



TESTIMONY
OF
ARTHUR J. STEWART
ON BEHALF OF
THE PENNSYLVANIA GRADE CRUDE OIL COALITION
BEFORE THE
HOUSE ENVIRONMENTAL RESOURCES AND ENERGY COMMITTEE

DECEMBER 15, 2021

Mr. Chairman and Members of the Committee,

My name is Arthur Stewart. I am the Secretary of the Pa Grade Crude Oil Coalition (PGCC), a trade organization representing Pennsylvania conventional oil and gas producers. On behalf of the many small businesses that constitute PGCC's membership, and the families sustained by those businesses, please allow me to THANK YOU for this opportunity to comment on HB 2104 sponsored by Representative Kathy Rapp.

PGCC members operate shallow oil and gas wells across western Pennsylvania, and our legacy dates to 1859 when Edwin Drake drilled the world's first conventional oil well in Titusville, PA. PGCC's members proudly supply natural gas to millions of Pennsylvania households, schools, hospitals, and businesses. Our oil is prized for its lubricating qualities, and much of that oil is refined in the world's oldest continuously operating refinery located in Bradford, PA. PGCC members have a legacy of supplying clean, safe, inexpensive, and reliable energy to Pennsylvania citizens for over 150 years.

Unfortunately, that 150-year legacy has not earned our industry respect or a level playing field with the government. Instead, American society has become fixated on perceived negative impacts of oil and gas. Seemingly ignorant that fossil fuels provide 84% of the energy that all of us consume, many American politicians want to pass subsidies, laws and regulations that will cripple or destroy PGCC's industry.

At this moment my industry faces new department of Environmental Protection (DEP) Chapter 78 regulations that will increase costs for oil and gas surface operations and waste management, ridiculously complicated federal EPA regulations concerning methane, moratoriums on pipelines, and taxpayer-funded subsidies that tilt the energy playing field against our industry and in favor of wind and solar, or what are commonly termed "green" energy sources.

The playing field tilts in favor of wind and solar due to the belief that wind and solar are magically free of negative impacts. That belief is, of course, a fantastic delusion. There is no such thing as green energy.

The manufacture of wind turbines and solar panels requires enormous amounts of mining. I'm providing you a graph from the International Energy Agency that shows the massive earth disturbance caused by mining ore for wind and solar, compared to the small amount of disturbance caused by the oil and gas industry. Just because the mining for solar and wind is currently out of sight and mind, under China's monopoly, doesn't undo the fact that such mining leaves gaping holes in the earth (visible from space), and produces millions of tons of highly toxic water.

The installation of wind and solar facilities requires major earth disturbance. Just like the oil and gas industry, wind and solar industries require roads and foundations. But compared to the oil and gas industry the amount of acreage consumed by wind and solar is enormous. Wind turbines and solar panels are very inefficient harvesters of energy. To make up for that inefficiency the wind and solar industry must install vast solar and wind fields, eventually consuming acreage larger than entire states. Wind and solar installations are wiping out forests and animal habitats on a massive scale that will dwarf the earth disturbance caused by the oil and gas industry.

In Pennsylvania, our own Pennsylvania Game Commission has recognized these problems by banning the installation of wind turbines on the Game Commission's 1.5 million acres of land. In addition to destroying vast swaths of habitat, wind turbines kill eagles, ospreys and other birds; in winter, wind turbines can shed massive blocks of ice, generating missiles that streak through the air; and wind turbines generate an annoying noise that is leading to "not in my back yard" lawsuits. Thus, in 2018 the Game Commission passed a moratorium stating: "that wind energy development on State Game Lands (is) inconsistent with the responsibilities of the PGC under both the Game and Wildlife Code and...the Pennsylvania Constitution." (Emphasis added). In other words, the Game Commission has concluded that the environmental impact of wind turbines is bad for generations yet to come.

Interestingly, the Pennsylvania Game Commission does allow drilling for natural gas upon its 1.5 million acres. Imagine the consequences, if in that drilling process, the gas industry killed an eagle...there would be a fanatical response up to and including criminal action. Yet wind turbines kill birds daily. This is the uneven playing field I am talking about.

That brings us to the issue of decommissioning, where that playing field tilts steeply. Decommissioning in my industry is highly regulated as it is in other traditional energy industries. Yet, in Pennsylvania today, solar panels and wind turbines can be installed with zero controls as to decommissioning. Is that because solar panels and wind turbines are environmentally benign? Not at all.

Solar panels are a smorgasbord of toxic chemicals. Solar panels are processed with hydrochloric acid, sulfuric acid, nitric acid, hydrogen fluoride, trichloroethane, and acetone. In addition to silica, solar panels contain gallium, arsenide, copper-indium-gallium-diselenide, and cadmium-telluride, which are all highly toxic. Silica dust is a hazard to workers, and we have no current technology to recycle the highly toxic solar panels.

