

OPPORTUNITY *Ohio*

P.O. Box 98
Dublin, OH 43017-0098
614.636.2663
www.opportunityohio.org

December 18, 2020

Dear Governor Mike DeWine & Lieutenant Governor Jon Husted:

As you are aware, Ohio's Capitol City has become all too like Washington, D.C. -- a progressive swamp in which special interests, insiders, and Big Business push agendas completely disconnected from how those agendas will impact Main Street Ohioans. Now, it seems, radical environmentalism is taking root and threatening to change the fabric of Ohio life -- and not for the better.

In a recent letter from the Columbus Partnership, one of these infamous swamp creatures urged the Public Utilities Commission of Ohio Nominating Counsel to nominate a "Green" commissioner. Their argument, in a nutshell, is to pave over Ohio's natural resources, our farmland and natural gas, in favor of solar farms and windmills. In pursuit of "national" leadership on the climate change issue, the Columbus Partnership would undermine our economy and hurt average Ohioans.

Look at California, where extreme environmental policies have pushed renewables at the expense of reliability and lower costs at horrible price to Main Street Californians and their businesses. California is a disaster environmentally and economically; over-regulated and overtaxed. That should be a good enough example of how bad policies create a terrible environment for businesses, workers, and consumers.

Did the Columbus Partnership not see the news about people and businesses fleeing California, including Tesla, for Texas? Whether or not the sun shines or wind blows, it seems beside the point for the Columbus Partnership. If blackouts and high prices are good enough for Californians, then the Columbus Partnership and their corporate jet-flying allies believe we Ohioans should welcome them with open arms. Adamantly, no.

Columbus is lucky. It is more or less immune from recession, given its heavy reliance on federal, state, and local government largesse. But the rest of Ohio has suffered enormously over the last two decades. Even before the COVID pandemic shutdown, from massive job and population losses to high overdose deaths, most of Ohio's counties have been battered relentlessly. One of the only bright spots for Ohio has been the resurgence of the energy industry due to the wonders of environmentally sound hydraulic fracturing and horizontal drilling.

The fact is Ohio is blessed with rich deposits of natural gas. That natural gas has helped make American energy independent and made Ohio an ideal location for businesses and their workers. It is because of the Utica Shale formation that Ohio started to claw back the

manufacturing jobs lost to China. Having access to a clean source of energy like natural gas means lower costs for businesses and consumers. Transitioning from oil and coal to clean natural gas not only improves Ohio's environment, but also ensures Ohioans and their businesses get access to low cost energy that is there when they need it.

As you can see from the attachments, our past work made a strong case against making Ohio heavily-dependent on renewables. An Ohio-based pro-energy coalition, The Empowerment Alliance, offers some powerful arguments for turning away from the Columbus Partnership's vision and turn toward energy prosperity:

- In 2015, the natural gas industry contributed \$26.7 billion to the Ohio economy.
- In 2015, there were 188,500 jobs related to the natural gas industry in Ohio—3.6% of state employment.
- In 2015, Ohio workers with jobs related to the natural gas industry earned an average of \$61,864 a year.
- In 2018, 3,627,656 residential and business customers used natural gas in Ohio.
- In 2018, 65.5% of Ohio households used natural gas for home heating.
- 13.9% of Ohio's population lives below the poverty level. Affordable energy from natural gas helps lower energy bills for those living on a tight budget.
- The U.S. is enjoying its best air quality in a half century, partly due to increased use of natural gas. From 2007 to 2017, CO2 emissions in Ohio were reduced by 23.54%.

Of course, Ohio should welcome renewable energy where it makes economic sense but do so with a market driven approach. Renewable energy has to be reliable AND affordable.

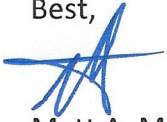
Ohio's energy policies should emphatically remain focused on an "all of the above" approach in which the most reliable, efficient, environmental, and inexpensive sources are leveraged to provide Ohioans and their businesses with the power they need. Today, that source is unequivocally natural gas, which Ohio, unlike sunshine and wind, has in abundance.

