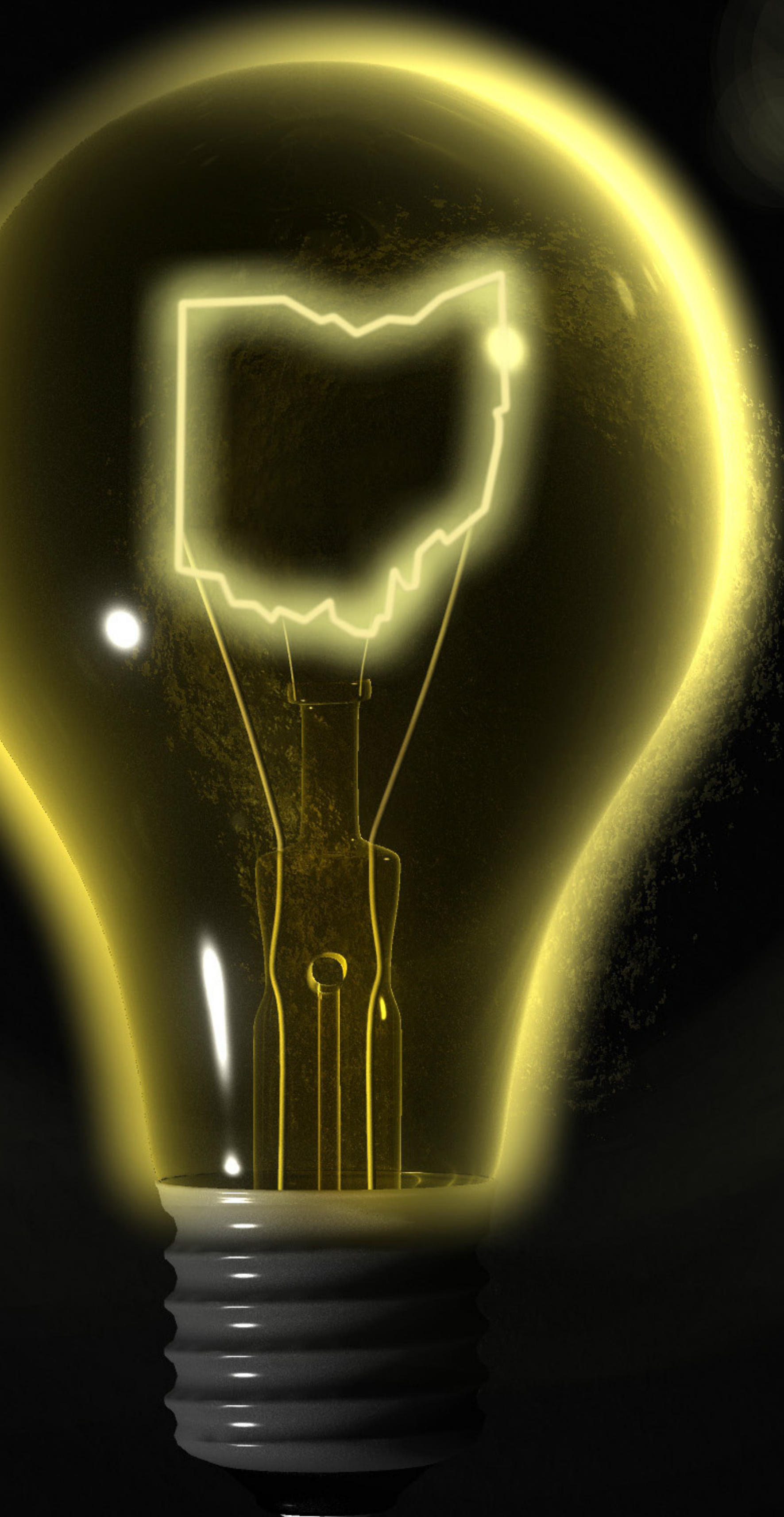

Leveraging Our Natural Resources

Ohio's Opportunity to Lead the World Again

by MARY McCLEARY
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OPPORTUNITY *Ohio*

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Introduction

Ohio has a rich energy history and stands at the crossroads of having a rich energy future—a future that is capable of driving an economic turnaround for the state of Ohio. This future, however, is a choice. Ohio has plentiful natural resources in coal, oil, and natural gas that are waiting to be developed by energy companies, both small state-based businesses and world-renowned companies, but policymakers at both the federal and state levels have jeopardized Ohio's energy future.

First, the Obama administration, through the Environmental Protection Agency, has declared a war on coal. In Ohio, this has meant the early retirement of coal-fired power plants and effectively a moratorium on the building of new coal-fired power plants due to regulatory requirements. Currently, more than 80 percent of Ohio's electricity is supplied by coal. The war on Ohio's coal hurts business and families through fewer jobs and higher energy costs.

Second, the Kasich administration is seeking to raise taxes on energy companies by increasing the severance tax 16 times its current rate. Though the additional revenue collected from the tax hike is supposed to fund an income tax cut for all Ohioans, this tax cut will be miniscule and will arguably do more harm than good to Ohio's economy. The tax hike will curtail profits of energy companies doing business in Ohio, so they will look to other states where they can get better returns on their investments. Reduced investment in Ohio translates into fewer royalties for landowners, fewer direct and supporting jobs created, higher energy costs, and possibly fewer tax dollars due to the decrease in economic activity.

In addition to the proposed severance tax hike, Ohio policymakers in recent years have a failed history of supporting traditional energy. In 2008, with almost unanimous support, the Ohio legislature passed renewable energy standards mandating that 25 percent of Ohio's energy comes from renewable sources by 2025. Although the definition of renewable energy was recently expanded to include cogeneration technology, the standards are still harmful to Ohio coal, oil, and gas companies and will result in higher energy prices for consumers and fewer jobs.

Ohio's potential economic boon from traditional energy could turn into a missed opportunity that once again leaves Ohio in the dust, trailing behind other states that are using their traditional energy resources to propel their economies forward and to create much-needed jobs. When Ohio policymakers stand behind traditional energy, Ohio wins.

Ohio's Energy History: World Leader

Ohio led not only the United States, but the entire world in energy production in the late 1800s. With the discovery of oil in the Appalachian Mountains shortly before the Civil War, the region experienced an oil boom. Rigs and refineries popped up across the area, with Cleveland becoming a major refining center.

This energy boom was led by John D. Rockefeller of Cleveland who formed Standard Oil in 1870. Rockefeller began with only one refinery, but eventually his company controlled almost all refineries in the United States. Though some find Standard Oil's business practices questionable, it is an undeniable fact that the Ohio energy boom brought economic prosperity to the state and to the rest of the country. Almost everyone benefited.

First, the cost of energy dramatically decreased due to the increase in oil supply and innovation. As a result, many businesses opened their doors in or near Ohio to capture the benefits of cheap energy costs. For example, Akron became the rubber capital of the world with Goodyear and Firestone tire companies. Second, many jobs were created. Standard Oil alone employed over 100,000 people. Ohio's energy advantage brought many manufacturing jobs to the state.[1]

In addition to oil, Ohio is known for its natural deposits of coal, particularly in the southeast portion of the state. Coal mining in Ohio predates statehood. Coal, often referred to as "black diamonds," brought much prosperity to the state, especially after the birth of railroads. In 1887, Ohio was the second-largest coal producer behind Pennsylvania. In terms of jobs, the coal industry in Ohio peaked just after World War I, when it employed over 50,000 Ohioans. As new equipment and better practices were developed, greater amounts of coal were able to be mined more safely and with fewer workers. Today, the industry only employs about 3,000 people.[2]

Though the number of mining jobs in Ohio peaked in 1918, actual production of coal in the state did not reach its high of 55,351,000 short tons until 1970.[3] The industry as a whole in the United States reached its apex in 2008. By 2010, Ohio's coal production had been reduced to about half of what was mined in 1970. Ohio's 42 bituminous coal mines only produced 26,707,000 short tons of coal.[4] Ohio was the 10th-largest producer of coal (out of 26 coal producing states) and accounted for 2.5 percent of total U.S. production. From 2009 to 2010, Ohio coal production decreased both from underground and surface mines. Almost half of all coal produced in Ohio comes from Belmont County.[5]

Today, Ohio possesses the headquarters of the largest privately owned coal company in the United States, Murray Energy Corporation. According to the Public Utilities Commission of Ohio, more than 82 percent of Ohio's energy comes from coal, most of which is used for electricity.[6] Due to Ohio's coal, electricity costs in Ohio are below the national average and rank 20th-lowest.[7]

According to the Ohio Department of Natural Resources, Ohio has 11.5 billion tons of known coal reserves.[8] If Ohio continues to mine coal at the rate it does today, it will not run out of coal for another 425 years. The Ohio Coal Association provides a more conservative estimate of 250 years.[9] Coal has played an important role in Ohio's past and should play an equally important role in Ohio's future.

