



Testimony of Secretary Patrick McDonnell
Department of Environmental Protection
Hearing on Regional Greenhouse Gas Initiative
House Democratic Policy Committee
Friday, November 1, 2019

Good morning Representative Vitali and members of the committee. On behalf of Governor Wolf, I'd like to thank you for the opportunity to participate in this hearing on Pennsylvania's participation in the Regional Greenhouse Gas Initiative (RGGI). Climate change is the most critical environmental threat confronting the world. Promulgating a regulation that links with RGGI will better protect the health and safety of Pennsylvanians by reducing greenhouse gas emissions from power plants.

Carbon emissions are having catastrophic impacts on public health and the climate. Increasingly severe weather patterns are having a devastating effect on Pennsylvanians across our commonwealth. In fact, 2018 was Pennsylvania's wettest year on record, and the storms that came brought pounding rain, causing flood after flood in communities of all sizes and locations. In just 2018, these extreme storms caused an estimated \$144 million in damage to residents' property, and another \$125 million in damage to state-maintained roads and bridges throughout the state. Pennsylvania residents are bearing the brunt of these costs through increased insurance costs and higher taxes to pay for infrastructure repairs.

Each year, the DEP inventories greenhouse gas (GHG) emissions from each source in Pennsylvania. The good news is that GHGs are decreasing, the bad news is that they aren't decreasing fast enough and are actually projected to increase.

Pennsylvania's GHG emissions come from a number of different sectors, including residential, commercial, industrial, transportation, electricity production, agriculture, waste management, and forestry and land use. The sectors with the largest contribution to the Commonwealth's GHG emissions are the transportation, industrial, and electricity production sectors, all of which combine to account for approximately 82 percent of Pennsylvania's gross emissions. Recently, we have seen the industrial sector, which includes natural gas production and coal mining, become the leading emissions producing sector. Historically, the electricity sector was the

leading emissions source but has recently seen decreasing emissions primarily due to flat electricity demand and fuel switching at power plants from coal to natural gas.

Overall, Pennsylvania's emissions have shown a relative decrease of 12 percent in net emissions from 2005 to 2015¹. This is a good start, but it's still not enough. DEP projects overall emissions to increase from 2015 levels by 2025 and even more so by 2050 if no additional policies are implemented². One recent estimate by Resources for the Future approximates that emissions from the power sector will increase 27% between 2020 and 2026³. These projected increases are due to expected closing of some nuclear power plants, which do not produce any carbon emissions, and a slowdown of fuel switching from coal to natural gas. Greenhouse gas emissions must decrease further, not increase, if we are to have any hope of effectively mitigating anthropogenic climate change.

It was in that spirit that Governor Wolf signed Executive Order 2019-01, which states that Pennsylvania shall strive to reduce net greenhouse gas emissions 26 percent by 2025 from 2005 levels, and 80 percent by 2050 from 2005 levels. If all states achieved similar GHG reduction targets, and other nations met comparable goals, climate science analysis suggests that global temperature rise could be kept below the 2-degree Celsius threshold cited by experts as the level beyond which dire consequences would occur, including sea level rise, superstorms, and crippling heat waves.

There are some who may agree that humans are causing climate change but question why Pennsylvanians should take action, especially given that we account for approximately one percent of worldwide emissions and other national or sub-national governments may not be taking action. However, that is simply not true. The Paris Agreement was signed by nearly every country in the world and most are already implementing the actions they committed to doing. This is significant as the Federal Government has re-committed to withdrawing the country from the agreement.

Per person, the United States ranks tenth for the highest greenhouse gas emissions in the world. As one of the top GHG emitting states in the country, Pennsylvania has an obligation to take action to reduce greenhouse gas emissions and has a duty to act to combat climate change.

One promising opportunity for Pennsylvanians to combat climate change is in clean electricity generation. Clean energy jobs now account for one out of every three energy jobs in Pennsylvania and employs more than twice the number of workers as Pennsylvania's entire fossil fuel industry⁴. Pennsylvania is the third highest electricity generating state in the nation and the top electricity exporter. This means that the Commonwealth generates more electricity than it consumes, and the remaining amount is used in other states. Fifty-seven percent of Pennsylvania's electricity comes from coal and natural gas, so there are significant opportunities to reduce emissions from the electricity generation sector.