Governor DeWine, your endorsement of conservative policies was pivotal to your election in 2018. Your campaign captured support from all across the Buckeye State. In 2020, while Joe Biden may have barely won nationally, in Ohio, particularly outside of Columbus, politicians, including Donald Trump, won supporting natural gas and America's energy renaissance. They firmly rejected the Green New Deal promoted by Biden, his progressive allies, and now, the Columbus Partnership.

Ohioans want access to clean, reliable, and inexpensive energy, which only natural gas can provide now and into the future. Don't make the mistake of confusing what special interests want with those who struggle to make ends meet want. The latter just told us what they wanted.

Ohio can't go the way of California. Reject putting a "Green" commissioner in charge at the PUCO.

Best,



Matt A. Mayer
President, Opportunity Ohio

cc: Public Utilities Commission of Ohio Nominating Council
Ohio House Speaker Robert Cupp
Ohio Senate President Larry Obhof

The Realities of Energy Generation

Natural gas power plants make more efficient use of land than do wind or solar plants. Wind power is by far the least efficient—in order to generate 1,000 megawatts of electricity you would need 234 square miles of land, an area larger than the city of Columbus. To generate the same amount of power with natural gas would require only 5.6 square miles. Additionally, natural gas plants can continue to generate power even when the wind stops blowing and the sun stops shining.

LAND USE FOR 1,000-MEGAWATT-EQUIVALENT ELECTRIC POWER PLANTS



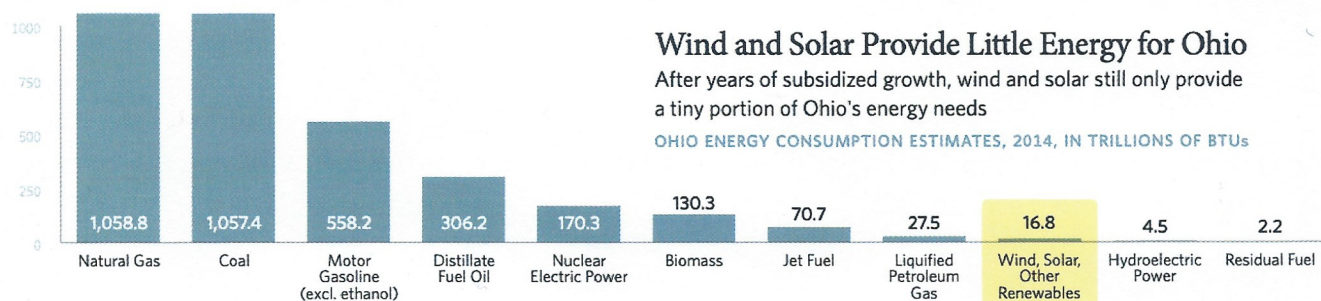
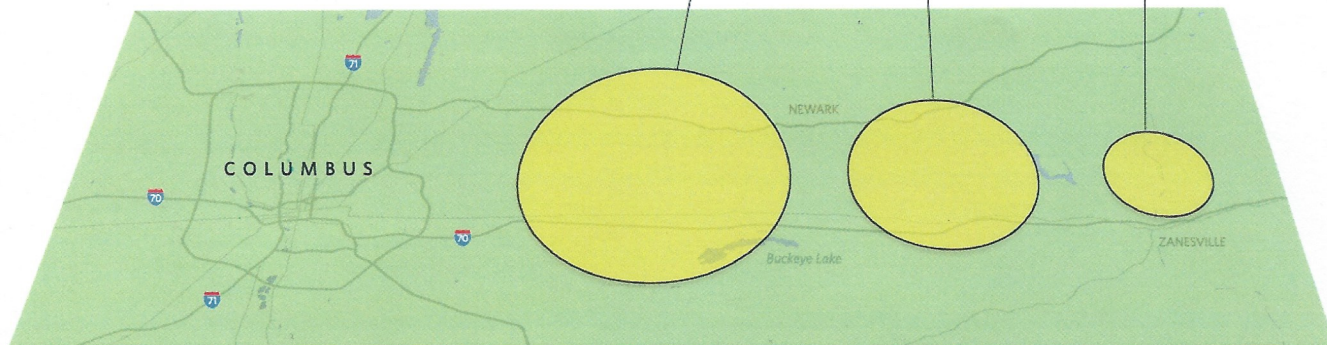
WIND
234 square miles
(11 square miles larger than
the city of Columbus)



