

Watts Inside?

Across the country, a big backlash to new renewables is mounting based on the national security, financial, health, safety and environmental costs of wind and sun energy.

Utility scale solar and wind takes up a lot of land, requiring anywhere from 5 to 10 acres per megawatt. And there can be big drainage and sediment pollution problems if developers are careless. Wind turbines are huge and visible for miles. They do kill thousands of birds and bats a year. They can catch fire or leak lubricating fluid that contain forever chemicals like PFAS (Poly Fluoro Alkyl Substances). Like other sources of power, they have their own set of problems.

If you thought politics was polarizing, wait till you cross the bridge of solar and wind turbine installations. In four terms as a county elected official in northern Ohio, it was the most contentious issue Doug Weisenauer had ever seen.

Robert Zulla a writer for the Ohio Capital Journal wrote the following which epitomizes the situation across the country:

Crawford County, Ohio, is far from an isolated case. Across the country — from suburban Virginia, rural Michigan, southern Tennessee and the sugar cane fields of Louisiana to the coasts of Maine and New Jersey and the deserts of Nevada — new renewable energy development has drawn heated opposition that has birthed, in many cases, bans, moratoriums and other restrictions.

With states, corporations, utilities and the federal government setting aggressive renewable energy goals, as well as big tax incentives such as in last year’s Inflation Reduction Act, wind and solar developers have been pushing projects that are igniting fierce battles over property rights, loss of farmland, climate change, aesthetics, the merits of renewable power and a host of other concerns.

I said all along I am not telling people what they can and can’t do on their property,” Weisenauer said. “It got ugly. Our families have been split, friendships broken. It was bad for our community.”

Though Zartman, the Republican former county commissioner from Ohio, acknowledged that some of the loudest pushback comes from conservatives, he said he sees a “mix” of motivation in opponents, including major resistance to changes to the skyline. (Some renewable projects even in famously liberal areas have sparked major opposition).

“I haven’t seen anywhere on a deed that it tells you you have control over your horizon and your view,” he said. It is attitudes like this that cause issues.

Bob Sostakowski, who’s lived in Crawford County, Ohio, for more than two decades and joined the local anti-wind effort after he became aware of proposed projects popping up in his and neighboring communities, said there’s more than aesthetics at stake.

“I had no opinion one way or another on wind until this,” Sostakowski, 48, said. “There’s an obvious and very provable negative impact on property values and people’s standard of living.”

Both Sostakowski and Kimberly Groth, 42, who lives in neighboring Seneca County and was heavily involved in the effort to defeat wind projects there and in Crawford, said it’s not reasonable to expect people in agricultural areas to put up with commercial wind farms.

“People want quality of life and people move to rural areas because of the peacefulness of it. When you introduce industrial scale wind over tens of thousands



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of acres, you’re interrupting that quality of life,” Groth said.

“I think we’ve heard for 20 to 30 years now about renewable energy and there’s just this assumption that it’s good and that it’s going to save us. So I think for me personally the more I looked into it, the more I realized it does have downsides. ... Every form of energy has these pros and cons.”

Sostakowski rejected the notion that farmers and landowners should have the right to lease their property to big wind developers whether or not their neighbors agree.

“There is a big distinction between commercial farming and agriculture and the heavy industrial production of electricity,” he said. “At no point in our history has it been OK for people to do whatever they want.”

Sostakowski added that when he was a kid, a bald eagle sighting was so rare, his parents would pull the family car over to catch a glimpse of one. Decades later, the fact that a wind project can get a “take permit” for eagles or other protected birds that run into the blades is “unfathomable,” he said, for an intermittent energy generation source that takes up lots of space.

“What a horrendous and irresponsible waste of resources, our manpower, our tax dollars and our wildlife,” he said.

The counterpoint came from both farmer Mike Brady who leased his land for wind turbines and Zartman. Zartman, the former Paulding County commissioner, said the turbines have been a windfall for rural Paulding’s local school and government coffers.

“As a county, we were virtually bankrupt,” Zartman said. Paulding, entirely reliant on agriculture and which had a population of about 19,000 as of 2021, had been hit hard by the recession that began in 2007.