Renewable Energy: Boom to Bust

In addition to oil and coal, Ohio has also attempted to be a leader in renewable energy, primarily through

1 Burton W. Folsom Jr., "John D. Rockefeller and the Oil Industry," The Freeman, Volume 38, Issue 10, October 1988, http://www.thefreemanonline.org/columns/john-d-rockefeller-and-the-oil-industry/ (accessed August 30, 2012).

2 Ohio Coal Association, "2012 Fact Book," http://www.ohiocoal.com/images/stories/pdfbook/OCA_FactBook_p5.pdf (accessed August 30, 2012).

3 U.S. Energy Information Administration, "State Coal Profiles," January 1994, http://www.eia.gov/state/state-energy-profiles-notes-sources-data.cfm (accessed September 4, 2012).

4 U.S. Energy Information Administration, "Reserves & Supply: Production – Coal," http://www.eia.gov/state/state-energy-profiles-notes-sources-data.cfm (accessed September 4, 2012).

5 Ohio Coal Association, "2012 Fact Book," http://www.ohiocoal.com/images/stories/pdfbook/OCA_FactBook_p5.pdf (accessed August 30, 2012).

6 Public Utilities Commission of Ohio, "Where does Ohio's electricity come from?" http://www.puco.ohio.gov/puco/index.cfm/consumer-information/consumer-topics/where-does-ohioe28099s-electricity-come-from/ (accessed August 30, 2012).

7 U.S. Energy Information Administration, "Prices: Electricity – Commercial," http://www.eia.gov/state/state-energy-profiles-notes-sources-data.cfm (accessed September 2, 2012).

8 Ohio Department of Natural Resources, "Coal Mining," http://www.ohiodnr.com/mineral/mining/tabid/10404/default.aspx (accessed August 30, 2012).

9 Ohio Coal Association, "2012 Fact Book," http://www.ohiocoal.com/images/stories/pdfbook/OCA_FactBook_p5.pdf (accessed August 30, 2012).

wind and solar power. While the idea is good in theory, it is cost prohibitive to the point that green energy cannot even compete with Ohio's traditional energy sources. Today, renewable energy makes up about 1 percent of electricity generated in Ohio and is heavily subsidized by the government. The Ohio Department of Development Energy Resources Division touts that it has invested over $60 million in about 700 energy projects since 1999 through its Advanced Energy Fund.[10] The state invested another $84 million in non-coal related clean energy as part of its bipartisan Advanced Energy Job Stimulus Program from 2009 to 2011.[11]

Ohio traces its solar energy roots back to the mid-1980s when Harold McMaster of Toledo founded Glasstech Solar and later Solar Cell, Inc., which later became the well-known First Solar LLC (now headquartered in Arizona, but still operating in the Toledo area). First Solar has been a world leader in bringing down the cost of solar energy to make it more competitive with traditional sources. McMaster contributed many patents and much research to the industry and is remembered as the father of commercial-scale solar energy. In 2010, Fast Company ranked First Solar as the sixth-most innovative company in the world behind only Facebook, Apple, Google, Amazon, and a telecommunications equipment provider. Similarly, in 2011, Forbes Magazine ranked First Solar as the fastest-growing American technology company.[12]

Due in part to Harold McMaster's legacy and the success of his company, the economically declining City of Toledo put its eggs in the green energy basket and sought to become the solar energy capital of the world. In the last decade, other solar energy companies have opened in northwest Ohio. In 2007, The Economist speculated that Toledo could become the Silicon Valley of clean technology. These firms were expected to create thousands of jobs and generate hundreds of millions of dollars in revenue.[13]

In addition to private investment, taxpayer dollars from all levels of government poured into the solar companies established in Toledo. In 2007, Lucas County invested $2 million in Xunlight. The following year, Xunlight received a $4.9 million grant through the Ohio Third Frontier, a state government program. The Toledo-Lucas County Port Authority also agreed to back $1 million in loans for the company. Isofoton North America received almost $16 million from the Ohio Department of Development. And First Solar received $3 billion in federally backed loans from the Department of Energy. These are just several examples of government money that flowed into Ohio solar companies all over the state.[14]

Today, even after receiving tremendous government support, the solar industry in Ohio is failing. In April 2012, First Solar announced that it would eliminate 2,000 jobs.[15] It reported $499 million in losses in the first quarter of 2012, and its stock is at an all time low.

Why the rapid decline in the solar industry in Ohio and in the United States? It can be partially attributed to Germany and other European companies abandoning their clean energy initiatives and therefore significantly reducing their investments in Ohio solar manufacturing. Additionally, it can partially be attributed to innovations and lower labor costs outside of Ohio. As the industry evolved, Ohio companies could not compete with Asian markets, such as China.[16]

10 Ohio Department of Development Energy Resource Division, "Advanced Energy Fund," http://www.development.ohio.gov/Energy/Incentives/AdvancedEnergyFundGrants.htm (accessed August 30, 2012).

11 Ohio Bipartisan Job Stimulus Program, "The Advanced Energy Job Stimulus Program (2009–2011)," http://www.ohioairquality.org/advanced_energy_program/default.asp (accessed August 30, 2012).

12 John P. McCartney, "Sun Burn 1: Area courted solar energy with research," *Toledo Free Press*, July 19, 2012, http://www.toledofreepress.com/2012/07/19/sun-burn-1-area-courted-solar-energy-with-research/ (accessed August 30, 2012).

13 *Ibid.*

14 *Ibid.*

15 Eric Platt, "Green Jobs Gone: First Solar Announces Massive Layoffs," Business Insider, April 17, 2012, http://articles.businessinsider.com/2012-04-17/markets/31353187_1_solar-industry-solar-market-photovoltaic-market (accessed August 30, 2012).

16 John P. McCartney, "Sun Burn 1: Area courted solar energy with research," *Toledo Free Press*, July 19, 2012, http://www.toledofreepress.com/2012/07/19/sun-burn-1-area-courted-solar-energy-with-research/ (accessed August 30, 2012).

The primary reason why solar energy has not caught on in the United States, however, is that it simply is not cost-effective and cannot complete with traditional energy sources. In the past two years, several major solar energy companies that received government grants have filed for bankruptcy, with the most famous being Solyndra in 2011, which received $535 million in grants from the federal government. The cost of solar energy at 8 cents per kilowatt/hour simply cannot compete with coal and natural gas, which cost half that amount.[17]

The theme is largely the same with the wind industry. Wind power is expensive and cannot compete with Ohio's traditional energy sources, yet Ohio's governments continue to fund wind projects from individual turbines for private businesses to offshore turbines in Lake Erie.

Similar to the oil, coal, and solar industries, wind power has strong historical roots in Ohio. The first electricity-producing automatically operated wind turbine was built by Charles Brush of Euclid, Ohio, in 1888. With this turbine, he powered his house, which was the first to have electricity in the Cleveland area.[18]

Despite being home to the first automatically operated wind turbine, wind power did not become popular in Ohio until a utility-sized wind farm was installed in Bowling Green, Ohio, in 2003. At the time, these turbines were the largest east of the Rocky Mountains.[19]

The Ohio Wind Working Group, which began in conjunction with the Bowling Green wind project, now oversees and organizes the development of wind power in Ohio. It is under the Ohio Department of Development and is funded primarily through the U.S. Department of Energy's Wind Powering America Program.

Though Ohio was ranked No. 2 by a Washington, D.C. group Renewable Energy Policy Project for having the most wind manufacturing potential, Ohio does not possess any turbine assembly plants. However, as of 2009, it was home to roughly 90 parts suppliers.[20]

The major problem with wind power in Ohio is that it is too expensive and cannot compete with traditional energy, yet all levels of government continue to throw money at developing the industry. From utility-sized wind farms to individual turbines for private companies to off-shore wind development, government investment in wind is a bad deal for taxpayers both in terms of jobs created and the cost of energy generated.

The latest wind infatuation in Ohio is wind turbines in Lake Erie. In 2010, the Lake Erie Energy Development Corporation proposed a pilot project of five turbines, which were eventually supposed to turn into 1,200 turbines if the project was successful. The project was put on hold because it was a bad deal for Ohioans.

First, the energy generated from these turbines was going to cost five times the market rate. Second, the estimated cost of the project was $31 billion. To put this high figure in perspective, it is significantly more than the yearly state budget. Third, the project was only expected to generate 600 Ohio jobs, and the cost per job was going to be approximately $975,000. Fourth, even though the project was supposed to generate $587 million in tax revenue over 20 years, the $31 billion investment would have never been recouped given the fact that the life span of a well-maintained turbine is only 30 to 40 years.[21]

Even in spite of the improvements made to the project over the last few years, it still is a bad deal for taxpayers. By switching to smaller turbines, the $100 million for the pilot project can buy nine turbines

17 U.S. Energy Information Administration, "Levelized Cost of New Generation Resources in the Annual Energy Outlook 2012," Table 1, July 12, 2012, http://www.eia.gov/forecasts/aeo/electricity_generation.cfm (accessed September 3, 2012).

18 Jeffrey La Favre, "The Brush Mansion and Family Life," http://www.lafavre.us/brush/mansion (accessed August 30, 2012).

