



# OEC [ Action Fund ]

**Proponent Testimony  
Ohio House Bill 389 (Leland/Seitz)  
Ohio House Public Utilities Committee  
October 27, 2021**

Good morning Chair Hoops, Vice Chair Ray, Ranking Member Smith; I am Miranda Leppla, Vice President of Energy Policy for the Ohio Environmental Council (OEC) Action Fund. Our organization, celebrating its 52nd anniversary this year, works to secure healthy air, land and water for all who call Ohio home. Thank you for allowing me to again provide proponent testimony on Ohio House Bill 389 (HB 389).

The OEC Action Fund has long supported policies that reduce the amount of energy wasted by inefficient equipment, buildings and processes. Energy waste reduction, also known as energy efficiency, helps Ohioans control their energy consumption and to lower their electric bills. I testified on the general aspects of why Ohio needs energy waste reduction programs and how these programs benefit all Ohioans when I testified last month, and wanted to use this opportunity to respond specifically to criticisms you heard from opponents<sup>1</sup> of this legislation that we believe are incorrect and unproven.

**The proposed energy waste reduction programs in HB 389 are cost-effective and will save Ohioans money.**

When I testified last month, I mentioned a recent study<sup>2</sup> by Gabel Associates that quantified the benefits of energy waste reduction programs like those proposed in House Bill 389. That study analyzed the benefits of the programs at a 1%, 1.5%, and 2% reduction in energy waste. Since House Bill 389 is proposing a 0.5% reduction in energy waste, Gabel Associates updated its analysis<sup>3</sup> to give us a direct answer on how a 0.5% energy waste reduction target would benefit Ohio. This updated analysis analyzes four categories of benefits--(1) utility system benefits, (2) environmental benefits, (3) economic benefits, and (4) bill savings--at the 0.5%

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<sup>1</sup> The Northwest Ohio Aggregation Coalition (NOAC) testified in person and Ohio Consumers' Counsel submitted written-only testimony on October 20th, 2021.

<sup>2</sup> *Estimating the Benefits of Energy Waste Reduction in Ohio*, Gabel Associates, Brendon Baatz and Isaac Gabel-Frank, (March 2021), available at <https://www.ohioenergywastereduction.com/report>.

<sup>3</sup> *Updated Analysis on the Benefits of a 0.5% Energy Waste Reduction Target for Ohio*, Gabel Associates, Brendon Baatz and Isaac Gabel-Frank, (Oct. 27, 2021), available at <https://www.ohioenergywastereduction.com/> (HB 389 Analysis).

target and is attached to my testimony, along with the original analysis<sup>4</sup> which it is based upon.

The first category of benefits are **utility system benefits**, meaning benefits and savings for Ohioans that are achieved because energy waste reduction programs help to displace traditional power generation by reducing demand. Additionally, the programs reduce the need for, and associated costs of, future infrastructure expansion in generation, distribution, and transmission because of that reduced demand for energy. The second category of benefits are **environmental benefits**, which include the benefits Ohioans will experience thanks to avoided power plant emissions which would reduce toxic air pollution, including nitrogen oxides, sulfur dioxide, carbon dioxide and particulate matter. Reducing these pollutants means we can improve public health and lower our health care costs by reducing asthma attacks, hospital visits, heart attacks, and respiratory disease.

The analysis shows that with a 0.5% annual energy waste reduction target, Ohioans would experience utility system and environmental benefits that **exceed \$6.5 billion dollars**.<sup>5</sup> This amount far outweighs the projected program costs (\$491 million) to achieve these savings, even when compared with just the utility system benefits which would be nearly \$1.8 billion dollars alone.<sup>6</sup> Importantly, all utility customers will receive cost savings from these benefits whether or not they participate directly in programs.

**Table 1. Cost Benefit Results, Ohio Cost to Achieve (NPV 2021\$)**

<b>Benefits</b>		<b>Value</b>
	Utility System Benefits	\$1,777,000,000
	Environmental Benefits	\$4,761,000,000
	<b>Total Benefits</b>	<b>\$6,538,000,000</b>
<b>Costs</b>		
	Program Costs	\$491,000,000
	<b>Total Costs</b>	<b>\$491,000,000</b>
<b>Net-Benefits</b>		
	Total	\$6,046,000,000
	<b>Cost-Benefit Ratio</b>	<b>13.3</b>

The third category of benefits Ohioans would experience with a 0.5% reduction in energy waste are **economic benefits**. These benefits occur because energy waste programs increase our state's gross domestic product (GDP) and create new, Ohio jobs that cannot be outsourced. By investing in these programs, energy waste reduction means putting Ohioans' to work across the state to install efficiency measures in Ohio homes and businesses, and to implement the programs. Additionally, because these programs save *all* Ohioans money, customers inject the dollars they're saving on their electric bills back into the local economy

<sup>4</sup> *Estimating the Benefits of Energy Waste Reduction in Ohio, supra*, note 2.

<sup>5</sup> *Updated Analysis on the Benefits of a 0.5% Energy Waste Reduction Target for Ohio, supra*, note 3 at 2.

