



Testimony for CO2 Budget Trading Program Regulation

Hello Members of the Environmental Quality Board,

I am Dr. Devonna Sue Shoemaker, a retired Professor of Biology Emerita. I am writing to you today in support of PA joining the RGGI. I moved to PA in 1994 accepting employment at Saint Francis University to build the marine biology program. Yes, SFU has a marine biology program on top of the mountain. I fell in love with the region which reminds me of Southern Indiana, where I'm originally from. I am a scuba diver and coral reef ecologist and love our oceans. I also love the freshwaters that flow into the ocean from the mountains in this region. Thus, I found the region around SFU a very stimulating place to teach the young minds of our college students. Yes, we do have to travel to the ocean to complete research but this makes our studies even fuller since our region effects the oceans greatly. It was while teaching in the 1990's that I became aware of the one of the problems with our region; air quality. I was surprised at the results of air quality testing on top of Cresson Mountain. Then, I realized that the prevailing winds come out of the west and that several electric generation plants were located to the west. So, my image of living up in clean mountain air was tainted. However, my love of the region was not. Instead, I decided that I needed to live what I was teaching the students. I have driven a hybrid car since that time, even though it takes a few years to justify the costs. And, I have joined Solar United Neighbors placing solar panels on my roof top. Although it will take several years to re-coup my costs, it is definitely worth it. We, as residents of PA, must look forward in solving the environmental problems that previous generations have caused. We must realize that rising health costs are being caused by air quality. We must also realize that our region needs economic stimulus which could come from adding more sustainable energy jobs.

I know that I can't teach you ocean science in 5 minutes but here's a start. The oceans are what have balanced levels of CO2 and O2 in the atmosphere for thousands of years. However, without getting into the chemistry, the balance that was present for years has become unbalanced. Thus, the oceans are acidifying. With lower pH, corals are struggling to make their calcium carbonate homes. Shelled organisms are having trouble producing their shells. These are organisms that live at the base of the food chain. Thus, complete ecosystems are becoming disrupted and loss of the reef ecosystems around the equator is becoming a real possibility. Having been a scuba diver since 1968 and involved in the diving industry since 1975, I can speak to this in economic terms. The industry is struggling because these reefs supports billions of people who live and work on the islands that are surrounded by the reefs. Many of these people depend on the US and European dollars for survival. Also, with water temperatures rising, ice is melting and water levels are rising. The Northeastern States will all have to meet this challenge as oceanic water brings high tides higher into their port cities. We will see the saltwater wedge move in closer to Philadelphia and the water levels rise causing additional PA dollars needed to build levees around the city to keep the water out.

I am positive that we can start addressing these issues now and significantly reduce levels of CO2 in the atmosphere. By utilizing science and technology together, we can solve the issues and can bring new jobs to our region and build the economics of the region. We can meet this challenge if we act now. And, acting united by joining the RGGI is the strongest way to start our actions. Coal generation plants are not going to disappear in the short run. The challenges we need to meet will take many years and

thus we will have to rely on generation plants. But, the sooner we can change into sustainable energy sources, the better. And, the sooner we can reduce the CO2 load entering the atmosphere, the better. By joining the RGGI, people in PA will gain new economic opportunities increasing jobs in sustainable energy, will have reduced energy costs, and will gain health benefits by eliminating air pollution. All of these benefits have already been realized in the states that currently are members of RGGI. PA needs to get onboard with the RGGI now.

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