19 Ohio Wind Working Group, "Brief History," http://www.ohiowind.org/Brief-History.cms.aspx (accessed August 30, 2012).

20 Denise Trowbridge, "Manufacturers primed for wind turbines, but market soft," Columbus Business First, August 28, 2009, http://www.bizjournals.com/columbus/stories/2009/08/31/tidbits5.html?page=all (accessed August 30, 2012).

21 Mary McCleary, "Lake Erie wind turbines costly, inefficient," *Toledo Blade*, December 6, 2010, http://www.toledoblade.com/Op-Ed-Columns/2010/12/07/Lake-Erie-wind-turbines-costly-inefficient.html (accessed August 30, 2012).

instead of five, but the cost per kilowatt-hour is estimated to come in around 15 cents, which is at least 1.5 times more expensive than land wind power and about three times more expensive than coal and natural gas. Additionally, the nine turbines could generate up to 27 megawatts of energy, which could power up to 21,600 homes, which is only 3 percent of Cuyahoga County.[22, 23]

Despite support from the City of Cleveland, and Lake, Cuyahoga, Ashtabula, and Lorain counties, the future of the project rests upon receiving a $50 million federal grant since the Third Frontier program, for the time being, has declined to fund the project.[24]

Equally insidious are the government grants for wind power given to private companies. One example is the two wind turbines at Byers Auto Group in Columbus and Delaware. The state and federal government funded $400,000 of the $600,000 cost for these turbines, which produce energy at 17 cents per kilowatt-hour, more than triple the cost of traditional energy and almost double the cost of utility-scale wind power. Beyond the sheer cost, Ohio taxpayers should not be picking up the energy tab for private companies. If the turbines were a less expensive source of energy without being subsidized by the government, every company would be having them installed. Clearly, this is not the case.[25]

The green energy industry in Ohio is propped by government grants and loans from the federal, state, and local levels. The free market does not render these sources of energy economically viable at this time. While special interests benefit significantly when the government picks winners and losers, the vast majority of Ohioans lose. The clear benefactors of green energy mandates and subsidies are those affiliated with the industry and the businesses that are lucky enough to secure grants to fund projects that will benefit their bottom lines.

The losers, on the other hand, are hardworking Ohio taxpayers and those affiliated with traditional energy. Ohioans not only lose as their tax dollars are poorly invested, but also as energy costs increase. With the green energy mandate and the war on coal, it is almost certain the price of energy will go up.

Green energy is not the "stimulus" that Ohio needs to recover from the long lasting effects of the economic bust experienced over the last decade. Between 2000 and 2010, Ohio lost over 614,000 private-sector jobs, a nearly 13 percent decline. Though Ohio has gained back some of the jobs in the last few years and unemployment is declining, the recovery that all politicians tout and claim credit for is not as glamorous at it appears. For one, Ohio's labor force has shrunk by almost 139,000 people since 2008. Even though the labor force has shrunk, the number of unemployed has increased by over 89,000 since 2008. Only Michigan experienced a similar phenomenon. This does not take into account the Ohioans that are underemployed. While Ohio might be adding jobs, the job market is anything but healthy.[26]

Aside from raw jobs numbers, other economic data indicate that Ohio still has not recovered from the recession. The most recently available household income data shows Ohio households earn $3,000 less income than they did in 2007 and only a few hundred dollars more than they did in 2006. Ohio's median household income of $46,093, which is below the national median income of $49,445 and 16th-worst in the nation, is hardly higher than it was in 2000 at $42,962.[27]

22 John Funk, "Wind turbine project back on table," *Columbus Dispatch*, May, 27, 2012, http://www.dispatch.com/content/stories/business/2012/05/27/wind-turbine-project-back-on-table.html (accessed August 30, 2012).

23 Ohio Department of Development, "Ohio County Profiles: Cuyahoga County," https://www.development.ohio.gov/research/files/s0.htm (accessed August 30, 2012).

24 Ed FitzGerald and Ronn Richard, "Third Frontier should support wind energy," *Cleveland Plain Dealer*, June 23, 2012, http://www.cleveland.com/opinion/index.ssf/2012/06/third_frontier_should_support.html (accessed August 30, 2012).

25 Mary McCleary, "Government Powers Private Business through Green Energy Grants," The Buckeye Institute for Public Policy Solutions, November 18, 2010, http://www.buckeyeinstitute.org/news-from-the-statehouse?id=75 (accessed September 4, 2012).

26 Matt A. Mayer, "Kasich's Claims on His Severance Tax Hike Plan: "Exorbitant Overestimates Drive Bad Policy," Opportunity Ohio, August 23, 2012, http://www.opportunityohio.org/wp-content/uploads/2012/06/Kasich's-Claims-on-His-Severance-Tax-Hike-Plan.pdf (accessed August 23, 2012).

27 U.S. Census Bureau, "Median State Income: Median Household Income by State – Single-year Estimates," http://www.census.gov/hhes/www/income/data/statemedian/ (accessed August 30, 2012).

With a less than stable job market and relatively flat wages, Ohioans do not have extra money to spend funding boondoggle green energy projects. Likewise, when companies, particularly factories and plants, rely heavily on energy, they feel the increase in costs through their bottom lines. This can result in layoffs and worse yet in companies closing their doors. Rising energy costs can be the difference between being profitable and being unprofitable. While the green energy industry may add jobs, it costs jobs in other sectors and harms all Ohioans without a direct financial stake in green energy success.

Aside from purely financial arguments against government green energy investments, simple practicality also must be a consideration. First, other countries continue to rely on coal as a cheap source of energy. In fact, as the United States is killing coal at home, other countries are using coal to propel their economies. In spite of the United States shifting away from coal, global demand for coal is expected to rise by 38 percent by 2035.[28] The end result of this policy will be the further weakening of U.S. manufacturing. As costs rise at home, companies will move overseas as a way to reduce costs.

Second, even though the United States is abandoning coal and imposing strict emissions standards, these policies do nothing to reduce global emissions or save the planet, as the Obama administration intended. Though carbon dioxide emissions in the United States fell slightly from 2001 to 2010, global emissions increased by 28.5 percent. Even if U.S. emissions were zero, global emissions would still have risen. The United States cannot single-handedly save the world from carbon dioxide, and even its most valiant, far-reaching efforts at home would have little effect on global output.[29]

Third, coal is much more power dense than any kind of renewable energy. Robert Bryce explains this reality in City Journal:

> Once you account for the energy lost during the conversion of coal to electricity, the [North Antelope Rochelle Mine in Wyoming] yields the energy equivalent of about 300,000 barrels of oil per day. Solar and wind energy production, meanwhile, provided the United States with 333,000 megawatt-hours of electricity per day in 2011—the equivalent of 203,000 barrels of oil. The point isn't merely that a single mine produces about 50 percent more energy on an average day than all the country's solar panels and wind turbines combined. It's that the mine covers just 80 square miles, while domestic wind projects now cover about 9,400 square miles—an area approximately the size of Maryland.[30]

Traditional energy is more cost-effective and more practical than either solar or wind power. Based on the facts, policies that favor renewables over coal and natural gas do not make sense for Ohio or the United States.

Ohio's Energy Revival: The Utica Shale

With green energy going bust and the discovery of oil and gas deposits in the Utica Shale in the eastern half of the state, Ohio has the opportunity to be a national leader in oil and gas production.

The most obvious benefactors of the Utica Shale are oil and gas companies from small Ohio-based businesses to world-renowned corporations. These companies have the opportunity to invest in Ohio and make a decent return on their investments. The average return for energy companies is roughly 7 percent. Without the profit incentive, there is no investment.[31]

28 Robert Bryce, "Coal Comfort," *City Journal,* Summer 2012, Volume 22, Number 3, http://www.city-journal.org/2012/22_3_coal.html (accessed September 3, 2012).

29 *Ibid.*

30 *Ibid.*

31 Ohio Oil and Gas Association, "Ohio Oil and Gas Association Severance Tax Fact Sheet," http://ooga.org/issues-advocacy/archive/ohios-oil-and-gas-severance-taxes/ (accessed September 4, 2012).

Oil and gas companies will invest in states where they can make the greatest returns.

Landowners, many of whom are rural Ohio farmers, benefit greatly from leasing their land to energy companies for exploration and drilling. Companies are already paying in excess of $5,000 per acre in signing bonuses.[32] Additionally, royalties on wells typically range from 12.5 percent up to 20 percent. This revenue flowing directly into the pockets of Ohioans will bring a much-needed boost to the area, much of which is still recovering from the Great Recession.

Many of these landowners, though possibly rich in land, are average Ohioans with average or below average incomes, particularly in southeast Ohio, which has the lowest median incomes in the state. For example, the median household income in Noble County is only $39,500 and only $37,030 in Monroe County. The Utica Shale will likely bring an economic boon to the region.[33]

When the oil and gas companies win, Ohioans win. According to an economic study completed in 2011, at least 200,000 jobs will be created by the oil and gas industry in Ohio by 2015. This does not include other ancillary jobs that will be created as a result of these jobs.[34] These jobs are necessary to help Ohio recover from the massive job losses it has experienced since 2000 (over 614,000 jobs were lost between 2000 and 2010) and to bring an economic revival to the poorest parts of the state.

