles and buildings meet sustainability goals. When companies' reputations and sales are on the line, they quickly adapt to customer demands and at times set industrywide standards.

Although the federal government's retreat from its leadership role is counterproductive, opportunities for state and local governments, businesses and the public to develop initiatives remain. Wolf's directive is an important step along a journey that requires participation by all of us.

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