“No Man Is an Island” is a well known saying that seems to advance the thought that all persons are connected to each other by common goals and obligations. The same can be said for real property: “No land exists in isolation.” If one owns land, one must deal with all the people that surround the land and who own land that gives access to one’s land. This simple fact has led to a thousand years of common law followed by statutory law as to the rights and obligations of property owners whose lands abut.

In a report updated last year, the Sabin Center for Climate Change Law at Columbia Law School found that “in nearly every state, local governments have enacted policies to block or restrict renewable energy facilities and local opposition has resulted in the delay or cancellation of particular projects.”

Not including what it called “reasonable regulations,” the 2022 edition of the report found 121 local policies (up 17.5% from 2021) that block or restrict renewable energy and 204 contested renewable energy facilities (up 23.6%).

“My guess is that we’re going to need a lot of

renewables built on public lands further west, just because we’re seeing so much opposition growing up, especially sort of the middle of the country that’s already very dense on wind,” said Rich Powell, CEO of Clear Path, a nonprofit policy group working to curb carbon emissions.

But is the west prepared for the onslaught of wind and solar installations, especially in light of so many concerns and questions?

Productivity of Wind and Solar is a National Security Issue

According to cleanpower.org, there are more than 72,000 wind turbines across the country. Current estimates figure to fully power the United States with wind energy, it would require approximately 1.26 million wind turbines-just imagine that footprint and considering the amount of bird kills, and whether we would have any birds or migration of them left. Not only will this take over a lot of productive agriculture land and ruin view corridors, it can lead to unfunded mandates for the landowner and counties where they are located.

Current wind power capacity totals 151 GW, making it the fourth-largest source of electricity generation, but also the most unreliable because the wind doesn’t always blow and ice can stop the blades from turning as well.

So, what are the studies on productivity during adverse conditions such as ice on wind turbine blades. Wind turbine blades spinning through cold, wet conditions can collect ice nearly a foot thick on the yard-wide tips of their blades. That disrupts blade aerodynamics and the balance of the entire turbine; which can disrupt energy production by up to 80 percent, according to a recently published field study led by Hui Hu, Iowa State University’s Martin C. Jischke Professor in Aerospace Engineering and director of the university’s Aircraft Icing Physics and Anti-/De-icing Technology Laboratory.

Hu wanted to quantify what happens on wind farms during winter weather and so several years ago began organizing a field study. But that was more complicated than he expected. Even in Iowa, where some 5,100 wind turbines produce more than 40% of the state’s electricity (according to the U.S. Energy Information Association), he wasn’t given access to turbines. So, Hu asked a Chinese wind farm who had similar turbines to those used in the U.S.

Energy companies usually don’t want their turbine performance data to go public.

The researchers found that icing had a major effect: “Despite the high wind, iced wind turbines were found to rotate much slower and even shut down frequently during the icing event, with the icing-induced power loss being up to 80%,” the researchers wrote.

Consumers Energy Bills

When wind turbines stop producing power, back-up power must be purchased and like in the case of Texas a few years back, that means buying more expensive power from other states which can cause a \$200 monthly bill to increase to \$2000 overnight.



Effects on the Economy through Lost Manufacturing

In 2007, Minnesota became an early adopter in mandating the use of wind and solar on the state's electric grid, passing the Next Generation Energy Act (NGEA). This legislation mandated that 25 percent of Minnesota's electricity come from "renewable" resources by 2025, and it has caused electricity prices to soar.

Historically, Minnesota enjoyed the advantage of relatively cheap electricity, with rates typically 18 percent less than the national average. However, since spending an estimated \$10 billion on building wind farms and billions more on new and upgraded transmission lines, Minnesota has lost this competitive advantage with little to show for it, except higher electric bills. As electricity generation from carbon free wind approaches 20 percent of total generation, Minnesota has not experienced any appreciable reduction in greenhouse gas emissions relative to the U.S. average.

The Northern Foundry in Hibbing, Minnesota closed in April 2024 due to increased electric costs. The foundry was a major customer of Minnesota Power, and its closure is an example of how high electricity rates can force industrial businesses to close.