**SOLAR
PHOTOVOLTAIC**
54.7 square miles



NATURAL GAS
5.6 square miles



Sources: Opportunity Ohio calculations based on data from U.S. Nuclear Regulatory Commission, <https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/v1/TBL8-2.html> (accessed May 19, 2017), and U.S. Energy Information Administration, <https://www.eia.gov/state/> (accessed May 19, 2017).

OPPORTUNITY *Ohio*

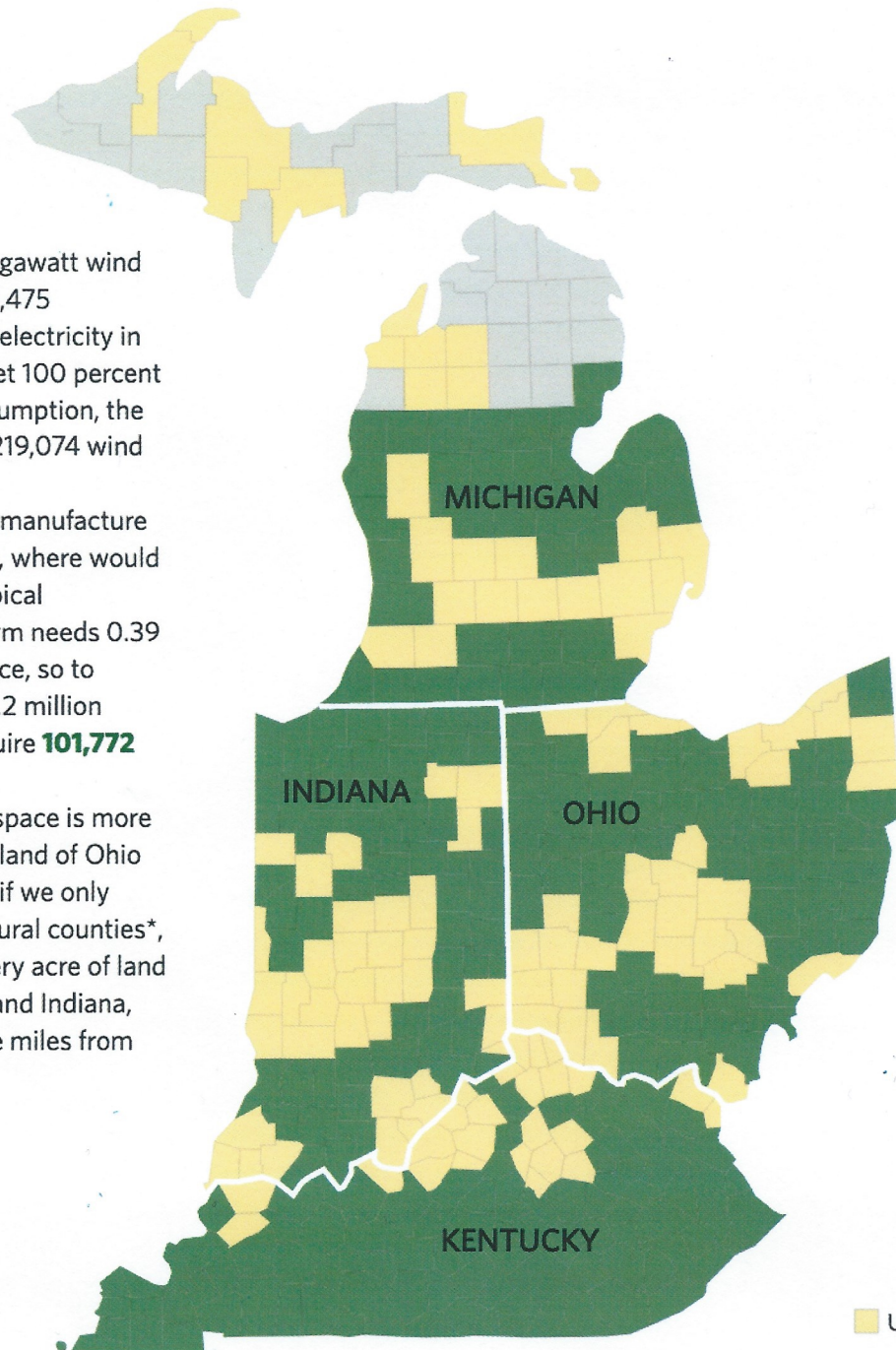
Wind Energy Imposes Heavy Demands on Land