In addition to jobs directly created by the energy industry, Ohio will become a more attractive place for companies, particularly manufacturing plants, to do business because of close proximity to energy production, which translates to lower energy costs.

Federal and State Attacks on Ohio's Energy

Though Ohio has long been a leader among states in energy production and development, Ohio's energy is under attack from both the right and the left. If Ohio wants to continue its leadership in the energy industry and use our natural resources as a source of economic power and growth, Ohioans must stand up to the federal and state governments, which are both actively working to undermine Ohio's energy advantage and, consequently, Ohio's economic recovery.

At the federal level, the Obama administration has effectively declared a war on coal. During his 2008 presidential campaign, President Obama clearly stated his position on coal with the following remarks: "If somebody wants to build a coal-powered plant, they can, it's just that it will bankrupt them because they're going to be charged a huge sum for all that greenhouse gas that's being emitted."[35] This is one campaign promise that Obama has made good on through the Environmental Protection Agency. Regulations not only effectively prohibit new coal-fired power plants, but they also have been the primary cause of coal-fired power plants closing all over the United States. Many existing plants will close on or before June 15, 2015, when tougher air pollution standards go into effect.

Ohio has already suffered from the war on coal through the loss of coal-fired power plants and the loss of jobs. Eight of 22 coal-fired power plants in Ohio are scheduled to close before June 15, 2015.[36] The U.S. Energy Information Administration reports that 175 plants nationwide are expected to close between 2012 and 2016, and that coal-fired capacity will be reduced by 8.5 percent.[37]

32 Spencer Hunt, "With shale, there's lots at 'play,'" *Columbus Dispatch*, April 1, 2012, http://www.dispatch.com/content/stories/local/2012/04/01/with-shale-theres-lots-at-play.html (accessed September 1, 2012).

33 Ohio Department of Development, "Ohio County Profiles," http://www.development.ohio.gov/research/files/s0.htm (accessed September 4, 2012).

34 Ohio Oil and Gas Association, "Ohio Oil and Gas Association Severance Tax Fact Sheet," http://ooga.org/issues-advocacy/archive/ohios-oil-and-gas-severance-taxes/ (accessed September 4, 2012).

35 Investor's Business Daily, "President Obama's war on coal hits battleground state of Ohio," August 1, 2012, http://news.investors.com/article/620622/201208011852/obama-war-on-coal-hits-ohio.htm?p=full (accessed September 1, 2012).

36 Spencer Hunt, "Coal power plants may be razed or sold once closed," *Columbus Dispatch*, June 10, 2012, at lhttp://www.dispatch.com/content/stories/local/2012/06/10/coal-power-plants-may-be-razed.html (accessed September 1, 2012).

37 U.S. Energy Information Administration, "27 gigawatts of coal-fired capacity to retire over next five years," July 27, 2012, http://www.eia.gov/todayinenergy/detail.cfm?id=7290 (accessed September 1, 2012).

In terms of megawatts of coal energy destroyed by the regulations, estimates vary. The U.S. Energy Information Administration estimates a loss of roughly 27 gigawatts between 2012 and 2016, with 49 gigawatts being retired by 2020.[38] In 2015, a one-year record amount of 10 gigawatts will be retired. To provide some context for these numbers, 10 gigawatts is enough to provide power for two times the number of households in Ohio.

The major EPA energy regulation that threatens electricity generated by coal is the Utility Maximum Achievable Control Technology (MACT), which places tight restrictions on emissions. The U.S. Court of Appeals in Washington, D.C. struck down the other major regulation threatening coal, the Cross-State Air Pollution Rule (CSAPR), in August 2012. Together these regulations, according to an analysis by the National Economic Research Associates (NERA), were expected to cost the United States 1.4 million net jobs by 2020, with 53,500 of those jobs coming from Ohio.[39]

Even the labor union United Mine Workers of America, part of the AFL-CIO, has turned its back on the President's energy policy, calling it economically devastating and comparing his energy policy to the War on Terror. In a radio interview, union president Cecil Roberts famously stated of the EPA Administrator Lisa Jackson: "The Navy SEALs shot Osama bin Laden in Pakistan and Lisa Jackson shot us in Washington."[40]

In August 2012, Murray Energy Corporation announced the coming closure of a mine in Ohio, citing the Obama Administration's energy policy. Due to regulations, it was no longer profitable for the company to keep the mine open. In 2009, the company employed 293 workers at the mine. Due to the regulatory burden, the number of employees had dwindled to 56 in 2012 and will be zero later this year.[41]

The effects of federal energy policy can already be seen through higher energy costs, particularly in Ohio. For example, in May 2012, FoxNews.com reported the following:

> Last week PJM Interconnection, the company that operates the electric grid for 13 states (Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia) held its 2015 capacity auction. These are the first real, market prices that take Obama's most recent anti-coal regulations into account, and they prove that he is keeping his 2008 campaign promise to make electricity prices "necessarily skyrocket."
>
> The market-clearing price for new 2015 capacity—almost all natural gas—was $136 per megawatt. That's eight times higher than the price for 2012, which was just $16 per megawatt. In the mid-Atlantic area covering New Jersey, Delaware, Pennsylvania, and DC the new price is $167 per megawatt. For the northern Ohio territory served by FirstEnergy, the price is a shocking $357 per megawatt.
>
> Why the massive price increases? Andy Ott from PJM stated the obvious: "Capacity prices were higher than last year's because of retirements of existing coal-fired generation resulting largely from environmental regulations which go into effect in 2015." Northern Ohio is suffering from more forced coal-plant retirements than the rest of the region, hence the even higher price.[42]

38 U.S. Energy Information Administration, "Projected retirements of coal-fired power plants," July 31, 2012, http://www.eia.gov/todayinenergy/detail.cfm?id=7330 (accessed September 1, 2012).

39 Kevin Schmidt, "Impact of Regulations Is Costly," *Columbus Dispatch*, October 20, 2010, http://www.dispatch.com/content/stories/editorials/2011/10/20/impact-of-regulations-is-costly.html (accessed September 1, 2012).

40 West Virginia Metro News, "Cecil Roberts: 'Lisa Jackson shot us,'" April 3, 2012, http://www.wvmetronews.com/news.cfm?func=displayfullstory&storyid=51952 (accessed September 1, 2012).

41 Casey Junkins, "Murray closing mine, blames President Obama," *The Herald Star*, August 1, 2012, http://www.heraldstaronline.com/page/content.detail/id/576399/Murray-closing-mine--blames-President-Obama.html?nav=5010 (accessed September 1, 2012).

42 Phil Kerpen, "Obama's war on coal hits your electric bill," FoxNews.com, My 22, 2012, http://www.foxnews.com/opinion/2012/05/22/obamas-war-on-coal-hits-your-electric-bill/ (accessed September 1, 2012).

In addition to the onerous regulations on the coal industry, the President plans to further display his disfavor towards traditional energy industries by cutting over $40 billion in tax expenditures for oil, gas, and coal companies over the next 10 years while continuing to use the tax code to support renewable energy.[43]

This tax expenditure cut is tantamount to a tax increase on traditional energy. While it is debatable whether or not tax expenditures should exist at all in federal tax code, one thing is certain: a tax expenditure cut will only lead to job losses and increased energy prices for American consumers.

Though wind power is not in danger of losing its tax expenditures, the loss of tax expenditures would be devastating to the industry according to the American Wind Energy Association, which says the industry could lose half of its 78,000 jobs without them.[44]

The point is not that further tax breaks should be given to green energy companies, but instead to illustrate the detrimental effects of eliminating energy tax expenditures.

In addition to Ohio's energy being under attack at the federal level, it is also facing a tax hike at the state level. Governor John Kasich has proposed raising taxes on traditional energy through increasing the severance tax 16 times to give Ohioans a small income tax break.

Currently, Ohio's severance tax rate is 0.25 percent and will be raised to a full 4 percent if the governor gets his wish. This tax hike won't just hit the big, out of state oil and gas companies: it will harm all Ohioans.

First, it is important to understand that oil and gas companies make thin margins. After covering costs and taxes, they only make about 7 percent. Well expenses eat up roughly 67 percent of revenue, taxes another 13 percent, and royalties yet another 13 percent. Though a 7 percent return may sound high, it is low compared to many other industries (e.g. pharmaceuticals, computers, manufacturing, machinery, and furniture – just to name a handful). More importantly, the increase in Ohio's severance tax will lower oil and natural gas profits to a mere 4 percent.[45]

If oil and gas companies cannot make good returns on their investments, they will either not invest in Ohio or limit their investments because they will be able to make better returns in other states. Recent history illustrates this point well.