Groceries gone wild:

According to Business Energy Advisor, grocery stores use 52.5 kilowatt hours (kWh) of electricity *per square foot* per year. An average Albertsons or Winco Foods store is 75,000 square feet, which means an average store consumes 3.9 million kWhs of electricity every year (the equivalent of 519 homes). This means grocery stores like Cub Foods have seen a massive increase in their electricity bills in recent years. Based on the U.S. Energy Information, the average store would have seen its electricity bill increase by nearly **\$108,700 per year since 2020**, growing from \$413,217 in 2020 to \$521,943 in 2022 and costs have continues to climb through 2024.

With electricity costs surging this way, is it any wonder that food prices keep going up?

Public Safety:

Unless you live in a rural community you often don't think about medical life flights. In a memo to Fond du Lac, WI residents, Flight for Life stated they would no longer be servicing their area because the 400 foot turbines make it too dangerous to land helicopters. In a rural community without a hospital or needed services in the case of an emergency, losing a Flight for Life can mean the difference between life and death.

National Security/Department of Defense:

Wind turbines can interfere with radar systems used for missile defense by blocking or distorting electromagnetic waves. This can make it harder to detect missiles and when wind turbines are installed offshore, it makes it harder to detect submarines.

In fact, in November, Sweden's government blocked the construction of 13 offshore wind farms over concerns that they would shorten the country's early-warning window for a Russian missile attack.

In the November issue of Defense News, it was reported that wind farms can interact with radar signals, reducing the quality of the situational air picture or even outright blocking out parts of the sky.

"The reaction time in the event of a missile attack could go from 2 minutes to 60 seconds with wind farms in the way," Swedish Defense Minister Pål Jonson wrote in a series of posts on X, formerly known as Twitter. They were accompanied by a schematic drawing of the wind farms casting a "shadow" behind them in which missiles and cruise missiles would stay undetected.

"Radar interference can impede air traffic control, weather forecasting, homeland security, and national defense missions," U.S. Department of Energy spokesperson wrote in an email to Defense News.

There are a number of ways that wind turbines, and especially large groups of them, can mess with the readings from a radar system. For one, they can show up on the screen because, just like any other object, they bounce back the electromagnetic waves

that radar relies on. The fact that they are moving – the blades are spinning, and the turbines can change orientation – can make it more difficult for analysts to filter out the noise and find actual threats in the skies.

With the wingtips rotating at a speed of up to 370 kilometers per hour (around 230 mph), they move fast enough for doppler radars to sense them as moving objects, resulting in a false positive on an operator's screen.

Radar systems vary greatly so what might work for one can be completely ineffective on another. Over-the-horizon radars, for example, might be especially affected by offshore wind farms. As the name suggests, these systems have a much greater range than other radars, which are generally limited to the line of sight of the antenna and so cannot see past the curvature of the earth.

The longer-range variants bounce their beams off the ionosphere layer of the atmosphere before the waves travel back close to the surface – where wind farms can get in the way and may completely block out the signal. "There is no way of mitigating that aside from not building turbines," said Benjamin Karlson who leads the Wind Turbine Radar Interference Mitigation program at the American Sandia National Laboratories.

The mission of the Department of Energy's (DOE) Office of Electricity Delivery and Energy Reliability (OE) is to lead national efforts to modernize the electricity delivery system, enhance the security and reliability of America's energy infrastructure, and facilitate recovery from disruptions to the energy supply. One of the threats OE is concerned about is a high-altitude electromagnetic pulse (HEMP) from a nuclear explosion and electromagnetic pulse (EMP) or an early time (E1) pulse which can be generated by EMP weapons.

Whose responsibility is it for EMP protection? Few utilities have given much thought or effort to protecting their systems against the effects of EMP. Many electric grid owners and operators see protection from an EMP attack as a DOD responsibility.

Both wind and solar need to be installed above ground, which not only makes them susceptible to damage from natural events like hailstorms, tornadoes, hurricanes, earthquakes, etc.; but it also makes them susceptible to an EMP attack.

Toxins and Environmental Impacts:

There is a growing public awareness that so-called environmentally friendly energy sources like wind turbines and solar panels aren't so environmentally friendly, after all. Whether it be thousands of non-recyclable wind turbine blades arriving at landfills, or the growing recognition that solar panels contain toxic heavy metals that can pose a risk to the environment should they leak out of the panels or shed off wind turbines, the environmental costs of "renewable" energy are becoming clearer every day.