In 2013, the U.S. consumed 28,574,429,271 megawatt hours of energy. Less than 5 percent of that came from wind power, and for good reason: unreliability—the wind doesn't always blow. But even if it did, could the U.S. reasonably get enough power from wind farms to fulfill our energy needs? Hardly, because as it turns out, another major challenge would be finding enough *land* for the necessary equipment.

A typical 2.5-megawatt wind turbine generates 5,475 megawatt hours of electricity in one year. So, to meet 100 percent of U.S. energy consumption, the U.S. would need 5,219,074 wind turbines.

Even if we could manufacture 5.2 million turbines, where would we put them? A typical 20-turbine wind farm needs 0.39 square miles of space, so to accommodate all 5.2 million turbines would require **101,772 SQUARE MILES.**

That amount of space is more than the combined land of Ohio and Kentucky. And if we only placed turbines in rural counties*, we would cover every acre of land in Ohio, Kentucky, and Indiana, plus 20,000 square miles from Michigan.



100% WIND POWER
WOULD REQUIRE

**101,772
SQUARE
MILES,**

the total rural area of Ohio, Kentucky, and Indiana, and about 54 percent of rural Michigan.

* Counties not a part of a metropolitan statistical area, as defined by the Office of Management and Budget.

Sources: U.S. Department of Energy, Energy Information Administration; National Wind Watch, "FAQ—Output," <https://www.wind-watch.org/faq-output.php> (accessed August 31, 2015); Wind Measurement International, "FAQ," http://www.windmeasurementinternational.com/wind-info/wind-energy_faq.php (accessed August 31, 2015), and Opportunity Ohio calculations. County land sizes are from U.S. Census Bureau.