¹ [DEP Greenhouse Gas Inventory](#)

² [DEP Climate Action Plan](#)

³ <https://www.rff.org/publications/issue-briefs/options-issuing-emissions-allowances-pennsylvania-carbon-pricing-policy/>

⁴ <https://www.e2.org/reports/clean-jobs-pennsylvania-2019/>

Last month, Governor Wolf's Executive Order directed DEP to begin a rulemaking process that will allow Pennsylvania to join the Regional Greenhouse Gas Initiative, with the goal of reducing carbon emissions from the electricity sector.

RGGI is composed of individual carbon budget trading programs in each state, based on each state's independent legal authority. RGGI provides a "model rule" for each state to adopt independently that then "links" with other states to allow for the interstate buying, selling, and trading of auction credits. This allows states to essentially regulate independently, while it increases the supply of available credits to level the price.

Pennsylvania would first set a limit on the amount of carbon pollution that power plants are allowed to emit and sell pollution permits up to this limit through quarterly auctions administered by RGGI Inc. The program would require large carbon-emitting power plants to buy pollution credits from the auction and the number of credits auctioned is lowered each year. One credit is typically equal to one ton of carbon pollution.

The overall emissions cap is reduced over time. In August 2017, the RGGI states announced a commitment for an additional 30 percent cap reduction by the year 2030, relative to 2020 levels.

The RGGI states have reduced power sector CO₂ pollution over 45 percent since 2005, while the region's per-capita GDP has continued to grow. RGGI-funded programs also save consumers money and help support businesses.

- RGGI investments in 2015 are estimated to return \$2.31 billion in lifetime energy bill savings to more than 161,000 households and 6,000 businesses which participated in programs funded by RGGI investments.
- 1.5 million households and over 37,000 businesses which received direct bill assistance. Clean and renewable energy makes up 16 percent of 2015 RGGI investments and 14 percent of cumulative investments.
- RGGI investments in these technologies in 2015 are expected to return \$785.8 million in lifetime energy bill savings to 19,600 participating households and 122 businesses in the region.
- RGGI-driven reductions in pollutant emissions have resulted in over \$5.7 billion in health and productivity benefits in the states participating in RGGI.

RGGI is a well-established and active carbon trading mechanism for which all the Northeast and most of Pennsylvania's neighboring states are participating, which is an example of a successful market-based program that has significantly reduced and continues to reduce emissions through a carbon pricing mechanism.

Governor Wolf's Executive Order directs DEP to develop and present a regulation to the Environmental Quality Board by July 31, 2020. The regulatory process will include significant opportunity for engagement by the General Assembly, key stakeholders, and residents of Pennsylvania who by a wide margin support the state taking concrete steps to address climate change. In fact, Yale studies show that nearly 70% of Pennsylvanians think global warming will harm future generations and 78% of Pennsylvanians support regulating CO₂ as a pollutant.

Looking forward, assuming the Environmental Quality Board adopts the proposed rulemaking, the regulation will be enacted consistent with the requirements of the Regulatory Review Act, which can take upwards of two years.

Opponents of RGGI state that this is a carbon tax or a new government price on carbon. The reality is that there is already a price on carbon, it's just that the wrong people are paying it. RGGI is a low-cost solution to a high-cost problem. With RGGI, electricity generators incorporate the price of carbon pollution into their product. This is in contrast to the current system – in which residents of Pennsylvania are paying for the pollution through worsened air quality, increased health care costs, and climate change impacts to infrastructure, agriculture, and more.

Developing a regulation that links with RGGI states is one of many actions that we plan to take to combat climate change. The impacts of climate change are real and will continue to put Pennsylvanians at risk from increased flooding, higher temperatures, and more. These impacts can be alleviated if all Pennsylvanians—including citizens and businesses, but especially leadership—understand their responsibility to combat and adapt to climate change and take action. The benefits of acting include economic growth, jobs, cleaner air, resilience and more. Pennsylvanians want to provide a prosperous commonwealth with clean air, water, and land for generations to come, now is the time to take action on climate change.

Thank you again for inviting DEP to participate in a discussion on this very important topic. I am available to respond to any questions you may have.