Pennsylvania has a 0 percent severance tax. No taxes combined with a wealth of natural resources has led to a 600 percent increase drilling in just five years. In contrast, Michigan and West Virginia, which also have shale, have seen decreased investments in drilling due to their high taxes. Both states charge a 5 percent tax for gas, while Michigan charges 6.6 percent for oil and West Virginia charges 5 percent for oil. Similarly, when Arkansas instituted a severance tax in 2008, it only took four years for drilling activities to be cut in half.[46]

Big oil companies (as opposed to small businesses) that have the luxury to choose where to drill will drill where they can make the best return. Taxes matter. Likewise, small oil and gas companies with limited resources that only drill in Ohio will be hurt. When taxes are increased 16 times the current rate, there is a very good chance that some Ohio companies will be taxed out of business. Obviously, this does nothing for economic or job growth.

Though Ohio's severance tax is lower than the surrounding states except Pennsylvania, Ohio's overall tax structure makes it uncompetitive with other states. Ohio's energy companies do not pay just a severance tax. They also pay corporate and personal income taxes, commercial activity taxes, sales taxes, fuel use taxes, and ad valorem taxes. Because of the current severance tax, energy companies already pay

43 Jim Snyder and Brian Wingfield, "Obama Budget Would Cut $40 Billion in Fossil-Fuel Credits," Bloomberg, February 13, 2012, http://www.bloomberg.com/news/2012-02-13/obama-proposes-cutting-40-billion-in-u-s-fossil-fuel-credits.html (accessed September 4, 2012).

44 Renee Schoof, "Federal spending on clean energy falls short on jobs, but wind and solar advance," *The Telegraph,* August 13, 2012, http://www.macon.com/2012/08/13/2132981/federal-spending-on-clean-energy.html (accessed September 1, 2012).

45 Ohio Oil and Gas Association, "Ohio Oil and Gas Association Severance Tax Fact Sheet," http://ooga.org/issues-advocacy/archive/ohios-oil-and-gas-severance-taxes/ (accessed September 4, 2012).

46 *Ibid.*

higher taxes than most Ohio businesses. The severance tax increase means that they will pay a much higher portion of their revenue in taxes than other Ohio industries.

Severance tax increase aside, Ohio is not known as a business friendly state. In 2012, The Tax Foundation ranked Ohio as having the 39th-best business tax climate. Likewise, the Fraser Institute ranked Ohio as the 44th-economically freest state. Recently, another Fraser Institute study showed that Ohio has dropped from 2nd to 14th as a place where energy company executives would be likely to explore because of the proposed severance tax increase. Only nine states scored worse than Ohio.[47] The severance tax further hinders Ohio's competitiveness and ability to create jobs.

Raising the severance tax is not only bad for oil and gas companies, it is bad for all Ohioans. When companies do not invest in Ohio, they do not create jobs in Ohio. The Kleinhenz & Associates study predicts that 200,000 jobs directly related to the oil and gas industries will be created in Ohio by 2015. The severance tax hike puts that job creation in jeopardy.[48]

Additionally, if companies choose not to drill in Ohio, landowners will not receive payments from oil and gas companies for leases and royalties. Equally as bad is the fact that many landowners who have drilling on their properties will receive lower payments from oil and gas companies because they could be expected to foot the bill for the severance tax. One estimate is that 85 percent of landowners will end up paying the tax instead of the energy companies.[49]

Even government likely will not receive the benefit of the severance tax that it expects. All other things held constant, when governments increase taxes, revenues will increase. However, increased taxes stunt the growth of economic activity. In terms of the state's coffers, the tax increase likely will not provide the revenue stream that politicians estimate, especially since Governor Kasich's estimate on the worth of Ohio's energy reserves was grossly overstated—off by a few zeros, according to experts. Ohio does not have more than a trillion dollars in oil and gas wealth. In fact, over the next four years, all the oil produced in the United States will only be worth about $800 billion. Since the value of the reserves has been inflated and exaggerated, it only follows that the tax revenues collected and the subsequent reduction in income taxes will be far less than expected.[50]

The good news for the state of Ohio is that tax revenues are expected to increase because of the oil and gas boom even without an increase in the severance tax. In 2015, it is estimated that tax collections from oil and gas companies will have increased by $1.05 billion from development of the Utica shale without raising taxes. Overall, this amounts to a 4 percent increase for state and county governments and a 6 percent increase for municipal governments since 2010. On the other hand, the Ernst & Young study, which is in favor of the tax hike, estimates that the tax will bring in $459 million to $547 million additional revenue per year.[51] Though, based on the two studies, raising the tax is expected to bring in slightly more money than not raising the tax, there is a good chance that the level of increased tax revenue that the Governor expects will not come to fruition due to overestimates.

Whether taxes stay the same or are raised, one thing is certain: all levels of government will collect more money from the energy industry in the future than they do today. Since the main purpose of increasing taxes is to provide an income tax cut to Ohioans,

47 Gerry Angevine, Miguel Cervantes, and Vanadis Oviedo, "Global Petroleum Survey 2012," The Fraser Institute, June 26, 2012, http://www.fraserinstitute.org/research-news/display.aspx?id=18469 (accessed September 1, 2012).

48 Ohio Oil and Gas Association, "Ohio Oil and Gas Association Severance Tax Fact Sheet," http://ooga.org/issues-advocacy/archive/ohios-oil-and-gas-severance-taxes/ (accessed September 4, 2012).

49 Matt A. Mayer, "Governor John Kasich's Claims on His Severance Tax Hike Plan: 'Exorbitant Overestimates' Drive Bad Policy," Opportunity Ohio, August 23, 2012, http://www.opportunityohio.org/articles/ (accessed September 1, 2012).

50 *Ibid.*

51 *The Wall Street Journal*, "Kasich's Tax Swap," July 26, 2012, http://online.wsj.com/article/SB10000872396390443437504577545081209344456.html (accessed September 15, 2012).

why not forgo the tax increase and just use the additional revenues collected from increased economic activity to lower taxes?

While lowering the personal income tax is good and noble cause, there is a right way to do it, and there is a wrong way to do it. Raising taxes on one industry is not the right way to fund a tax cut for everyone else. In fact, when asked, only 7 percent of Ohioans agreed with this approach. In contrast, 49 percent of Ohioans thought cutting government spending provided a better base from which to fund an income tax cut.[52] If cutting the income tax is so important, it should either be done by a spending cut or by using the additional taxes collected from the oil and gas boom sans the tax increase.

Though Ohio has a high overall state and local tax burden, the state income tax is in the middle of the pack compared to other states. Ohio's income tax actually is not uncompetitive. Though Ohioans will get a reduction in their income taxes, this reduction will be less than substantial. The governor hopes that oil and gas companies can fund an income tax cut of $500 million per year.[53] If the tax cut were distributed equally among all of Ohio's workers, it would equate to a cut of approximately $96 per year. If tax revenues are only the $300 million that the Ohio Oil & Gas Association estimates, the tax cut will only be $57 per worker per year. According to an analysis by Matt Mayer in Appendix A using actual data from the Utica Shale, the tax cut likely is closer to $16 per year.

Most economists agree that a broad-based tax cut that comes at the expense of one industry is a bad idea. In 2008, when Colorado tried to raise taxes on energy production, the National Taxpayers Union (NTU) wrote an open letter to Colorado residents warning against the tax hike that was signed by over 100 economists from a wide range of academic institutions and think tanks.[54] Not surprisingly, NTU also opposes raising the severance tax in Ohio in an open letter to Governor Kasich.[55]

Matt Mayer sums up the flaws inherent in the severance tax hike in his book, *Taxpayers Don't Stand a Chance: How Battleground Ohio Loses No Matter Who Wins (And What to Do About It)*:

> First, it continues to ignore the elephant in the room: government spending. The real problem in Ohio (and America) is that government spending has outpaced inflation and economic growth. Shifting tax burdens from individuals to the companies they work for may change the color of the revenue brought into government, but it utterly fails to tackle the spending side of the ledger.
>
> Governor Kasich's tax plan confirms that he accepts the status quo size of state government. Otherwise, he would reduce government to pay for the income tax cut. Remember, Governor Kasich's first budget actually increased general revenue fund expenditures. From 1990 to 2013, Ohio's general revenue fund expenditures will have exploded by 148 percent with a lot of unjustified government growth.
>
> His view that Ohio's "disproportionately low" tax on the energy industry presents him with a windfall opportunity to increases taxes is, frankly, odd for a conservative … Most governors seeking to increase their states' competitiveness for an industry move to lower tax burdens, not increase them.
>
> No matter the political spin, raising taxes on the energy industry will have a

52 Magellan Strategies, "Ohio General Election Survey Topline Results," Opportunity Ohio, July 25, 2012, http://www.opportunityohio.org/book-2/ (accessed September 1, 2012).

53 10tv.com, "Kasich Unveils Plan to Lower Income Taxes, Raise Severance Tax for Out-of-State Oil Companies," July 13, 2012 http://www.10tv.com/content/stories/2012/07/13/columbus-kasich-unveils-plan-to-lower-income-tax.html (accessed September 2, 2012).

