Testimony of Robert C. Altenburg Senior Director for Energy and Climate, Citizens for Pennsylvania's Future (PennFuture)

Before the Environmental Resources and Energy Committee
Pennsylvania House of Representatives
November 13, 2023

Testimony in Support of HB 1215

Good morning, Chair Vitali, Chair Causer, and members of the committee. My name is Robert Altenburg, and I'm the senior director for energy and climate at Citizens for Pennsylvania's Future (PennFuture). We are a statewide organization leading the transition to a clean energy economy in Pennsylvania and beyond.

Historical Context

Looking back on the lessons from the fracking boom, it's increasingly clear that Pennsylvania's approach to the gas industry has largely been a failure.

Despite the promises made by the industry, and huge subsidies provided by the state, both income and jobs in counties with gas generation has lagged the national average¹—our communities have been left with pollution instead of prosperity. Coal jobs lost to gas haven't been replaced, we are increasingly dependent on unreliable gas plants for power, and volatile gas prices have driven up our electric bills. For all the claims that gas would be a "bridge fuel" to a cleaner, more affordable, and more sustainable economy, that bridge was left unbuilt.

This was not inevitable. We could have adopted policies and made investments that would have created more jobs, produced more clean energy, and built a more resilient power grid. But we didn't take advantage of those opportunities.

Now, with potential for hydrogen to grow as an industry, we again have a choice. We can repeat the pattern of blindly subsidizing the gas industry and hoping for different results, or we can do things differently this time and take meaningful steps toward the sustainable future we need.

¹ Ohio River Valley Inst., Appalachia's Natural Gas Counties: Contributing more to the U.S. Economy and Getting Less in Return (Feb. 12, 2021)

Putting Hydrogen in perspective.

The Department of Energy,² the Intergovernmental Panel on Climate Change³, and other organizations have recognized hydrogen as a potential tool for decarbonizing our economy. But it is important to keep that potential in perspective.

The Pareto Principle tells us that, in a lot of things, 80 percent of the results come from 20 percent of the work. Football teams might have a dozen or more plays in their playbooks, but most of what moves the ball down the field isn't the trick plays, it's focusing on the basics and executing that well.

Decarbonizing our economy isn't much different. To make the most progress, our effort should also be focused on the basics—doing the relatively simple things we already know how to do. This means investing in cost-effective energy efficiency wherever we can, cutting emission from our power grid with new clean renewable generation, and plugging in wherever possible to use that clean energy instead of polluting fossil fuels.

The last ten to fifteen percent of pollution however is going to be more challenging. We expect things like jet aircraft, moving cargo, making steel, and some other industrial processes will be harder to electrify in a cost-effective way.⁴ For those things, it makes sense to look at alternatives—that is where hydrogen may have a role to play.

HB 1215 is a step in the right direction.

To make Hydrogen to be part of a sustainable future, it's tempting to focus on creating as much hydrogen as possible by all available means, but that misses the point. Increasing hydrogen production alone doesn't solve our problem—the real test is how effective we are at using it to reduce carbon pollution. HB 1215 addresses this in several ways.

First, it directs our investment to truly clean hydrogen. It doesn't prevent companies from making hydrogen using polluting technologies, and it doesn't stop such projects for qualifying for federal programs, but it focuses our limited resources on encouraging the cleanest hydrogen.

Second, this bill has an "additionality" provision that encourages construction of new clean energy sources. It doesn't prevent using existing clean generation to make hydrogen, but until our grid has a surplus of clean energy, diverting existing clean resources to other uses will result in more polluting fossil-fuel pollution backfilling the demand. Additionality, though, has an added benefit—this new construction will also drive more jobs and more economic

² U.S. Dept. of Energy, U.S. National Clean Hydrogen Strategy and Roadmap (Jun. 2023)

³ [Cite IPCC mitigation report]

⁴ See: Michael Liebreich/Liebreich Associates, Clean Hydrogen Ladder, Version 5.0, 2023.

development than running existing plants, and it will also help make Pennsylvania a leader in clean energy.

Finally, this bill targets our support to the qualifying clean hydrogen uses that are the most likely to be needed. There are countless situations where using hydrogen is technically possible but unlikely to prove cost effective compared to other available alternatives. Heating our homes, fueling our cars, or running large power plants aren't likely to be competitive. Instead, we should focus on using hydrogen in aviation and shipping, as a chemical feedstock, for steel making, and other hard-to-electrify industrial uses. These are all industries where Pennsylvania can lead.

Conclusion

One important lesson we've, hopefully, learned from fracking's failure is that if we keep putting off tackling pollution until tomorrow, that work never gets done. Polluters will always have excuses why now is not the right time, but with every passing year, achieving the necessary emission reductions in the time we have left keeps getting more and more difficult.

Pennsylvania can be a leader in the sustainable economy of the future, but to do so, we need to prioritize investments in clean industries, build our workforce, and finally start work on that long-neglected bridge.