



Stephen Hoffman

From: ecomment@pa.gov
Sent: Tuesday, December 15, 2020 3:07 PM
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Cc: c-jflanagan@pa.gov
Subject: Comment received - Proposed Rulemaking: CO2 Budget Trading Program (#7-559)

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The enclosed comment was received as part of the following testimony:

Testimony name: Public Hearing 4 (6pm) - #7-559
Testimony date: 12/9/2020 12:00:00 AM
Testimony location: WebEx

Re: eComment System

The Department of Environmental Protection has received the following comments on Proposed Rulemaking: CO2 Budget Trading Program (#7-559).

Commenter Information:

Mark Fichman
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Comments entered:

Thanks to the DEP for giving me an opportunity to testify regarding the Regional Greenhouse Gas Initiative (RGGI). My name is Mark Fichman. I am an emeritus Professor of Business at Carnegie Mellon University in Pittsburgh. I support Pennsylvania entering the CO2 Budget Trading Program also known as the Regional Greenhouse Gas Initiative. I think the case for doing this based on reducing greenhouse bases and mitigating global climate change is compelling and should be sufficient reason to join the RGGI, but I want to add three observations that I believe support Pennsylvania's entry into the RGGI apart from climate change. I want to make the ``business case'' apart from the social and human welfare case (which is sufficient in itself).

1. If Pennsylvania joins the RGGI, additional funds would be generated

that would add money and jobs into the economy of Pennsylvania. When you create a marketplace for carbon and carbon offsets, money will flow to projects that can reduce carbon at the lowest cost

To give you

one concrete illustration of the incentive effects already in place, consider the following.

Here in Pittsburgh the Rice Brothers have invested in EQT and Rice Energy, both large natural gas companies. They have now started Rice Acquisition Corporation. The business is focused on 'deep decarbonization.' (Amy Litvak, Pittsburgh Post-Gazette, Dec. 9, 2020) Here is what they say to their investors. "We believe the widespread adoption of renewable fuels by major sectors of the economy such as freight, air and marine transportation, residential and industrial heating and power generation and energy storage will create a profound disruption resulting in a very large addressable market." Here you see oil and gas investors recognizing the transition away from carbon is with us now.

2. The cost of renewable energies is declining and will continue to decline. Lazard, an investment bank, has developed a comparison process for renewable energy contrasted with hydrocarbon based energy. "Lazard's latest annual Levelized Cost of Energy Analysis (LCOE 13.0) shows that as the cost of renewable energy continues to decline, certain technologies (e.g., onshore wind and utility-scale solar), which became cost-competitive with conventional generation several years ago on a new-build basis, continue to maintain competitiveness with the marginal cost of existing conventional generation technologies." (<https://www.lazard.com/perspective/lcoe2019>). The attraction to renewable energies will grow as they continue to become more and more cost competitive with traditional hydrocarbons. The RGGI initiative will enhance and support the move to renewables, which are currently cost competitive in Lazard's analysis and trending towards becoming more attractive purely on an economic basis. Of course, if you add in the clear benefits to society and the planet of reducing greenhouse gases, the case for facilitating the use of renewable energy sources using the RGGI becomes much stronger and more compelling economically. Interestingly utility companies are starting to move to renewables without such incentives. In New Mexico, the Public Service Company of New Mexico shut down a large coal plant, planning to build a natural gas plant in its place. After being presented with arguments for building a facility using solar farms, wind and batteries, they cancelled the natural gas plant. The economic case for renewables is here today and RGGI will help accelerate that move.

3. Any decision on RGGI has four possible outcomes.

(1) Pennsylvania

could join RGGI and discover they were right to do it, as the benefits with respect to global warming were greater than the costs. That is likely but not certain. In decision making terms, this is a true positive.

(2) Pennsylvania could decide not to join the RGGI and discover that the benefits did not outweigh the costs. That is very unlikely but some people discount global warming and value a hydrocarbon based economy. These two outcomes are usually contrasted in the debates on climate change. But as a business person, I know there are two other possibilities. In decision making terms this is a true negative.

(3) Pennsylvania could join the RGGI and find out it did not provide the expected benefits. The costs would be investments in renewables without sufficient return on the investment. With some small probability, there would be a several billion dollar cost to be borne by the state. This is a false positive. This is like buying insurance on your house and never making a claim.

(4) Pennsylvania could decide not to join the RGGI when in fact the RGGI would have been beneficial both economically and in reducing climate change. The cost of being wrong on an investment again is a few billion dollars. The cost of being wrong on climate change is simply catastrophic and will change the lives of my children and grandchildren in unimaginably awful ways. Being wrong on climate change and foregoing opportunities to reduce it has far greater cost than being right on climate change. This is a false negative. This is like not buying insurance on your house and then you a fire! You see the cost of the false negative is far higher than the cost of any of the other three outcomes.

If opponents of RGGI are right, we are out a few billion dollars. If opponents of RGGI are wrong, we will be living (if we can) in a far more hostile and difficult world. When you consider all 4 possibilities. supporting RGGI is an easy decision regardless of your views on the truth or falsity of the claims of climate change and its existence and effects.

Thank you for your time, attention and efforts.

No attachments were included as part of this comment.

Please contact me if you have any questions.

Sincerely,
Jessica Shirley

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