

# The Economic Fallout of the Freeze on Ohio's Clean Energy Sector

By Gwynne Taraska and Alison Cassady March 10, 2015

Passed in 2008 with overwhelming bipartisan support, Ohio's renewable energy and energy-efficiency standards proved unambiguously successful in spurring economic progress in the state. Among their benefits were increased in-state investment and energy development, new jobs for Ohioans, and decreased electricity bills.

Despite broad public support for these standards, the Ohio legislature passed S.B. 310 in May 2014, which froze the state's ramp-up schedules for renewable energy and energy efficiency. It subsequently passed H.B. 483, which dramatically increased the setback requirements for wind turbines. Gov. John Kasich (R) signed both bills into law in June 2014.

To understand whether S.B. 310 and H.B. 483 are beginning to chill investment in Ohio and erode the progress made by its clean energy sector, the Center for American Progress interviewed business leaders and experts in renewable energy and energy efficiency across the state. All spoke to the uncertainty created in the clean energy sector, and all reported negative impacts of the recent legislation. For example, some have had

to stall hiring or lay off employees; some are shifting their operations to other states; some are experiencing a downturn in business or difficulty attracting new investment; and some have had to cancel projects that the new legislation made economically unviable.

The full implications of S.B. 310 and H.B. 483 will become clearer over the course of the coming year. However, the initial evidence indicates that the legislation is saddling Ohioans with economic harms and will come to represent a missed opportunity for Ohio to lead the country in building a clean energy economy.

Other states across the country are currently considering similar actions to roll back or repeal their renewable energy standards, energy-efficiency standards, or programs to promote clean energy. For those states, Ohio should serve as a cautionary tale about the detrimental consequences of regressive energy policies.

After a series of campaigns across the country to roll back state-level renewable energy standards over the past two years, many states are now facing similar efforts in 2015. For those states, Ohio serves as a cautionary tale of the consequences of pursuing regressive energy policies. For state-level specifics, view the following fact sheet, which details bills that propose to weaken or rescind renewable energy schedules: Gwynne Taraska and Alison Cassady, "Efforts to Repeal or Weaken Renewable Energy Schedules in the States" (Washington: Center for American Progress, 2015), available at https://www.americanprogress.org/issues/default/report/2015/03/09/108250//.

This issue brief describes the economic growth that the 2008 energy standards catalyzed in Ohio. It then presents commentary from clean energy leaders in Ohio about the effect of the recent legislation on their operations.

## Background: Ohio's clean energy schedules

Passed on a nearly unanimous basis in 2008, Ohio S.B. 221 set in place the state's clean energy standards.<sup>3</sup> These standards required utilities to meet 12.5 percent of electricity demand with renewable resources and to decrease energy use by more than 22 percent through energy-efficiency programs by 2025, with interim targets set for each year beforehand.<sup>4</sup> The renewable energy standards also had an in-state requirement—half of the renewable energy was to come from Ohio facilities—and a solar "carve-out," which mandated that utilities meet 0.5 percent of electricity demand with solar resources by 2025.<sup>5</sup>

Public opinion strongly backed the standards. A poll from Yale University showed that a majority of Ohioans favored stronger renewable energy standards than were in fact in place,<sup>6</sup> and a poll from Ohio Advanced Energy Economy showed that a majority of Ohioans supported the state's energy-efficiency standards.<sup>7</sup>

Nevertheless, the Ohio legislature passed S.B. 310 in May 2014, which froze the clean energy standards at 2014 levels for 2015 and 2016.8 It also eliminated the in-state requirement for renewable energy. In June 2014, Gov. Kasich signed the bill into law, and Ohio became the first state in the country to take regressive measures against its clean energy standards.9

Because of the economic benefits that accrued from the standards—which are detailed in the next section—many companies with operations in Ohio strongly opposed the freeze. For example, a coalition of 11 manufacturers and energy service companies—including Honda, Honeywell, Whirlpool, and Ingersoll Rand—argued in a letter to state senators that the standards fostered competitiveness by keeping utility costs stable and low. Another coalition of 51 companies and 24 organizations argued in a letter to Gov. Kasich that the standards stimulated in-state investments and created jobs. 11

