



PennFuture

October 4, 2021

Before the PA Senate Environmental Resources & Energy Committee and the PA Senate Community, Economic & Recreational Development Committee:

“Consumer & Economic Impacts of Failing to Invest in PA's Natural Gas Infrastructure”
Testimony of John Ukenye, Policy Analyst, PennFuture

Good afternoon Chairs Yaw, Yudichak, Comitta, Cappelletti, and Members of the Committees:

My name is John Ukenye and I serve as the Policy Analyst at Citizens for Pennsylvania's Future (PennFuture). We are a statewide non-profit environmental advocacy organization leading the transition to a clean energy economy in Pennsylvania and beyond. We are protecting our air, water and land, and empowering citizens to build sustainable communities for future generations. We thank you for this opportunity to submit written comments.

In short, instead of failing the industry, Pennsylvania has given the fracked gas industry decades of handouts amounting to billions of dollars. In return, Pennsylvanians have received severe environmental degradation, harmful effects on our health, and lack of investment in an ever growing, multi-billion-dollar economic sector. We, as a Commonwealth, have bought into an unsustainable economic focus through extracting our shared public natural resources in place of investing in a vibrant and healthy clean energy future.

In February of 2021, PennFuture released the third edition of our Fossil Fuel Subsidy Report. In this report, we uncovered that Pennsylvania provided \$3.8 billion in fossil fuel subsidies in Fiscal Year 2019 by systematically disabling many of its standard tools for collecting tax revenues, allowing the industry to extract public resources at little to no charge, and awarding the industry grants and tax credits.¹ Meanwhile, in the same time period, the industry imposed \$11.1 billion worth external costs to the state and its residents.

We recognize the need to secure the livelihood of Pennsylvanians, especially in this volatile time as the country as a whole begins to recover from the COVID-19 pandemic. However, we also recognize that this recovery period is a source of opportunity. Pennsylvania, as many other states and nations already have, can leap to the forefront of the new, clean energy economy and provide hundreds of thousands of high paying jobs in a diverse number of sectors for the people across this great Commonwealth.

Thus, it is clear to us that Pennsylvania's continued investment in the fracked gas industry is harmful to workers, businesses, and the general public. A better path forward doesn't lie in some far-off future, it is already here, and it is time for our great Commonwealth to seize this opportunity through heavily and seriously investing in the New Clean Economy.

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Better Jobs in the New Clean Economy

Greener, more environmentally friendly energy alternatives are already proving to not only be both cost effective for producers and consumers, but also offer higher-paying wages for those in the green energy job sector.ⁱⁱ

In regards to cost effectiveness, U.S. Energy Information Administration's (EIA) data predicted solar and wind energy would dominate America's new energy generation in 2020.ⁱⁱⁱ EIA also projected natural gas generation to only grow 1.3% in 2020—the slowest rate since 2017—while non-hydropower renewable energy generation will grow 15% in 2020, the fastest rate in four years.^{iv} Early, actual 2020 reports are beginning to show that solar, wind, and other renewable energy sources “beat earlier estimates and all previous records despite the economic slowdown that resulted from the COVID-19 pandemic...exceeding expansion in 2019 by close to 50 percent.”^v

Over the last decade, wind energy prices have fallen 70% and solar photovoltaics have fallen 89% on average, according to a 2019 report.^{vi} Utility-scale renewable energy prices are now significantly below those for coal and gas generation.^{vii} Experts and analysts have estimated that, with wind, solar, and storage prices falling at such a fast rate, the United States can reach 90% clean electricity by 2035 without raising customer costs at all from today's levels, and actually decreasing wholesale power costs 10%.^{viii} In other words, renewable energy sources are now cheaper than the average cost to operate coal, the average cost to build new fracked gas sites, and can be great for the consumer's bottom line.^{ix}

In regards to (higher) wages, compared with jobs in the coal, fracked gas and petroleum industries, jobs in solar and wind pay about 50 cents more, and this industry is only at the beginning of its ascendancy.^x Specifically, wind and solar electricians—HVAC technicians, mechanics, welders and assemblers—are paid \$2.50 more than their counterparts in the coal and gas industry.^{xi} Clean energy jobs are more likely to be union jobs than jobs across the economy as a whole—9 percent versus 6 percent—which correlates to higher pay and better benefits.^{xii}

In July of 2020, PennFuture released a report titled *A Green Stimulus and Recovery Platform for Pennsylvania* which detailed how transitioning to a green energy future would preserve or create 389,000 good paying and environmentally sustainable jobs in a variety of sectors and types such as tourism, blue-collar, and white-collar jobs—including detailed steps our legislature can take to make this a reality.^{xiii}

As America faces an economy post-COVID 19, the green energy sector presents an avenue to create jobs on a massive, interstate scale that includes a diverse workforce of people with varying levels of education and skill set.^{xiv} Such a new economy cannot be realized without proper investment, and Pennsylvania, facing the brunt of the dying fossil fuel industry, is the perfect place to rise to the moment and invest.