Wind turbines are a decommissioning nightmare due to their sheer size. The average turbine weighs 1688 tons (the equivalent of 23 houses) and contains 1300 tons of concrete, 295 tons of steel, 48 tons of iron, 24 tons of fiberglass, and the hard-to-extract rare earth minerals neodymium, praseodymium, and

dysprosium. Each blade averages 81,000 pounds and cannot be recycled. I have appended a photograph of wind turbine blades being buried in a landfill. The landfill space requirements for turbine disposal are enormous.

Wind turbines and solar panels do not last forever. In fact, wind turbines and solar panels begin to degrade from the first moment they are installed, and they are not nearly as efficient at year 10 as they are on the day of installation. By year 20 (or sooner) wind turbines and solar panels are entirely worn out and must be decommissioned.

It should be easy for us to foresee thousands of acres of carelessly abandoned solar panels. We should be gravely concerned about massive wind turbines standing abandoned in our back yards.

HB 2104 is one step toward leveling a playing field that is grossly tilted and ignorant of the many adverse impacts of the wind and solar industries. But with due respect, decommissioning is only one portion of the picture. The General Assembly must also regulate the installation and operation of solar and wind facilities.

The installation of wind and solar facilities (and the associated power lines) involves industrial earth-moving and tree-cutting across thousands of acres. Wind turbines create annoying noise, radar and visual interference; they throw dangerous ice chunks, and blade parts when the turbines fail. Any other industry posing such enormous impacts would be subject to setback, permitting and planning requirements. Wind and solar should be no exception.

The operation of wind and solar facilities poses similar risks. Turbine failures result in gear-case oil spills. Solar panels contain many toxic chemicals and must be handled accordingly. Again, any other industry posing such enormous impacts would be subject to safety inspections as well as operating and reporting requirements.

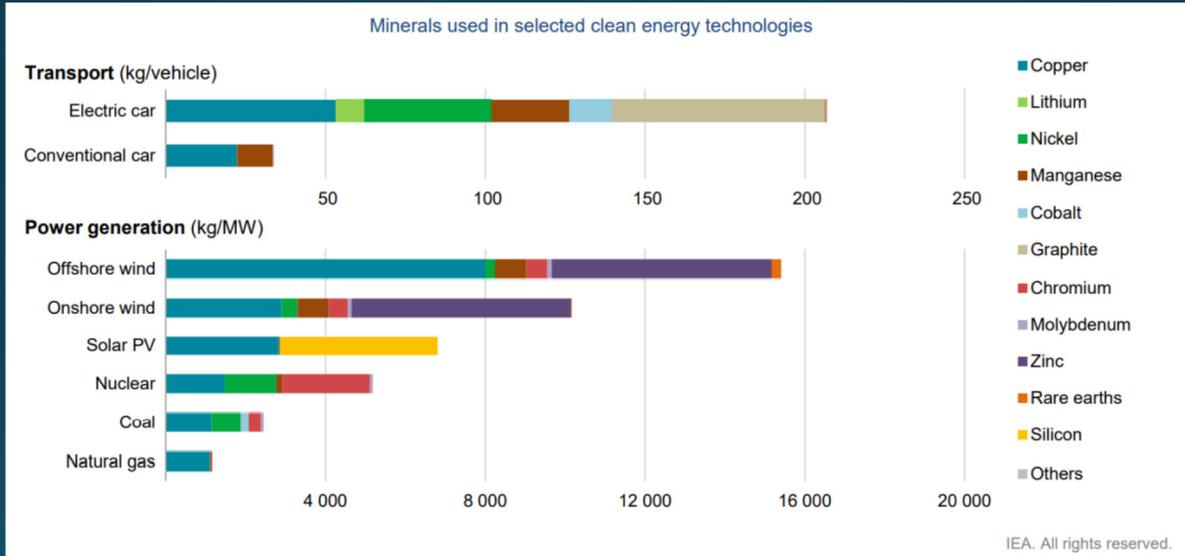
I urge the General Assembly to approach energy impacts from a comprehensive perspective. All sources of energy have negative impacts, and to have a sensible energy policy, Pennsylvania must examine all those energy sources in common context. Pennsylvania needs a Comprehensive Energy Policy.

My industry is not opposed to the solar and wind industry. But my industry and the solar and wind industries are competitors. Like any competitor my industry asks to be treated in the American way—by being allowed to play on a playing field where the referees aren't rooting for the other team.

It is time to stop the inaccurate propaganda about green energy sources. Green energy doesn't exist. HB 2104 is a sensible step on the path toward creating a Comprehensive Pennsylvania Energy Policy that is accurate, fair, devoid of picking winners and losers based on political leanings, and embraces the opportunities available to our great Commonwealth thanks to the myriad of energy resources located here. While HB 2104 is a good first step, PGCC urges the General Assembly to look toward a Comprehensive Energy Policy that also examines the dangers of installing and operating wind and solar facilities, and that regulates those dangers and impacts accordingly.

Thank you!

"Green" Energy: Must Mine Huge Amounts of Minerals



“Green” Energy: Not Green After All



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