

## Ohio's Energy Mandate Supporters Fail to Make Their Case

By Joe Nichols

On September 3, 2015, the House Democrats on the Ohio Energy Mandates Study Committee released their "House Democratic Report on Our Diverse Energy Future" arguing that the state's energy mandates should be reinstated.¹ These mandates, collectively known as the Alternative Energy Portfolio Standard (AEPS), required Ohio electric utility companies to artificially increase their renewable energy output and implement programs to reduce electricity consumption.² The General Assembly rightly suspended these counterproductive requirements in 2014 and the House Democratic Report does not justify their reinstatement.

The House Democratic Report relies heavily on a flawed study by the Advanced Energy Economy Ohio Institute (AEE Ohio Institute).<sup>3</sup> Unfortunately, the study makes a significant false assumption and includes a key error in its economic model that detracts from the study's reliability and force.

First, the study makes the all-too-common mistake of assuming that the energy mandates create the proverbial "free lunch" for Ohio—giving out benefits while imposing virtually no costs on families or businesses. Of course, there is no such thing as a free lunch, and the General Assembly should be skeptical of any study that assumes one to bolster its conclusions.<sup>4</sup> The AEE Ohio Institute study, for example, concludes that the AEPS should be reinstated because the mandates boosted Ohio's gross domestic product from 2008 to 2012 by increasing government "investment" by 8.5% and

Energy Mandates Study Committee, "The House Democratic Report on Our Diverse Energy Future," September 2015, <a href="http://www.scribd.com/doc/278098425/">http://www.scribd.com/doc/278098425/</a>
<a href="mailto:Energy-Mandates-Study-Committee-OHDC-Report">http://www.scribd.com/doc/278098425/</a>
<a href="mailto:Energy-Mandates-Study-Committee-OHDC-Report">Energy-Mandates-Study-Committee-OHDC-Report</a>.

<sup>2</sup> Am. Sub. S.B. 221, 127<sup>th</sup> Ohio General Assembly, (2008).

Advanced Energy Economy Ohio Institute, "Economic Analysis of Ohio's Renewable and Energy Efficiency Standards," November 18, 2013, <a href="http://ohioadvancedenergy.org/wp-content/uploads/2014/03/FINAL-DEEPS-11.19.13.pdf">http://ohioadvancedenergy.org/wp-content/uploads/2014/03/FINAL-DEEPS-11.19.13.pdf</a>.

Joe Nichols, "Why Ending the Renewable Energy Mandate is Good for Ohio Families and the Economy," The Buckeye Institute for Public Policy Solutions, January 29, 2015, <a href="http://www.buckeyeinstitute.org/uploads/files/Pew%20">http://www.buckeyeinstitute.org/uploads/files/Pew%20</a> Renewables%20Final(1).pdf.

private investment by 0.94%.<sup>5</sup> Of course, the state of Ohio can only increase its "investments" of taxpayer money in one of two ways: by raising taxes; or by changing its spending priorities—funding renewable energy companies rather than schools and roads, for instance.<sup>6</sup> Both methods for raising government capital impose opportunity costs for taxpayers and businesses that must be accounted for when estimating the true value of government programs and mandates.

Regrettably, the AEE Ohio Institute study failed to adjust for these costs to taxpayers and the private sector. Such an omission is significant considering that private enterprises tend to use their dollars and resources more efficiently than governments. Economist Valerie Ramey has shown that the "multiplier effect" of government investment is significantly lower than private sector investment.<sup>7</sup> Thus, transferring money through mandates from the private sector to the inherently less-efficient public sector comes at a cost—slower economic growth.

Furthermore, the suspended energy mandates do not merely allow for direct government "investment" of taxpayer dollars. Instead, the government directs the private electric companies to spend and invest their own money to satisfy specific government policy preferences. Rather than spend and invest their capital as the more-efficient power companies would prefer, the mandates give the government a say in how those private sector funds are allocated. Any thorough analysis of the energy mandates must account for this kind of "indirect investment" to determine whether the private sector would have directed its own money more efficiently, created more jobs, and generated more economic growth *without* the government's heavy-handed directives. Such analysis is conspicuously missing in the AEE Ohio Institute study.

Second, the economic model that the Advanced Energy Economy Ohio Institute used is flawed. According to Dr. Jonathan Lesser, the model used could produce a scenario in which Ohio's carbon dioxide emissions are negative. This scenario—literally impossible in the real world—likely points to a coding error in the computer program, and calls into question the reliability and accuracy of the model's results. Unfortunately, deciphering the precise nature of the error is more difficult because the model's underlying assumptions have not been made public. These assumptions, of course, significantly affect the results and should be open to

Advanced Energy Economy Ohio Institute, "Economic Analysis of Ohio's Renewable and Energy Efficiency Standards," November 18, 2013, 2, <a href="http://ohioadvancedenergy.org/wp-content/uploads/2014/03/FINAL-DEEPS-11.19.13.pdf">http://ohioadvancedenergy.org/wp-content/uploads/2014/03/FINAL-DEEPS-11.19.13.pdf</a>.

Joe Nichols, "Power to the People: Repeal Ohio's Counterproductive Energy Policies," The Buckeye Institute for Public Policy Solutions, July 20, 2015, 4, <a href="http://www.buckeyeinstitute.org/uploads/files/Power">http://www.buckeyeinstitute.org/uploads/files/Power</a> to the People.pdf.