54 National Taxpayers Union, "An Open Letter to Colorado Residents: Amendment 58 Will Raise Energy Prices," October 9, 2008, http://www.ntu.org/in-your-state/colorado/colorado-amendment58-raise-energy-prices2.html (accessed September 2, 2012).

55 Andrew Moylan, "Don't Just Shift the Burden of Government, Reduce It!" National Taxpayers Union, June 5, 2012, http://www.ntu.org/in-your-state/ohio/l12-06-05-oh-energy-tax-govkasich.html (accessed September 2, 2012).

> negative impact on Ohio's competitiveness and job creation … Business leaders in all industries are very nervous about politicians with "windfall" mentalities. They know "fairness" for one industry today could hit their industries tomorrow, as feeding government spending is what matters.
>
> A third flaw is that Governor Kasich's tax plan contains no real reform and, therefore, represents nibbling on the margins of our problems. Shifting taxes around doesn't lower Ohio's overall tax burden.[56]

In May 2008, the Ohio General Assembly codified green energy standards in Senate Bill 221, which passed both the Senate and the House unanimously with the exception of then-Representative Thomas Patton. According to this mandate, 25 percent of electricity sold in Ohio must be from alternative energy sources by 2025, with half of that energy coming from renewable sources such as wind and solar. Since this requirement is phased in incrementally, energy standards are raised every year until they reach a full 25 percent in 2025. Additionally, the bill requires Ohio's utilities to reduce power use by 22 percent by 2025.[57]

In spite of renewable energy's bad track record, the standards passed in 2008 are not likely to be repealed any time soon. During the last gubernatorial election, now-Governor John Kasich's spokesman stated: "We're not opposed to the standards."[58] Additionally, in September 2011, Governor Kasich wrote a letter to attendees of an energy summit at The Ohio State University claiming "renewable and advanced energy sources 'the pursuit of the future, and our commitment to them shouldn't waver despite the fact that their costs aren't yet where we want them to be.'"[59] That same month, Senator Kris Jordan introduced a bill to a repeal Ohio's energy standards. Though hearings were held in February 2012, the bill never made it out of committee.

Instead, the Ohio General Assembly in March 2012 passed Senate Bill 289 which broadened the definition of "renewable energy resource" to include cogeneration technology. Cogeneration technology as defined by Senate Bill 289 is "technology that produces electricity and useful thermal output simultaneously."[60] In other words, any technology that captures heat produced from the industrial process and converts it to electricity qualifies as a renewable energy resource. Though another source of energy is included in the statute, the law provides little true relief from the energy standards originally passed in 2008.

What Should Ohio Do?

First, Ohio's political leaders should repeal the renewable energy requirements in Senate Bill 221 and let the free market determine what percentage of renewable energy companies use.

Next, Ohio legislators should unequivocally reject Governor Kasich's severance tax hike as soon as possible to send a clear message to the world's energy producers that Ohio won't adopt a "rob Peter to pay Paul" approach to the Utica Shale formation.

Finally, Governor Kasich should lead a national effort to aggressively push back on the federal government's nationalization of energy policy so that states can freely set policies that work best for them, thereby re-embracing America's federalism principle.

56 Matt A. Mayer, *Taxpayers Don't Stand a Chance: How Battleground Ohio Loses No Matter Who Wins (And What To Do About It)*, pp. 48–49, Opportunity Ohio, July 2012.

57 The Public Utilities Commission of Ohio, "Energy, Jobs, Progress: Ohio Senate Bill 221," http://www.puco.ohio.gov/puco/index.cfm/consumer-information/consumer-topics/energy-jobs-progress-ohio-senate-bill-221/ (accessed September 4, 2012).

58 Jim Siegel, "Green-power pushback," *Columbus Dispatch*, September 9, 2011, http://www.dispatch.com/content/stories/local/2011/09/09/green-power-pushback.html (accessed September 2, 2012).

59 Jeff Bell, "Energy mandate comes under file at Statehouse," Columbus Business First, December 9, 2011, http://www.bizjournals.com/columbus/print-edition/2011/12/09/energy-mandate-comes-under-fire-at.html?page=all (accessed September 2, 2012).

60 129th General Assembly, "Substitute Senate Bill Number 289," http://www.legislature.state.oh.us/bills.cfm?ID=129_SB_289 (accessed September 2, 2012).

Conclusion

Ohio has a rich history of leadership and success in the energy industry, but history is certainly no indication of future success. Unless the right policies are put into place, Ohio will not be a leader, despite its bountiful natural resources, because companies will invest their money in other states and consequently create jobs in other states instead of in Ohio.

Policy makers need to focus first and foremost on developing Ohio's natural resources, which include coal, oil, and natural gas. Ohio's current severance tax advantage over most states combined with its abundant coal, gas, and oil deposits make it an ideal place for energy companies to invest. When energy companies doing business in Ohio make profits, nearly everyone wins, and Ohio's economy grows, which results in job creation and additional tax dollars for all levels of government.

Ronald Reagan famously stated, "If you want less of something, tax it." This is basic economics. With the threat of a tax hike already causing decreased investment in the state, Ohioans can expect even less investment and economic activity if the tax comes to fruition.

In addition to developing our natural resources, Ohio needs to actively push back against the federal government and the EPA, who are waging a war on Ohio's coal. Governors all over the country should stand up to the President on behalf of their citizens who will be hit with higher energy prices and fewer jobs.

In addition to developing the Utica Shale, Ohio should continue taking advantage of the latest research and technology in other energy sectors, such as nuclear, so long as it is economically feasible and can complete in price with traditional energy, unlike solar and wind power.

Developing natural resources in Ohio and all across the United States is good for the economy, but beyond jobs, profits, and tax revenues, it strengthens the country by lessening our dependence on foreign oil. In the event of a world crisis or a war, the United States needs to have relatively cheap power to stabilize its economy and to defend itself against foreign powers.

Policies that support the development of Ohio's coal, natural gas, and oil have many benefits. Raising taxes might provide a temporary boost in income to the state, but long-term consequences will tell a different story and leave Ohioans holding an empty bag.

MATT A. MAYER

Appendix A: Governor John Kasich's Claims on His Severance Tax Hike Plan: "Exorbitant Overestimates" Drive Bad Policy

Kasich Claim #1: Ohio has oil and gas recoveries of $1 trillion or more.[61]

Fact: As reported in the *Cleveland Plan Dealer*, experts say this claim is an "exorbitant overestimate." As the report states: "I think he's way off base. My best estimate is he's probably wrong by a couple of zeroes," said Arthur Berman, a Texas-based petroleum geologist and independent energy consultant. In fact, the *Plain Dealer* noted, "At current oil prices, that figure represents more than four times U.S. oil production last year. Viewed another way, every drop of oil produced in America for the next four years will be worth roughly $800 billion, based on current prices and production rates."[62] Why does this matter? Because the only compelling element of Governor Kasich's plan is the state income tax cut. If his estimates are "exorbitantly overestimated" then the amount of the tax cut has to drop quite a bit. That means all this time and money spent trying to ram his tax hike plan through the legislature may result in a small state income tax reduction.

Kasich Claim #2: The cost per well is $5 million.[63]

Fact: Governor Kasich got this figure from the Ohio Chamber of Commerce report "An Analysis of the Economic Potential for Shale Formations in Ohio."[64] The problem with this figure is it is only an estimate. The field test wells are costing more than twice as much to get running, coming in around $10 million. Why does this matter? First, producers, landowners, and farmers don't start paying the severance tax until they recover their costs. That means it may not be a year or two before Ohioans get a tax cut; it may be years in the future. Secondly, it works in conjunction with Claim #3 by significantly impacting the profitability and, therefore, the attractiveness of Ohio. Chesapeake Energy, the largest investor in Ohio's Utica Shale formation, recently announced that its capital investment in Ohio would drop to only 8 percent for 2013.[65] In the last two weeks, Anadarko removed its drilling rig from Ohio, and Devon Energy reported that results from two wells "were not encouraging."[66]

61 Governor John Kasich made this claim to WCMH-NBC4 in March 2012. See Associated Press, "Experts question Kasich's estimate on oil and gas revenues," August 2, 2012, http://www.cleveland.com/business/index.ssf/2012/08/experts_question_kasichs_estim.html (accessed September 15, 2012).

62 *Ibid.*

63 Governor Kasich's projections are contained in a document his administration produced titled, "Estimated New Severance Tax Revenue and Gross Production Income (2012-2016)." A copy of this document can be viewed http://www.opportunityohio.org/wp-content/uploads/2012/06/Estimated-New-Severance....pdf (accessed September 15, 2012).

64 Ohio Chamber of Commerce, "An Analysis of the Economic Potential for Shale Formations in Ohio," February 28, 2012, pp. 1–2, 16, and 31, http://www.ohiochamber.com/dococc/HOMEPAGE/-pdf/study.pdf (accessed September 15, 2012).