FirstEnergy Corporation, a diversified energy company headquartered in northern Ohio and one of the country's largest investor-owned utilities, aggressively lobbied for the freeze. 12 The passage of S.B. 310 followed a number of attempts across the country to repeal or roll back state-level energy standards that increased in 2013, after the American Legislative Exchange Council, or ALEC, produced model legislation that targeted them. 13

The future of the standards after the two-year freeze period is uncertain. S.B. 310 created an Energy Mandates Study Committee—made up of 12 legislators and the chairperson of the Public Utilities Commission of Ohio, or PUCO—which will perform a cost-benefit analysis of the standards and report to the Ohio General Assembly

with its appraisal.<sup>14</sup> However, even if the freeze were lifted, the in-state requirement for renewable energy would not be reinstated without a change in law. Moreover, it is reasonable to worry about whether the study will be unbiased, as the language in the bill itself seems to prejudice the outcome:

It is also the intent of the General Assembly to get a better understanding of how energy mandates impact jobs and the economy in Ohio and to minimize government mandates. Because the energy mandates in current law may be unrealistic and unattainable, it is the intent of the General Assembly to review all energy resources as part of its efforts to address energy pricing issues.<sup>15</sup>

Furthermore, 9 of the 12 legislators on the committee voted for S.B. 310, despite strong existing evidence that the standards were in the best economic interests of Ohio.<sup>16</sup>

On the heels of signing S.B. 310, Gov. Kasich signed H.B. 483, which imposed new setback requirements for wind turbines. Ohio law now requires that there be more than 1,125 feet between the blade of the turbine and the nearest adjacent property, regardless of whether that property has a residence. Whereas the freeze on Ohio's energy standards was publicly debated, the setback requirements were included in H.B. 483 without any public discussion or consultation with wind energy experts. These requirements dramatically reduce the number of turbines that can be sited on new wind farms and, as our interviews with representatives from the wind industry show, threaten the viability of the industry in the state.

# The economic success of Ohio's energy standards

Ohio's renewable energy and energy-efficiency standards brought a number of economic benefits to the state, including savings to ratepayers, in-state investment, and new jobs.<sup>19</sup>

### Savings to ratepayers

From 2009 to 2012, every dollar invested by Ohio utilities in energy-efficiency programs resulted in more than \$2 in near-term savings for ratepayers: Reports filed by Ohio utilities with PUCO show that energy-efficiency programs over that period cost \$456 million but resulted in more than \$1 billion in savings for consumers. The programs from that period are also projected to result in more than \$4 billion in savings for consumers over a 10-year span. Further, a study from The Ohio State University found that the combined energy standards—energy efficiency and renewable energy—resulted in a 1.4 percent decrease in electricity bills from 2008 to 2012.

## In-state economic and energy development

Ohio currently depends heavily on coal—which accounted for 69 percent of its net electricity generation in 2013—much of which is imported from other states.<sup>23</sup> Net coal imports cost the state \$490 million in 2012.<sup>24</sup> It is possible, however, for Ohio to meet its electricity demand using its own resources. According to National Renewable Energy Laboratory resource assessments, Ohio's onshore wind power alone has the potential to cover more than 95 percent of the state's electricity demand.<sup>25</sup>

Prior to the freeze, Ohio's energy standards were driving investments that were stimulating the economy and helping the state begin to reach its energy potential. The standards resulted in an increase in public and private investment that corresponded to approximately \$660 million in direct and indirect investments in 2012 alone, bolstering the state's more than 400 companies in advanced energy industries.<sup>26</sup> The wind industry in Ohio, for example, now has the highest number of wind-component manufacturing facilities in the country—62, according to the American Wind Energy Association—and in 2011 had the fastest growth in wind power installations.<sup>27</sup> Ohio's solar industry has thrived as well, with 202 solar companies, 55 of which have in-state manufacturing sites.<sup>28</sup> In 2013, investments in solar installations for businesses, homes, and utilities in Ohio reached \$72 million.<sup>29</sup>