Contrary to previous assumptions, pollutants such as lead or carcinogenic cadmium can be almost completely washed out of the fragments of solar modules over a period of several months, by rainwater alone.

Tornado in 2015 broke 200,000 solar modules in S. California and in Puerto Rico which gets 40% of its power from solar, they lost a majority of their panels during Hurricane Maria.



Stanford Magazine also points out that solar energy has a higher carbon footprint than wind and nuclear energy. Ray Weiss, a professor of Geochemistry at the Scripps Institution of Oceanography, explains that a number of solar panels release nitrogen trifluoride (NF₃), a chemical compound 17,000 times worse for the atmosphere than carbon dioxide.

Beyond the clear misallocation of resources and energy market price distortions, there is a

further environmental problem associated with solar panels and wind turbines.

According to cancer biologist David H. Nguyen, PhD, toxic chemicals in solar panels include cadmium telluride, copper indium selenide, cadmium gallium (di)selenide, copper indium gallium (di)selenide, hexafluoroethane, lead, and polyvinyl fluoride. Silicon tetrachloride, a byproduct of producing crystalline silicon, is also highly toxic.

Like a headline from the Babylon Bee, due to the toxins in renewable energy products, if Robert Kennedy Jr. were to be appointed to the Department of Energy instead of the Department of Health and Human Services, solar panels and wind turbines and lithium batteries would be banned and dismantled across the U.S. When you factor in the cost of reliability in providing power (the sun doesn't always shine and the wind doesn't always blow), as well as decommissioning costs and environmental cost from superfund chemicals on solar panels and wind turbines that leach off equipment and into the soil and water, the numbers behind "free sun and wind" don't look so clean and cheap any longer.

Retiring Worn-Out Wind Turbines Could Cost Billions that Nobody Has

When the federal subsidies go away, many of the wind turbine companies will go with them. You will not be paid for the lease and will be responsible for disposing of their equipment which contains PFAS which are essentially chemical compounds that contain Fluorine (the 'F' in PFAS).

Many confuse Fluorine which is a chemical element, with fluoride which is the negatively charged ion of that element, meaning when a fluorine atom gains an electron, it becomes a fluoride ion; essentially, fluoride is the ionic form of fluorine. Both are toxic (see skull and crossbones and word "TOXIC" on the bags of Fluoride our water departments dump into our water). Good thing for Wind Turbine companies Bobby Kennedy Jr. is headed to the Health and Human Services Department instead of the Energy Department or solar and wind energy products could have been banned by him.



The EPA's PFAS Superfund designation is a rule that classifies perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) as hazardous substances. This designation is part of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund. Why the designation was made: the EPA made this designation to protect public health and the environment from the potential harm of PFAS.

The EPA believes that no level of exposure to PFOA and PFOS is safe!

The wind turbine manufacturers know this. They promise you all this money from leases, knowing full well, they might not be in business when the time comes to decommission their turbines. The turbines are installed on your land which then makes it the landowner's responsibility to dispose of them, or perhaps the taxpayers when the local county has to get involved.

This whole process has the potential to bankrupt the landowner and place an enormous unfunded liability on the counties where the turbines are installed.

American Experiment has been warning the public about the short useable lifetimes of industrial wind turbines for some time now,



Veronica Phelps

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I am looking for help in getting 204 discarded windmill blades removed from my property. NextEra Energy is the original owner of the blades. They contracted with RiverCap Ventures to remove them from their sites in Colorado. RiverCap negotiated a lease agreement with my husband (now deceased) and then RiverCap went out of business and the lease was taken over by Canvus Inc. Now they are out of business. Brian Donahue now with NobleWins is the party who has handled all of the negotiations with RiverCap and Cavus Inc. has refused to follow through on his commitment to honor the lease agreement and I have not had any luck getting in touch with anyone from either of the

but one thing we haven't really touched on yet is who pays to decommission the turbines once they're no longer useable?