65 Mark Passwaters, "Chesapeake pins 2013 hopes on Eagle Ford, Anadarko Basin," SNL, July 16, 2012, http://www.snl.com/Interactivex/article.aspx?CdId=A-15298604-13352 (accessed September 15, 2012).

66 Bob Downing, "Company reports shed more light on Utica shale drilling in Ohio," *Akron Beacon Journal*, August 9, 2012, http://www.ohio.com/business/company-reports-shed-more-light-on-utica-shale-drilling-in-ohio-1.325896?utm_source=8-20-2012+Pipeline&utm_campaign=8%2F20%2F12+Pipeline&utm_medium=email (accessed September 15, 2012).

Table 1: Governor John Kasich's Estimated New Severance Tax Revenue and Gross Production Income (2012–2016)

Annual Production Per Well (in Barrels)	Wells Producing 2012	2013	2014	2015	2016
89,100	172	559	925	1,192	1,290
62,100	–	172	559	925	1,192
48,600	–	–	172	559	925
40,500	–	–	–	172	559
34,200	–	–	–	–	172
Total Production	7,662,600	35,584,650	84,281,850	144,679,500	204,969,600
Gross Income at $90/BBL	$689,634,000	$3,202,618,500	$7,583,361,750	$13,018,200,120	$18,444,853,440
Estimated Severance Tax Revenue	$10,344,510	$48,039,278	$132,558,626	$272,073,152	$441,941,152
				Total Severance Tax Revenue	$904,956,718

Kasich Claim #3: The revenue per well is $75 million.[67]

Fact: For this claim, we will focus on oil production because gross income from oil production makes up 95.8 percent of the revenue from which Governor Kasich expects to get his severance tax proceeds.[68] Governor Kasich's estimate for 2012–2016 projects each well will produce between $24.7 million and $29.4 million in oil depending on the price per barrel. Once gross income from natural gas and natural gas liquids are added to the gross income from oil over the entire estimated 25year life of the well, the estimated revenue per well hits $75 million.

Most of the figures contained in Governor Kasich's projection come out of the Ohio Chamber of Commerce report. Specifically, Governor Kasich's average annual production numbers are identical to the numbers in Table 1, "Average Anticipated Annual Production Per Well (after processing)." The only difference is that he separates the liquids between oil and natural gas liquid.[69] Similarly, Governor Kasich uses the numbers in Table 3, "Projection of Wells Drilled," for a couple of the years in his estimate.[70]

The field test wells, however, are producing a lot less than $75 million worth of product. It looks like the production per well for 2012–2016 will be closer to $6.2 million to $7.4 million in oil depending on the price per barrel. The public records released so far include two sources of production. First, Chesapeake Energy released its 2011 Utica Shale Production covering nine active wells. When the oil produced from each well is prorated for a year's worth of production (365 days), the average oil production per well equates to 22,371 barrels.[71]

The second source comes from a newspaper report in which EV Energy Partners LP notes that its

67 See footnote 63.

68 See footnote 63.

69 Ohio Chamber of Commerce, at p. 15.

70 *Ibid,* at p. 17.

71 Ohio Department of Natural Resources, "2011 Utica Shale Production," undated, http://ohiodnr.com/portals/11/oil/pdf/Utica_Production_2011.pdf (accessed September 15, 2012).

Table 2: Estimated New Severance Tax Revenue and Gross Production Income (2012–2016) with Actual Results

Annual Production Per Well (in Barrels)	Wells Producing 2012	2013	2014	2015	2016
22,371	172	559	925	1,192	1,290
15,592	–	172	559	925	1,192
12,202	–	–	172	559	925
10,169	–	–	–	172	559
8,587	–	–	–	–	172
Total Production	1,923,906	8,934,503	21,161,271	36,325,759	51,463,243
Gross Income at $90/BBL	$173,151,540	$804,105,259	$1,904,514,416	$3,269,318,284	$4,631,691,831
Estimated Severance Tax Revenue	$2,597,273	$12,061,579	$33,291,279	$68,326,936	$110,975,955
				Total Severance Tax Revenue	$227,253,022

Frank well "is producing 515 barrels of energy equivalents per day."[72] This data, however, is test data covering only a short period of time and not extended production data. Of the 515 barrels, only 40 percent, or 202 barrels, is oil, which equates to a yearly total of 73,730 barrels of oil. This figure is much higher than the Chesapeake Energy results, but still much lower than Governor Kasich's average for all wells. If the Frank well results are added to the nine Chesapeake Energy wells, the average would rise from 22,371 to 27,507.

Table 1 contains Governor Kasich's estimate for oil production.

If Governor Kasich's exaggerated annual production figures are replaced with the actual average production results and subsequent years decline in production at the same rate as Governor Kasich used, the total severance tax plummets to $227 million as highlighted in Table 2. The revenue from 2016, which Governor Kasich relies upon to claim nearly $500 million in state income tax cuts per year, decreases from $442 million to $111 million.

Finally, if the costs per well are twice as much as Governor Kasich estimates, it likely will take four years or more instead of two years for the higher severance tax to kick-in. That means Ohioans will wait longer to get their state income tax cut and the amount of the cut will be smaller than Governor Kasich is promising.

Table 3 shows that the total severance tax after five years totals just $173 million, an 81 percent decline for Governor Kasich's estimate in Table 1. As a result, the average state income tax cut Ohioans will receive won't happen for at least four years and the amount will be roughly $16, enough for a large pizza with a few toppings from your local pizza shop.

Another important flaw in Governor Kasich's estimate is that it anticipates 172 wells in production in 2012. As of July 1, 2012, only 14 wells were online. This substantial variance will compound in future years. That means Ohio is way behind in ramping up production, further delaying any state income tax cut into the end of the decade. Anecdotally, one has to ask if the delay is due to the weak results being reported and the impact the higher severance tax will have on those weaker results.

72 Bob Downing, "Oil well's production touted as Texas-like," *Columbus Dispatch*, p. D3, August 19, 2012.

Table 3: Estimated New Severance Tax Revenue and Gross Production Income (2012–2016) with Actual Results and Four-Year Cost Recovery

Annual Production Per Well (in Barrels)	Wells Producing 2012	2013	2014	2015	2016
22,371	172	559	925	1,192	1,290
15,592	–	172	559	925	1,192
12,202	–	–	172	559	925
10,169	–	–	–	172	559
8,587	–	–	–	–	172
Total Production	1,923,906	8,934,503	21,161,271	36,325,759	51,463,243
Gross Income at $90/BBL	$173,151,540	$804,105,259	$1,904,514,416	$3,269,318,284	$4,631,691,831
Estimated Severance Tax Revenue	$2,597,273	$12,061,579	$28,567,716	$49,039,774	$80,962,867
				Total Severance Tax Revenue	$173,229,210

Why does that matter? It matters because higher costs and higher taxes on lower producing wells pushes the 7 percent after tax margins of energy companies down even further.[73] Because many investors can obtain a greater return in other states or in other businesses, it will be harder for energy companies in Ohio to grow and continue to operate. That means lost jobs.

Kasich Claim #4: Ohioans won't pay the severance tax. Instead, out-of-state oil companies and their shareholders will pay it.[74]

Fact: Lots of Ohioans will pay the tax, including most of the farmers and landowners under whose land the oil and gas is located, as well as the 2,250 Ohio-based small business energy entrepreneurs and their companies who will be subject to the severance tax hike.[75] Almost all leases signed so far require farmers and landowners to pay the severance tax.

Additionally, most of Ohio's government pension plans hold stock in energy companies that will be subject to the severance tax hike.[76] For example, as Jason Hart reported, "with Ohio's public pension funds holding a sum of more than 15 million shares of Exxon common stock, even a trivial reduction in Exxon's per-share dividends would further weaken what are already flimsy balance sheets at OPERS, STRS, SERS, and OHPRS."

Finally, lots of Ohioans own stock directly in energy companies subject to the severance tax hike or have invested in mutual funds that hold stock in energy companies.

Kasich Claim #5: Higher taxes will result in

73 Ohio Oil and Gas Association, "Severance Tax Presentation," undated, http://ooga.org/wp-content/uploads/OOGASeveranceTaxPresentation.pdf (accessed September 15, 2012).

74 Office of Governor John Kasich, "The Income Tax Cut: Key Points," undated, http://www.opportunityohio.org/wp-content/uploads/2012/06/Income-Tax-Cut-Key-Points.pdf (accessed September 15, 2012).

75 Ohio Oil and Gas Association, "Ohio's Crude Oil and Natural Gas Producers Stand Against Tax-Increase Proposal," March 26, 2012, http://ooga.org/wp-content/uploads/OhiosCrudeOilandNaturalGasProducersStand-PR-032612-22.pdf (accessed September 15, 2012).