## In-state jobs

Ohio's energy standards nurtured the state's robust advanced energy economy, which supported more than 25,000 jobs as of 2010, according to a report by Advanced Energy Economy Institute.<sup>30</sup> A report from ICF International subsequently found that there were more than 31,000 full- and part-time workers in Ohio's alternative energy economy in 2012, with more than 12,000 jobs in energy efficiency alone.<sup>31</sup> There is ongoing controversy about why the ICF report, commissioned by the Ohio Development Services Agency, was not released until after the passage of S.B. 310.32

From 2008 to 2012, increased investments due to the standards created more than 3,200 jobs in the state, according to a study from The Ohio State University.<sup>33</sup> The number of new jobs is expected to increase dramatically should the standards be fully implemented. For example, the Natural Resources Defense Council projects that implementation of the energy-efficiency programs alone would create more than 32,300 new jobs by 2025.<sup>34</sup>

# The initial effects of Ohio's regressive energy policies

Without the clean energy standards that drove Ohio's positive economic trends, many Ohioans fear that the trends could stall or reverse. To gauge the new reality on the ground, CAP spoke with business leaders and experts in Ohio's wind, solar, and efficiency industries to learn about their recent experiences.

#### Wind

The large-scale onshore wind industry in Ohio is struggling under both S.B. 310 and H.B. 483, which increased the required setback distance for turbines.

Regarding S.B. 310, it is not only the uncertainty about whether the freeze will be lifted that is making investors cautious. Eric Thumma, director of policy and regulatory affairs for Iberdrola Renewables—the second-largest operator of wind power in the country points out that one aspect of S.B. 310 that is sometimes overlooked is the permanent removal of the in-state requirement for renewable energy. "That will have a long-term, long-lasting impact," Thumma says. "The key thing that lured people to invest in Ohio was this in-state requirement because you knew you were going to have demand."35

Even more destructive to the large-scale onshore wind industry is the turbine setback requirement imposed by H.B. 483. This too is permanent in the absence of new legislation.<sup>36</sup> According to Thumma, the effect of H.B. 483 is that new large-scale onshore wind projects "are essentially zoned out."37

Before the passage of S.B. 310 and H.B. 483, Iberdrola Renewables completed its Blue Creek Wind Farm, a large-scale wind project in northwest Ohio. With 152 turbine sites located in Van Wert and Paulding counties, the wind farm generates \$2 million annually in lease payments to landowners and \$2.7 million annually in local taxes.<sup>38</sup>

Iberdrola Renewables had plans to build another wind farm in northwest Ohio, in the small town of Leipsic. "We believe there is a lot of local support and excitement about the revenues the project would bring in," Thumma says.<sup>39</sup> He estimates that the wind farm would have generated more than \$1 million annually in lease payments and \$1.35 million annually in local taxes.<sup>40</sup>

The new legislation, however, affects the financial feasibility of the Leipsic project. Thumma says that 75 turbine sites were planned, but only two sites are allowed under the new setback requirements. "Essentially, that means we won't be able to do the project ... It's too small," Thumma says. 41 According to the American Wind Energy Association, if H.B. 483 had been in effect before the Blue Creek Wind Farm was approved, the site would have had only 12 turbines instead of 152.42 Thumma points out that S.B. 310 adds a second challenge on top of the setback requirements of H.B. 483.<sup>43</sup>

Iberdrola Renewables is therefore returning to the drawing board to somehow make the project viable. "We're trying to make our projects work," says Thumma. "We think our host communities want them, but it's much more difficult now."44

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Iberdrola Renewables

EverPower, a national developer and owner of wind projects, is also looking for ways to complete projects that were planned before S.B. 310 and H.B. 483 were enacted. "We are still trying to find solutions to make our projects viable," says Michael Speerschneider, EverPower's chief permitting and public policy officer, "but our confidence in Ohio has changed." Because of this, EverPower will not be investing in Ohio for new projects. "That is not on the table," Speerschneider says. The company is currently developing projects elsewhere across the country, including in Maine, New York, Pennsylvania, Montana, Oregon, and other states. 46

Iberdrola Renewables is also shifting its focus from Ohio to other regions. "If you're Iberdrola or another large-scale wind company, you're better off investing in markets like Texas, California, or New England," says Thumma. "At a certain point, it becomes irrational to continue hitting your head against a wall in Ohio."