The first step in fixing the issue of solar and wind manufacturers going bankrupt before their products are decommissioned and they have to incur those costs, is to institute an upfront fee on solar panel purchases to make sure that the cost of safely removing, recycling or storing wind turbine and solar panel waste is internalized into the price of the products and not externalized onto future taxpayers.

An obvious solution would be to impose a new fee on solar panels that would go into a federal disposal and decommissioning fund. The funds would then, in the future, be dispensed to state and local governments to pay for the decommissioning of wind turbines and solar panel waste. The advantage of this fund over extended producer responsibility is that it would insure that products are safely decommissioned, recycled, or stored over the long-term, even after wind and/or solar manufacturers go bankrupt.

Dangers of Lithium-Ion Batteries (LIBs) Fires:

According to Steve Kerber, vice president and executive director of Underwriters Laboratory's

(UL) Fire Safety Research Institute (FSRI), the number of lithium-ion battery-based fires is growing with enormous frequency both in the United States and internationally.

In all of these fires caused by LIBs, it is not a slow burn; there's not a small amount of fire, it literally explodes," FDNY Commissioner Laura Kavanagh told reporters. "It's a tremendous volume of fire as soon as it happens, and it's very difficult to extinguish and so it's particularly dangerous."

Due to the lack of wind and sun consistency, energy storage (i.e. Lithium-Ion batteries) need to be considered in the equation. The news has reported on electric vehicles lithium battery fires that local fire departments have an increasingly difficult time putting out. Lithium-ion batteries are used in solar installations to store energy, in electric vehicles, mobile phones and more. Lithium battery fires are very dangerous. Water may not prevent this type of battery from burning and spreading. Battery cells are known to explode and quickly spread to another battery or other devices.

These batteries may continue to generate heat even when there is no visible sign of fire. Lithium-Ion batteries are known to unexpectedly re-ignite (without warning) minutes, hours and even days after all visible fire has been put out and fire extinguishers do not work on lithium-ion batteries fires.

Decommissioned batteries are also dangerous because the toxins used to create them can leach into the soil and water.

Bankruptcies:

According to recent reports, while a significant number of solar companies, particularly smaller installers, have gone bankrupt in recent years, the exact percentage of all solar and wind manufacturers experiencing bankruptcy is difficult to pinpoint due to the diverse nature of the industry, but estimates suggest it is not a majority; however, some sources indicate that over 100 US residential solar companies collapsed in 2023 alone, representing a substantial portion of the market. Then 2024 brought additional immense challenges, with higher interest rates, tighter financing, and adverse policy shifts in key states contributing to over 100 more solar bankruptcies based on industry data.

California was particularly hard hit due to new net metering rules under NEM 3.0 that radically reduced system economics. These adverse state policy impacts exacerbated financing shifts, triggering plummeting demand and an 80% decrease in rooftop solar installation volume. The California Solar & Storage Association reports that the fallout includes thousands of stalled projects, over 17,000 industry layoffs, and a wave of high-profile bankruptcies. The outright collapse of many once fast-growing solar firms provides a sobering case study on the potential unintended consequences of incentive transitions.

Mounting financial losses in the wind industry over the last few months are taking a toll on the Biden administration's clean energy drive. Despite the billions in subsidies that came down the pipeline in 2022 before the Inflation Reduction gave away even more money.

Since the Obama administration, the federal government has been pouring billions into projects to meet environmental goals, only to have the companies go bankrupt.

In 2009, the Obama administration co-signed \$535 million in loans to solar panel manufacturing startup Solyndra. Two years later, the company went bankrupt, laying off 1,100 workers.

Another solar manufacturing startup, Abound Solar, received \$400 million in federal government-backed loans to expand its Colorado and Indiana facilities. The company received further support from the U.S. Export-Import Bank, as well as property tax rebates in Colorado and Indiana.

In June 2012, the company filed for bankruptcy and left 405 people unemployed. It also left Colorado to spend millions to clean up hazardous waste it left behind.

Fisker Automotive received a \$529 million green-energy loan from the Department of Energy for its luxury hybrid vehicles. The company spent \$192 million of the loan before it was suspended in 2011 after the company failed to meet several sales milestones. Fisker filed for bankruptcy in 2013.

Now you know why trillions of dollars later, taxpayers aren't any better off. 🗿