



My name is Ayres Freitas from Pittsburgh, PA. I am a professor of Physics at the University of Pittsburgh, but I am not testifying on behalf of the university, but as a private resident. I support the proposed rule of the Environmental Quality Board to regulate CO₂ emissions and join the RGGI program. Many of the previous testifier have already expounded the scientific, economic and health reasons calling for this measure, and I do not wish to repeat them here. Let me only reiterate that, according to data from NOAA, the year 2020 continues the trend of being significantly more than 1°F warmer and also wetter than average in Western PA¹, even though it may feel dry compared to 2018 and 2019.

In the following, I would like to give some perspective on several objections against the proposed rule that have been expressed. For instance, there is understandable concern that it may lead to loss of jobs in the natural gas sector. However, existing gas facilities and power plants will be able to continue operating under RGGI for many years. The most immediate impact of the cap and trade scheme will be on plans for future power generating facilities. Currently 93% of new electricity generating capacity under construction in PA is based on natural gas, according to the PA Public Utility Commission². Continuing along this trajectory will make Pennsylvania dependent on a single source of power with wildly fluctuating prices, and it will lock in future CO₂ and methane emissions and other environmental hazards. If we continue to invest in fossil fuel infrastructure, any action by future governments to curb climate and air pollution will need to be much more drastic and harmful to the state economy.

Instead, by joining RGGI now, the state provides a framework for predictable long-term planning by energy and utility companies. It supports investment in renewable energy and energy efficiency industries, which provide good and stable jobs for Pennsylvanians. The E2 business group reports that employment in clean energy in PA has grown by 60% to more than 90,000 from 2014 to 2018³. At the same time, gas industry jobs are very unreliable. Jobs in natural gas extraction have dropped by more than 60% between 2011 and 2016, according to the PA Independent Fiscal Office⁴, not because of environmental regulation, but simply due to the inherent volatility of the fossil fuel market.

By regulating CO₂ emissions through RGGI, the state can do its part to limit the worst effects of climate change, while supporting stable job growth in renewable energies. Two independent polls conducted by Yale University and by Climate Nexus show that at least 70% of Pennsylvanians support regulations to reduce CO₂ emissions^{5 6}, including majorities of both Democrats and Republicans. It would be preferable to implement such measures through legislation. But since leaders of the PA legislature have decided to abdicate their responsibility and do not allow any climate change related bills to get out of committee and be put to a vote, the state administration must step in to fill this void. Therefore I strongly support the proposed rule.

1 <https://water.weather.gov/precip/>

2 https://www.puc.pa.gov/General/publications_reports/pdf/EPO_2020.pdf

3 <https://www.e2.org/wp-content/uploads/2019/06/E2-Clean-Jobs-Pennsylvania-2019.pdf>

4 <http://www.ifo.state.pa.us/releases.cfm?id=91>

5 <https://climatecommunication.yale.edu/visualizations-data/ycom-us-2016/>

6 <https://climatenexus.org/wp-content/uploads/2015/09/Pennsylvania-Climate-Change-Poll-Toplines.pdf>