Missed Opportunity for Green Investment in the Lehigh Valley

As Lehigh Valley is expected to be highlighted at today's hearing, it is important to at least note how the region has already begun doing its part to invest in a clean energy future, while simultaneously highlighting a missed opportunity in our Commonwealth.

Lehigh University, Lafayette College, Muhlenberg College, and Dickinson College announced a partnership in February 2020 to purchase renewable energy as a collective.^{xv} Together they planned to purchase the largest amount of solar power of any group of independent higher education institutions nationally. The schools signed a 15-year virtual power purchase agreement (VPPA) to buy renewable energy that will be generated by a newly-constructed 200+ acre solar farm located in Texas.

This initiative would help prevent over 70,000 metric tons of carbon emissions each year, equivalent to removing over 15,000 cars from the road or the amount of carbon sequestered by nearly 85,000 acres of forest. However, by investing in solar energy in a far-away state like Texas due to our own lack of adequate clean energy infrastructure, we as a Commonwealth are forgoing an opportunity to bolster our own economy, invest in our own workers, and foster our own clean energy sector.

Transitioning to the New Clean Economy is Good for the Overall Economic Development in Pennsylvania

Building new renewable energy is cheaper than running existing coal plants and prices get cheaper every year.^{xvi} By 2025, almost every existing coal plant in the United States will cost more to operate than building replacement wind and solar within 35 miles of each plant.^{xvii}

The renewable energy industry has become a major U.S. employer. E2's Clean Jobs America 2019 report found nearly 3.3 million Americans working in clean energy—outnumbering fossil fuel workers by 3-to-1.^{xviii} E2 reported the fastest-growing jobs across 12 states were in renewable energy during 2018, and renewable energy is already the fastest-growing source of new U.S. electricity generation, leading the U.S. Bureau of Labor Statistics to forecast America's two fastest-growing jobs through 2026 will be solar installer (105% growth) and wind technician (96% growth).^{xix}

U.S. coal consumption fell 4% in 2018 to its lowest point in 39 years due to accelerating coal plant closures and reduced coal plant utilization.^{xx} The electric power sector represented 93% of total U.S. coal consumption from 2007 to 2018, but over that period 68 GW of coal-fired generation (out of 313 GW in 2007) retired, capped by 13 GW of retirements in 2018.^{xxi}

Rocky Mountain Institute (RMI) has not only detailed the benefits of renewable energy on the nation's economy, but they have repeatedly highlighted how Appalachia, and Pennsylvania specifically, can stand the most to gain from a Clean Energy Economy.^{xxii}

By 2030, US wind and solar is on track to generate more than \$60 billion in annual revenue—on par with the three leading US agricultural commodities: corn (\$58 billion), soy (\$44 billion), and beef production (\$70 billion). Analysis conducted for RMI's *Seeds of Opportunity* report indicates that the projected 600 GW of new wind and solar projects built between 2020 and 2030 would generate \$220 billion in direct, lifetime economic benefits.^{xxiii} This is a gamechanger for Rural America, of which much of Pennsylvania falls into.

Specifically, onshore wind and utility-scale solar projects can result in \$2.7 billion in tax revenues collected by local governments annually; \$2.2 billion collected in land lease payments to rural landowners hosting turbines or panels on their property; \$2.3 billion in construction jobs and wages; and \$3.7 billion in operations and maintenance jobs and wages, all occurring annually by 2030.^{xxiv}

Conclusion

Pennsylvania has a legacy of environmental damage from extractive industries including timber, oil, coal, and gas. In response, we passed a Constitutional amendment, Pa. Const. Art. I § 27, acknowledging our fundamental right to clean air and pure water and requiring that the government act as a trustee with the duty to conserve and maintain our environment and our shared public natural resources. The threats associated with climate change only add to the urgency of this duty.

Instead of doubling down on an unsustainable and dirty fracked gas industry, Pennsylvania must work to reduce dependence on fossil fuels and promote alternatives such as energy efficiency and clean renewable energy. To do so, we must align our investments with our goals and avoid unintended side effects that promote pollution and poison our communities and our workers. This is a significant undertaking, but as a start PennFuture recommends the following:

- **Regular and ongoing evaluation of the costs and benefits of the fracked gas and fossil fuel subsidies:** As time and technology changes, subsidies that were once justified may no longer make sense. Regular reconsideration of existing subsidies is needed to ensure we are spending money wisely and working towards our goals.
- **Engaging in discussions with statewide, national, and international leaders in the renewable energy space:** As renewable energy companies continue to establish themselves as leaders in the ever-growing clean energy economy, it would be wise for Pennsylvania economic development leaders to engage in job-creation centered dialogue in order to foster a robust and diverse clean energy sector in this great Commonwealth.

We believe Pennsylvania can build a vibrant and growing economy on clean and renewable energy. We ask our Legislature to help lead us to that New Clean Economic future by investing in renewable energy industries and jobs in Pennsylvania.

For more information, please do not hesitate to reach me and use PennFuture as a resource.

Sincerely,

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