76 Jason Hart, "Kasich severance tax plan could harm 4 of 5 state pension funds," August 3, 2012, http://ohio.mediatrackers.org/2012/08/03/kasich-severance-tax-plan-could-harm-4-of-5-state-pension-funds/ (accessed September 15, 2012).

more energy activity in Ohio.[77]

Fact: As free market economist Milton Friedman and President Ronald Reagan both noted, if you want less of something, then tax it. It simply defies common sense that Ohio will get more oil and gas activity by increasing the taxes on that activity—even if this one tax remains lower than other states. If Ohio wants more oil and gas activity, it should leave the tax rate at its current level to ensure the gap between Ohio and other states remains as big as possible. Why risk chasing away energy companies, the jobs they will create, and the economic activity in hotels, restaurants, hardware stores, and other secondary goods and services providers? A Fraser Institute survey of energy company executives showed that Ohio fell from No. 2 to No. 14 in terms of attractiveness for energy exploration because of Governor Kasich's severance tax hike plan.[78]

Kasich Claim #6: Kasich's severance tax hike plan has broad support.

Fact: Other than a couple of the big city chambers whose members won't get hit with it, few groups support the severance tax hike plan. Those opposed to the tax hike include the National Taxpayers Union, Americans for Tax Reform, Americans for Prosperity Ohio, the Ohio Liberty Coalition, several regional farm bureaus, and several local chambers of commerce. In a statewide survey of Ohioans, a plurality of 44 percent indicated opposition to Governor Kasich's severance tax hike plan.[79]

Kasich Claim #7: Kasich's severance tax hike plan is simple modernizing a 40-year-old law.[80]

Fact: On July 1, 2010, Senate Bill 165 became law, extensively modernizing Ohio's oil and gas exploration laws.[81] For a detailed analysis of Senate Bill 165, please see the Ohio Legislative Service Commission's "Final Analysis."[82]

Kasich Claim #8: Ohio's state income tax is among the highest in America.[83]

Fact: According to the most recent tax data, Ohio has the 33rd-highest state tax burden in America. The major tax burden on Ohioans is local taxes, which are the 6th-highest in America.[84] The severance tax hike does nothing to lower local taxes in Ohio. The best-case scenario for Governor Kasich based on actual data is that the severance tax hike results in a slight reduction in state income tax rates. Such a small reduction certainly isn't going to unleash a torrent of economic activity among the tens of thousands of small business owners who get a tax cut of $250 or less. In contrast, the roughly 2,250 small business energy entrepreneurs who fund the income tax reduction could be pushed out of business by the sixteenfold increase in their taxes. A better and more secure source to fund a small income tax cut is by reducing state government spending, which has outstripped inflation by 2 percent every year on average from 1990 though 2013. When asked, 49 percent of Ohioans felt the most effective way to pay for a state income tax cut was "cutting government spending" (the next closest option of using the government surplus, if any, earned just 11 percent support and only 7 percent supported taxing one industry).[85]

77 This claim is implied in Governor Kasich's severance tax hike plan.

78 Bob Downing, "Ohio slip in oil-gas investment outlook, survey says," *Akron Beacon Journal*, July 2, 2012, http://www.ohio.com/blogs/drilling/ohio-utica-shale-1.291290/ohio-slips-in-oil-gas-investment-outlook-survey-says-1.317775 (accessed September 15, 2012).

79 Magellan Strategies, "Ohio General Election Survey", Opportunity Ohio, July 25, 2012, http://www.opportunityohio.org/wp-content/uploads/2012/06/Ohio-General-Election-Survey-Topline-Results-Release-072512.pdf (accessed September 15, 2012).

80 See footnote 74.

81 Ohio General Assembly, Substitute Senate Bill 165, July 1, 2012, http://www.legislature.state.oh.us/bills.cfm?ID=128_SB_165 (accessed September 15, 2012).

82 Eric Vendel, "Final Analysis," Ohio Legislative Service Commission, June 30, 2010, http://www.lsc.state.oh.us/analyses128/10-sb165-128.pdf (accessed September 15, 2012).

83 See footnote 74.

84 Greater Ohio Policy Center, "2012-2013 State Budget Response," undated, http://www.greaterohio.org/files/pdf/go-budget-response-2011.pdf (accessed September 15, 2012).

85 Magellan Strategies, at p. 3.

Kasich Claim #9: The severance tax hike won't be passed on to Ohioans.

Fact: Even Governor Kasich admits, "oil companies pass on their costs of doing business—including the cost of taxes—to whomever buys their products."[86] The Ohio Chamber of Commerce report upon which Governor Kasich gets the figures used in his estimate approvingly cites a report that notes:

> Annual savings resulting from the substitution of locally-produced gas for fuel purchased from non-Ohio sources would amount to $718 million—not counting $30 million per annum that would no longer go to interstate pipeline fees. Additionally, Ohio consumers would benefit because the increased availability of local natural gas would reduce storage costs … while also helping to insulate gas-buyers from price fluctuations.[87]

Ohioans and their businesses buy oil and gas to heat and run their homes, businesses, cars, and other assets.[88] When asked, 72 percent of Ohioans agreed "taxes are just passed on to consumers."[89]

Kasich Claim #10: The oil and gas industry pay "disproportionately low taxes" compared to other Ohio industries.[90]

Fact: Most industries in Ohio only pay the Commercial Activity Tax (CAT) of 0.26 percent on gross receipts. The oil and gas industry pay both the current severance tax of roughly 1 percent on gas and 0.2 percent on oil and the CAT. Governor Kasich's severance tax hike would drive the severance tax up to 4 percent. One has to ask: What Ohio industries does Governor Kasich refer to when he claims that Ohio's oil and gas producers pay "disproportionately low taxes"?

Bottom Line

Governor Kasich's severance tax hike plan is based on erroneous estimates and risks undermining continued investment and exploration in Ohio, which will hurt job creation. If he wants to cut the state income tax, the primary source to fund the cut should come from reductions in state government spending. Equally important, we once again call on Governor Kasich to launch a state and local tax summit to develop a comprehensive tax plan that lowers the total state and local tax burden on all Ohioans. The continued shifting of tax burdens from the state to local governments or from one group and area of Ohio to other groups and areas of Ohio is nothing more than flawed redistributionist tax policy that hurts rather than helps Ohio's competitiveness and prosperity. Ohioans and the businesses seeking to grow in Ohio deserve better.

86 See footnote 74.

87 Ohio Chamber of Commerce, at p. 22.

88 Greater Ohio Policy Center, at p. 1.

89 Magellan Strategies, at p. 2.

90 See footnote 74.

About Opportunity Ohio

OPPORTUNITY OHIO (O2)—OHIO'S SOURCE OF OXYGEN TO FEED ITS INTELLECTUAL FIRE

O2 is dedicated to **enhancing prosperity for Ohioans** through educating policymakers and empowering citizens. We pay particular to the impact of state and local government decisions and how they foster or hinder job creation and economic growth. Our strategic aim is to provide Ohioans with the intellectual firepower for a better tomorrow.

We focus on three key areas. First, we firmly believe that the future of Ohio depends on **increasing economic freedom and competitiveness** in all parts of our economy. We believe government must **provide a fair and level-playing field** where everyone is equal before the law, not doling out special favors to insiders, subsidizing those with the best lobbyists, or protecting certain industries from competition and innovation.

Next, an economy geared to the promotion of **job creation and entrepreneurship** is the only way to ensure that those looking to start or grow a business and those seeking quality work can blossom. We must ensure that government policies spur business and attract the best and brightest by **giving a voice to those who create jobs and free Ohio's risk-takers from government actions that impede growth.**

Finally, the cost and burden of government cannot continue to make Ohio among the worst states economically, so we must institute **strong government reform and accountability measures.** Elected officials and the people who run our state and local governments must be **accountable for providing transparent, honest, and open government that works.** Taxes and regulations—and the size of government—must be kept in check so that the best and brightest Ohioans stay here rather than flee to more hospitable pastures.

We live in a world where it's easy for businesses to create jobs anywhere—be it in the 49 other states or other countries. O2 aims to make **Ohio a thriving state once again by reforming government policies** so we keep and attract those men and women who create good jobs.

O2 is an educational organization which has applied for federal tax exemption as a 501(c)(3) public charity. During the application process, O2 can accept charitable contributions and, if this designation is granted, then the full amount of your contribution will be deductible for federal income tax purposes. For more information, visit us at *www.opportunityohio.org* or send an inquiry to *contact@opportunityohio.org*.

About the Author

Mary McCleary is the Senior Policy Analyst at Opportunity Ohio where she researches and writes about state and local public policy issues. Prior to joining Opportunity Ohio, Mary led the government transparency project in the State Treasurer's office. Previously, Mary worked at The Buckeye Institute for Public Policy Solutions as a policy analyst, where she wrote game-changing policy reports and op-eds that were published in major Ohio papers, appeared on television and radio programs, and spoke to liberty groups across the state. Additionally, Mary contributed significantly to the ground-breaking government transparency tools on the Buckeye Institute's website.

Mary graduated magna cum laude from Hillsdale College with a major in economics and a minor in math. In college she received a prestigious Koch fellowship, which enabled her to work under the direction of an economics professor. In 2011, Mary was a Publius Fellow with the Claremont Institute, where she had the privilege of studying the American Founding and political thought.

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