Solar

Like the wind industry, the solar industry in Ohio has been damaged by the freeze—and the uncertainty created by it—as well as the elimination of the in-state requirement.

Alan Frasz is president of Dovetail Solar and Wind, a company that primarily designs and installs residential to utility-scale solar systems. Frasz explains that most large-scale projects are built through power purchase agreements, or PPAs, in which a developer secures funding from investors based on the forecasted cash flow of the project. In order to secure that funding, he says, the policies that affect the projects need to be stable for at least 8 to 10 years. 49

As a result of the regulatory uncertainty created by S.B. 310, Frasz says, "major developers and investors became nervous about doing large projects." This nervousness began in 2013, when a similar attack on Ohio's advanced energy standards, S.B. 58, was proposed but ultimately proved unsuccessful. "If you're trying to get several million dollars for a project and if policies are stable elsewhere," he says, "you're going to pick those [other projects] over Ohio projects." <sup>51</sup>

Frasz recalls that before the attacks on Ohio's energy standards began, Dovetail's business was growing, with a pipeline of business that would have carried it into 2015. The company hired more than a dozen employees in 2012 and completed a total of 16 PPA projects in 2010, 2011, and 2012. But business seriously declined in 2013, with a number of projects canceled after the funding fell through. Hiring has stalled as well, Frasz says, and Dovetail has even had to lay off some employees. "We've had people we wanted to keep, but we didn't have the volume of work that can support them. It's been a challenging business environment. We've been fortunate to find some projects in Indiana, Michigan, and West Virginia, but doing business in other states is expensive, since you have to travel." 53

"If you're trying to get several million dollars for a project and if policies are stable elsewhere, you're going to pick those over Ohio projects." – Alan Frasz, Dovetail Solar and Wind Steve Melink, president of Melink Corporation, which develops and installs large solar photovoltaic systems in addition to providing efficiency-related products and services, also saw several projects fall through as a result of Ohio's new energy legislation. "We were very actively working on projects, and suddenly, this prevented us from completing them," he says. "Without financing, we just can't do the projects." Like other renewable energy executives, S.B. 310 has led Melink to shift his focus to other states. "We are spending less time on developing projects in Ohio and more in other states that are more serious about growing investment and jobs," he says. 55 The company is currently developing projects in North Carolina, Massachusetts, California, and Hawaii.<sup>56</sup>

Mike Shaut, president of Carbon Vision, reports that the steep decline in business in the aftermath of S.B. 310 has forced him to eliminate jobs. Four years ago, Shaut had 10 people on staff; now he has no one on staff and only one contract employee. "I will continue to consult and do some projects now and then, but if my 'right arm,' who is now a contract employee, gets a full-time job elsewhere, then we're done," Shaut says. 57

According to Shaut, part of what has damaged the solar industry in Ohio is the erosion of the market for solar renewable energy credits, or SRECs, which are tradable commodities that represent one megawatt-hour of electricity generated by solar power. The solar carve-out creates a market for SRECs, explains Sara Rafalson, senior associate with Sol Systems, a solar investment and finance firm. 58 If legislation affects the solar carve-out and decreases demand for SRECs, the value of an SREC will drop, which discourages solar development.59

The price of SRECs in Ohio was \$85 before the passage of S.B. 310 but fell to \$30 afterward, says Jason Cimpl, SREC portfolio manager at Sol Systems. "We were working on a 3.8 megawatt project and a 600 kilowatt project," he says. "Once 310 went through, those became unfeasible."60

Frasz of Dovetail says that despite the freeze and the decline of SREC prices, the residential business remains strong—at least for projects with traditional bank financing rather than PPAs. "Citizens want this [solar energy]," he says.

Cody Cooper, consultant manager of the solar installation company YellowLite, notes that the upfront rebate that American Electric Power, or AEP, used to offer before the freeze has been dropped. "We had a lot more success when that was available," he says. The company also does projects in New York, which Cooper views as a friendlier market. He explains that in New York, "They have three incentives available: a 30 percent federal tax credit, a 25 percent state tax credit, and the NY Sun PV Incentive Program."61 "We are spending less time on developing projects in Ohio and more in other states that are more serious about growing investment and jobs." Steve Melink, Melink

Corporation

## Energy efficiency

Since the passage of S.B. 310, FirstEnergy, one of four investor-owned utilities in Ohio, has already canceled many of its energy-efficiency programs. <sup>62</sup> This directly affects energy-efficiency businesses in FirstEnergy's territory in northern Ohio, but it also creates uncertainty in the industry throughout the rest of the state.