Valerie A. Ramey, "Government Spending and Private Activity," University of California, San Diego and National Bureau of Economic Research, January 2012, <a href="http://econweb.ucsd.edu/~vramey/research/NBER\_Fiscal.pdf">http://econweb.ucsd.edu/~vramey/research/NBER\_Fiscal.pdf</a>; Michael T. Owyang, Valerie A. Ramey; and Sarah Zubairy, "Are Government Spending Multipliers Greater During Periods of Slack? Evidence from Twentieth-Century Historical Data," *American Economic Review: Papers & Proceedings* 103, no. 3 (2013): 129-134, <a href="http://econweb.ucsd.edu/~vramey/research/ORZ\_Published.pdf">http://econweb.ucsd.edu/~vramey/research/ORZ\_Published.pdf</a>.

Jonathan A. Lesser, PhD, "Ohio's Electricity Usage Reduction Mandate: The 'Free Lunch' Paid for by Ohio Consumers," Continental Economics, February 18, 2014, <a href="http://www.ieu-ohio.org/resources/1/Education%20Home%20Page/Dr.%20Lesser%20Electricity%20Usage%20Reduction%20Mandate%20Report.PDF">http://www.ieu-ohio.org/resources/1/Education%20Home%20Page/Dr.%20Lesser%20Electricity%20Usage%20Reduction%20Mandate%20Report.PDF</a>.

public scrutiny if only to allow others to replicate their findings. Without such transparency one can only wonder in bemusement, for example, at the potential for negative carbon dioxide emission levels.

Finally, the House Democrats' report claims that the energy efficiency mandates saved Ohioans more than \$1 billion in energy costs during their four year tenure from 2008 to 2012.9 This claim may be misleading. 10 As Dr. Robert J. Michaels has noted, the study's alleged \$1 billion in savings may be substantially inflated because of how utility companies account for their customers' "savings" under the mandates and subsidy programs. 11

For example, Dayton Power and Light (DP&L) reported 92% of its energy savings in 2009 under the mandate's Energy Efficiency Resource Standard or "EERS" through a program subsidizing customers who replaced incandescent light bulbs with energy-efficient compact fluorescent light bulbs (CFLs). The EERS purports to extend energy efficiency measures to where they otherwise would not occur, but many of DP&L's customers surely would have purchased CFL bulbs even without the subsidy incentives. Thus, under the mandates, *all* of DP&L's customers paid higher utility prices, while only *some* took advantage of a subsidized discount—with an even smaller fraction being customers that would not have otherwise purchased high-efficiency bulbs. This is known as the "free rider effect"—as a few take a "free ride" paid for by the many.

To measure this effect in Ohio's EERS program, Dr. Michaels used a "ratepayer impact measure" test. Under this test, when the average ratepayer's costs equal their benefits, the utility company scores a "1." Ohio utilities typically score between 0.4 and 0.6, which means that the average Ohio ratepayer pays for more than he receives under the EERS. 13 DP&L's methodology does not account for this "free rider" effect in its compliance filings, thereby substantially exaggerating the energy savings allegedly created by the mandate. Using comparable data from California that *does* account for "free riding," Dr. Michaels estimates that rather than exceeding its 2009 EERS goal, DP&L would have fallen short. 14

DP&L is not unique in relying on CFL bulbs to hit required compliance targets. Ohio utilities across the state derived 74-89% of their residential and commercial/industrial program goals through lighting subsidies in 2010. 15 By 2012, that range improved only slightly to 54-87%. 16

Energy Mandates Study Committee, "The House Democratic Report on Our Diverse Energy Future," September 2015,

http://www.scribd.com/doc/278098425/Energy-Mandates-Study-Committee-OHDC-Report.

Robert J. Michaels, PhD, "Ohio's Energy Efficiency Resource Standard: Where are the Real Savings?,"
The Mercatus Center at George Mason University, December 2014,
<a href="http://mercatus.org/sites/default/files/Michaels-Energy-Efficiency-OH.pdf">http://mercatus.org/sites/default/files/Michaels-Energy-Efficiency-OH.pdf</a>.

<sup>11</sup> *Id.* at 57.

<sup>12</sup> *Id*.

<sup>13</sup> Id. at 56.

<sup>14</sup> *Id.* at 63.

<sup>15</sup> *Id.* at 61.

<sup>16</sup> *Id*.

The rising costs of hitting the compliance targets and creating the energy "savings" are even more troubling. DP&L reported that the costs per megawatt-hour of electricity saved by their efficiency programs *increased* by 50% from 2009 to 2012. <sup>17</sup> Contrary to some mandate supporters' claims, these rising costs suggest that complying with ever-increasing efficiency targets continues to be more—not less—expensive.

As the Energy Mandates Study Committee considers the future of the now-suspended alternative energy requirements, a careful analysis of their true costs and benefits is required. Unfortunately, the House Democratic Report on the issue falls short of providing sound, transparent data on which the Committee can rely. Supporters of Ohio's energy mandates continue to rest their arguments on false assumptions and a rose-colored optimism that fails to account for opportunity costs and other inconvenient economic truths. The Energy Mandates Study Committee should take a more measured and thorough look at the facts before reinstating expensive, counterproductive government standards.

Joe Nichols is the William & Helen Diehl Energy and Transparency Fellow at The Buckeye Institute for Public Policy Solutions.

17 *Id.* at 55.

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88 East Broad Street, Suite 1120 · Columbus, Ohio 43215 · 614-224-4422 · BuckeyeInstitute.org