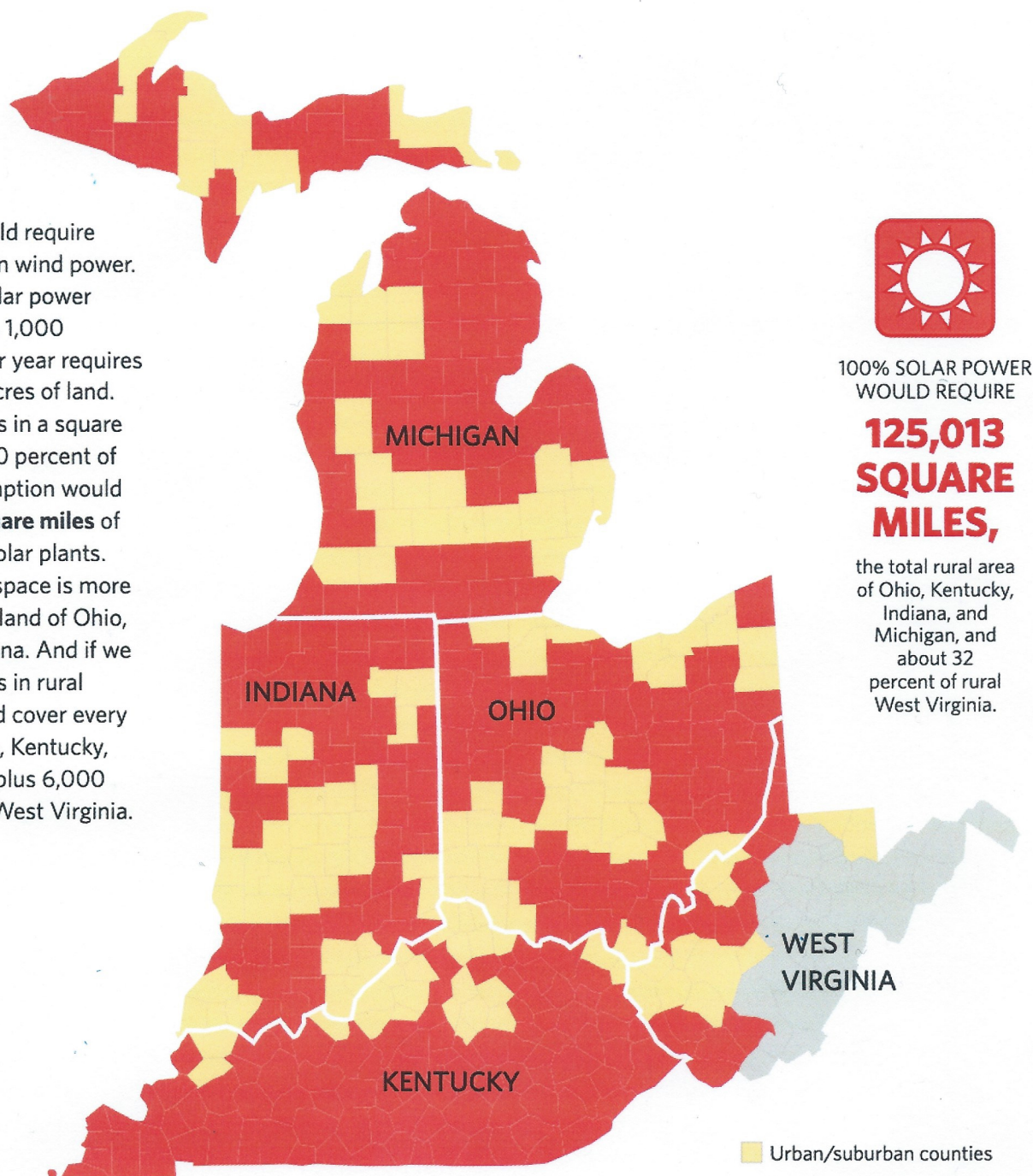
Solar Energy Would Burn Up a Lot of Land

In 2013, the U.S. consumed 28,574,429,271 megawatt hours of energy. Less than 1 percent of that came from solar power, and for good reason: unreliability—the sun doesn't always shine. But even if it did, could the U.S. reasonably get enough power from solar power plants to fulfill our energy needs? Hardly, because as it turns out, another major challenge would be finding enough *land* for the necessary equipment.

Solar power would require even more land than wind power.

A single large solar power plant that produces 1,000 megawatt hours per year requires an average of 2.8 acres of land. There are 640 acres in a square mile, so to meet 100 percent of U.S. energy consumption would require **125,013 square miles** of land dedicated to solar plants.

That amount of space is more than the combined land of Ohio, Kentucky, and Indiana. And if we only placed turbines in rural counties*, we would cover every acre of land in Ohio, Kentucky, Indiana, Michigan, plus 6,000 square miles from West Virginia.



* Counties not a part of a metropolitan statistical area, as defined by the Office of Management and Budget.

Sources: U.S. Department of Energy, Energy Information Administration; National Renewable Energy Laboratory, "Land-Use Requirements for Solar Power Plants in the United States," June 2013, <http://www.nrel.gov/docs/ty13osti/56290.pdf> (accessed August 31, 2015); and Opportunity Ohio calculations. County land sizes are from U.S. Census Bureau.

