



Testimony for CO2 Budget Trading Program Regulation

Submitted by:

Jeaneen A. Zappa
208 Mary Ann Drive
Glenshaw, PA. 15116
J33zappa@gmail.com

Private Citizen

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Good afternoon and thank you for the opportunity to be here. My name is Jeaneen Zappa, and I am testifying today as a private citizen. But I come to you with years of professional experience tied to energy efficiency projects. I served as the first Sustainability Manager for Allegheny County. In that role, I participated in the selection and oversight of a contractor to perform a \$26 million energy savings project across multiple county facilities, including the County Jail, several nursing homes, the courthouse, and a number of additional properties. The project saved \$2 million annually for the County. More recently, until its merger with another organization this past summer, I served for 7 years as the Executive Director of Conservation Consultants Inc., a 501c3 nonprofit organization that provided energy efficiency services to nearly 4,000 Southwestern Pennsylvania households annually, the majority of them lower-income families.

I testify today in support of the proposed regulations to allow Pennsylvania to enter into the Regional Greenhouse Gas Initiative program and to urge your use the auction proceeds to support energy efficiency investments.

Energy efficiency delivers proven results. De facto, efficiency work reduces consumption, and the associated CO₂ for each kilowatt of energy that is no longer needed. I will illustrate the importance of RGGI participation through three key points which flag the need for additional resources **to help residential customers at all income levels, and most especially those who are lower income.**

First – the Public Utility Commission already requires utilities in our Commonwealth to provide Low Income Usage Reduction Programs. The customers served by these programs must have *both* high energy usage *and* household incomes typically at or below 150% of Federal Poverty Guidelines. **But some of the worst-performing homes cannot be served by the program and are deferred. My point is that existing low-income energy efficiency programs work well and should be leveraged, augmented and/or adjusted in conjunction with RGGI funds to achieve even more.**

According to the PUC's own 2019 report, on Universal Service Programs Collections Performance⁽¹⁾, LIRUP programs delivered real savings. In 2017 – the most recent year for which

data is provided -- LIURP delivered an average across all utilities in the state of 8% energy reductions for projects in electrically heated homes and 16.3% in gas-heated homes. Yet, the same report shows that, on average, respectively of electric and gas utility companies, only 41% and 34.4% of payment-troubled, low-income customers enrolled in the Customer Assistance Program actually also participates in the energy-savings opportunities through the LIURP program. That means that *many* lower-income households can still benefit from EE.

But not all who are eligible will qualify. If situations, like moisture in a home, cause a home to be deferred from eligibility for energy efficiency and building envelope improvements, that lower-income household does not get energy efficiency services. If RGGI could position more homes to qualify for weatherization work by providing tandem or contingent funding to address these issues, more of the very worst-performing homes will become less wasteful and less polluting.

Columbia Gas of Pennsylvania engaged Apprise Consulting to evaluate why homes were deferred from its own LIURP program and found that 68% of homes exhibited a moisture issue and 20% of deferrals were due to roof leaks and 25% of deferrals were due to wet basements⁽²⁾.

My second key point is that these homes really need energy efficiency investments. People who are poor often live in poorly maintained, energy-inefficient homes. Focusing resources to fix these “worst performing homes” will deliver fastest carbon savings.

The American Council for an Energy Efficiency Economy published in September the “2020 Energy Burden Report,” the third that it has released. An energy burden is the percentage of total income spent on home energy bills. Anything above 6% is considered to be high. Each report shows that Pennsylvania homes fare poorly, with Philadelphia and Pittsburgh consistently ranking among the worst in the country.

The current report⁽³⁾ shows that Philadelphia’s Median energy burden is 3.2%, and the median low-income energy burden is 9.5% in the Philadelphia metropolitan area. n A quarter of low-income households have an energy burden above 19% in the Philadelphia metropolitan area, which is almost 6 times higher than the median energy burden. n 26% of Philadelphia households (609,507) have a high energy burden (above 6%). ACEEE. Plans to publish an addendum by year-end with updated figures for Pittsburgh, but past reports show it having a similar profile to that of Philadelphia, with energy burden exceeding 8%. Sadly, these issues disproportionately and more severely impact renters, the elderly and minorities.

It is notable that the report’s lead author, Ariel Dreihobl, said the poor condition of these homes directly related to the high energy burden. She said, “From bad insulation to outdated heating or air conditioning equipment, there’s a lot of energy that many homes use unnecessarily. If we focus on supporting those most in need to make their homes more efficient, those investments can go a long way to reduce their bills.”

Finally, my third point is that middle income customers need help to make energy efficiency improvements and they clearly respond to incentives to make energy efficiency improvements in their homes, and RGGI can help to drive these improvements across the commonwealth. At the nonprofit CCI, we conducted a friendly competition starting in August of 2019. Fifty-four Pittsburgh area homeowners voluntarily committed to make energy-saving improvements in their homes and to start with an energy audit. The winner spent just about the same as the higher end of the LIURP programs -- \$8,814 and achieved a whopping 27% reduction in their energy use.⁽⁴⁾ The project found that 87% of the attics didn't even have half of the amount of insulation specified by building code. A surprising 11% of the attics had absolutely no insulation at all. In addition, 43% of the homes had walls that could be insulated but were not. The average CO2 emissions footprint of these homes was 25,525 pounds per year, and our energy audit reports and modelling projected that we could reduce that by 29%, or nearly 7500 pounds of carbon, with **energy efficiency** improvements. These could be accomplished at an affordable average net financing cost of \$44 per month and 11-year simple payback calculation.

In conclusion, I wanted to remind the Board that 70% of electricity is used in buildings and that buildings are responsible for 31% of total U.S. carbon emissions. By directly investing in energy efficiency through participation in RGGI, Pennsylvania can help all households to save money, save energy, save carbon and address long-standing know opportunities for improvement.

1. https://www.puc.pa.gov/General/publications_reports/pdf/EDC_NGDC_UniServ_Rpt2019.pdf
2. Data shared with CCI for "Health Homes Scorecard" by Deb Davis, Manager of Universal Services, and presented at training conference at Penn State University, September 2019.
3. <https://www.aceee.org/energy-burden>
4. <https://getenegysmarter.org/showcase>