Tom Sherman, president of Sustainable Energy Services, which identifies opportunities for commercial and industrial customers to save energy and costs, says the FirstEnergy service area was his company's primary market.<sup>63</sup> The utility used to offer a 50 percent incentive for energy audits, Sherman says, which has now been eliminated along with the cash rebates for equipment upgrades. That change, he says, has "put a chill on moving forward with a lot of projects." As a result, Sustainable Energy Services has paused its hiring and shifted its focus to other Ohio markets and out-of-state markets. "We had plans for hiring," Sherman says, "but everything is on hold until we see how this is going to play out."<sup>64</sup>

The other three investor-owned utilities—AEP, Duke Energy, and Dayton Power and Light—are not eliminating their energy-efficiency programs for the time being. However, "there is huge amount of uncertainty in the industry," says John Seryak, CEO of Go Sustainable Energy, an energy-efficiency consulting company. As a result, the company delayed hiring for a time and retooled its business model. "We are diversifying away from investor-owned efficiency programs and are beginning to work with municipal and corporate programs," says Seryak.<sup>65</sup>

Gary Swanson, president of the energy-efficiency consulting company Energy Management Solutions, says his company has 50 large industrial customers in Ohio, most in AEP territory and some in FirstEnergy territory. "All the business that depended on FirstEnergy's commitment to energy efficiency has been shut down," says Swanson. In addition, AEP has made an effort to reduce the cost of its rebate program, though it is not, for the time being, eliminating it, Swanson says.<sup>66</sup>

As a result of S.B. 310, Energy Management Solutions has scrapped its hiring plans. "We were looking at doing an expansion and hiring about five more people," Swanson says. "That's stopped now."<sup>67</sup> The company is also seeking to develop its business in other areas, such as Washington and Chicago, because of the uncertainty in Ohio. "This has forced us to diversify, rather than expand [in Ohio], putting more eggs in other baskets," Swanson says. "As opposed to hiring, we're pulling resources out of Ohio and looking at focusing elsewhere."<sup>68</sup>

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- Tom Sherman,

Sustainable Energy

Services

In addition to harming energy-efficiency companies, S.B. 310 is harming low-income communities across the state. Ohio Partners for Affordable Energy is a collection of 60 nonprofits that engages in legislative and regulatory advocacy and also manages fuel funds and weatherization programs for utilities.<sup>69</sup> It serves about 440,000 Ohioans through bill-payment assistance and 17,000 families by providing weatherization services, says Dave Rinebolt, the company's executive director. He notes that S.B. 310 will reduce funding for low-income communities in the AEP territory next year. "We're going to lose about 40 percent, which is about \$4 million," Rinebolt says, "not because they [AEP] are eliminating their plan but because they are squeezing it down."

Conclusion

Ohio once stood as a national leader with its thriving clean energy economy. Under its renewable energy and energy-efficiency standards, signed into law by former Gov. Ted Strickland (D) in 2008, the state saw significant benefits, including in-state investment, in-state energy development, increased employment, and decreased electricity bills for consumers.

The full effects of Ohio's recent regressive energy policies—the freeze on the renewable energy and energy-efficiency standards, the elimination of its in-state requirement for clean energy, and the new setback requirement for wind turbines—will unfold over the coming year. But there is mounting evidence that they are already harming Ohioans by causing investment, employment, and business to drain from the state.

Other states can draw important lessons from Ohio. Those without renewable energy and energy-efficiency standards can look to Ohio to see the in-state economic development and energy development that accrue with the implementation of advanced energy policies. And the many states with clean energy standards in place but under attack can look to Ohio for a cautionary message about the damages that would follow a rollback.

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"As opposed to hiring, we're pulling resources out of Ohio and looking at focusing elsewhere."

– Gary Swanson,
Energy Management Solutions

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