The Columbus Dispatch

August 30, 2019

THE COLUMBUS DISPATCH

DeWine Should Leverage Ohio's Natural Gas, Location

By Matt A. Mayer

Another month, another mediocre job report. In the past 8.5 years, Ohio's private sector has gotten weaker and weaker each passing year. From a high of netting 94,200 private sector jobs in 2011 to just 2,600 through the first six months of 2019, Ohio's net percentage private sector job growth ranks 50th out of the 50 states and the District of Columbia. It really can't get much worse.

So, what should Gov. Mike DeWine do to turn things around? He should do exactly opposite of what his predecessor, John Kasich, did for eight years; namely, Gov. Kasich spent eight years denigrating Ohio's natural gas energy entrepreneurs and threatening them and every manufacturing company reliant upon natural gas with higher taxes.

Kasich's zeal to hike the severance tax was about as counterproductive as a selling point could be for Ohio to lure companies with high natural gas use to relocate or stay here.

Think about it. In the past decade, Ohio, along with Pennsylvania and West Virginia, accounted for 85% of the growth of natural gas production in the entire United States. If those three states formed their own country, it would be the third-largest natural gas producer behind only Russia and the rest of America. Because of that enormous boost in production, natural gas prices are lower today than those prices were more than 30 years ago without even adjusting for inflation. There truly is no better place in America to build a manufacturing facility than in eastern Ohio where access to inexpensive natural gas is literally under one's feet.

Lightning doesn't strike twice usually, but for Ohio it has. Specifically, over a hundred years ago, Ohio became the manufacturing giant it was through the 1980s because of John D. Rockefeller's leveraging of the location of the first oil deposits in America. It wasn't coincidence that the automotive, steel, tire, glass and other heavy manufacturing industries arose in Michigan, Ohio and Pennsylvania. It was the access to inexpensive energy to build cars and other products that created Lordstown, Moraine, Youngstown, Canton, Toledo and Cleveland.

With Ohio's deposits of natural gas accessible due to hydraulic fracturing and horizontal drilling, Ohio has a second bite at the apple to lead a rebirth of manufacturing in America, especially with President Donald Trump's aggressive trade policies and his defense of American workers and their companies. America is becoming greater and stronger under President Trump, yet Ohio lags behind other states because of the legacy of Gov. Kasich's self-defeating policies.

Ohio also has a second massive benefit for every manufacturer who understands the competitive advantage of locating close to inexpensive natural gas. Those companies would be located within 500 miles of roughly half their domestic customers, with easy transit options along the I-70, I-77, I-71, I-75, and I-80/I-90 corridors, as well as via Rickenbacker Airport's growing air transport facilities. Few states have the one-two punch combination that Ohio possesses, yet heretofore our political leaders haven't thrown enough of those punches.

Gov. DeWine can and should fix that failure today. He should channel former Gov. James A. Rhodes, who constantly shouted from the mountaintops how great Ohio was and went far and wide, including to Japan, to attract businesses to Ohio. Those efforts resulted in Honda of America establishing a large manufacturing presence in Ohio that has only gotten bigger in the past 40 years. Tens of thousands of Ohioans owe their prosperity to Gov. Rhodes' efforts.

DeWine and his team should start an initiative aimed at gathering the key facts, developing the right policies to leverage Ohio's natural gas even more, putting together the strongest business case and public relations packages and doing what Rhodes did during his tenure and go across America and around the world promoting Ohio's one-two punch of access to inexpensive energy and close proximity to the greatest consumer market in the world.

For eight years, Ohio policymakers squandered the amazing opportunity its energy entrepreneurs placed at their feet, thereby rendering Ohio a laggard among the states.

DeWine must not let another minute pass before reversing course and becoming the governor who made Ohio great again and a leader among the states.

By leveraging Ohio's natural gas and ideal location, he can seal his legacy alongside Rhodes as one of Ohio's greatest governors.

Matt A. Mayer is President of Opportunity Ohio.