<sup>6</sup> *Id.*

which helps grow our GDP. Specifically, these programs would add **\$1.2 billion to the state's GDP** and approximately **2,055 jobs per year** in program implementation, construction, electricians, and other energy waste reduction related industries.<sup>7</sup>

**Table 2. Total Net Economic and Job Creation Impacts (Jobs, NPV 2021\$)**

Total Value Added to GDP	Total Jobs per Year
\$1,204,000,000	2,055

Finally, and importantly, the fourth category of benefits are bill savings for Ohioans. The savings Ohioans would see on our bills exceeds **\$3 billion** if Ohio moves to require 0.5% energy waste reduction targets.<sup>8</sup> Bill savings, as Gabel Associates notes, are the main reason Ohioans take part in energy waste reduction programs, and those savings drive economic growth and help businesses focus their capital on their business instead of operating costs.

**Table 3. Total Program Participant Bill Savings (NPV 2021\$)**

Cost	Value
Supply	\$1,403,000,000
Distribution	\$1,617,000,000
<b>Total</b>	<b>\$3,020,000,000</b>

**Ohio policy is critical in incentivizing energy waste reduction.**

Last week you heard testimony from the Northwest Ohio Aggregation Coalition (NOAC) that these programs would happen without House Bill 389, and Mr. Hays gave an example of when a household's refrigerator breaks, that home purchases a more efficient appliance because it's newer and our standards are better now. While it's true that any refrigerator on the market today is more efficient than one available 10 - 15 years ago, Mr. Hays' example omits a critical policy piece. Ohio policy should be incentivizing Ohio customers to invest in the higher efficiency model when an appliance breaks. Further, these programs are important to incentivize other energy efficient behavior, from weatherization, to lighting and equipment upgrades, and when we have programs that encourage this behavior everyone in Ohio benefits. We enjoy lower bills, create more jobs, our GDP increases, and we have cleaner air, less illnesses, and less hospital visits. Energy waste reduction programs are the kind of policies we should be implementing for our state and for Ohioans--the benefits of doing so are clear.

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<sup>7</sup> *Id.* at 2-3.

<sup>8</sup> *Id.* at 3.

**Ohioans will still have the option to choose other energy waste reduction programs and measures if they want, but the programs created by House Bill 389 help fill gaps that otherwise might not be filled in the competitive marketplace.**

Another argument you heard last week was that we should leave these energy waste reduction measures up to the competitive marketplace. However, there is nothing in this legislation to stop other entities from offering energy waste reduction options. In fact, customers can opt out of the programs and choose to engage in any other energy waste reduction measure they so choose.<sup>9</sup>

Additionally, there was also no evidence provided by opponents of the bill to show that the competitive marketplace has been able to meet the type of savings the programs House Bill 389 would create. It simply wasn't addressed. In fact, there may be a gap if we rely exclusively on the competitive marketplace. For renters who pay their own energy bills but do not have control over what investments are made by their landlords to their residences, from weatherizing doors and windows to replacing appliances, programs like HB 389 can help incentivize landlords to invest in more energy waste reduction measures.

**Ohioans cannot afford to wait on federal legislation.**

Another criticism was that we should simply wait for federal legislation to implement energy waste reduction programs. While the OEC Action Fund is thrilled to see discussion and movement on legislation at the federal level that would implement business and residential energy efficiency, we do not yet know when that legislation will pass or how long it would take to implement if passed so that Ohioans begin to realize the energy and bill savings.

Additionally, as the study done by Gabel Associates shows, if we continue to increase investment in energy waste reduction programs, the savings and benefits will continue to rise for Ohioans.<sup>10</sup> Therefore should the federal proposal pass, House bill 389 could be complementary, increasing options and opportunities for Ohioans to continue to reduce energy, which benefits our environment, our wallets, and our health.

**OEC Action Fund supports passage of HB 389.** All Ohioans benefit from the types of programs that House Bill 389 seeks to reestablish. Since House Bill 6 repealed the Energy Efficiency Resource Standard (EERS), other studies have shown that Ohioans are missing out on significant savings and benefits. For example, a study released in August 2021 on behalf of the Midwest Energy Efficiency Alliance determined that Ohio is losing hundreds of millions of

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<sup>9</sup> The programs House Bill 389 seeks to establish, a version of which existed before they were repealed by House Bill 6, have been shown over and over to be cost-effective, saving energy and saving customers money, including for customers that do not participate. As a result, the OEC Action Fund does not support the opt out provision of this legislation.

<sup>10</sup> *Estimating the Benefits of Energy Waste Reduction in Ohio*, *supra*, note 2 at vii-viii, Tables 1-3 (showing the increasing savings of energy waste reduction targets at 1%, 1.5% and 2% for the four categories of benefits analyzed by the study).

dollars, which increases to over \$2 billion when the social cost of carbon and health impacts of the removal of the EERS are considered.<sup>11</sup> It is critical--for our health, our environment, and our wallets--that energy waste reduction programs are put back in place in the state. House Bill 389 takes an important step in the right direction to put Ohio back on track toward energy and bill savings after House Bill 6 repealed critical and effective energy-saving programs under the EERS.

Thank you for allowing me to testify in support of House Bill 389 today. The OEC Action Fund sees this bill as critically necessary, putting us on a path to greater energy waste reduction and the many benefits it brings for Ohioans. We hope that the success of these programs will be a building block upon which Ohio can expand these critical energy waste reduction measures and reduce Ohioans' bills and our energy consumption even further.

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<sup>11</sup> *Missed Opportunities: The Impacts of Recent Policies on Energy Efficiency Programs in Midwestern States*, Synapse Energy Economics, Inc. (Aug 2, 2021) at x-xi, available at [https://www.mwalliance.org/sites/default/files/meea-research/missed\\_opportunities\\_-\\_midwest\\_ee\\_policy\\_impacts.pdf?current=/taxonomy/term/11](https://www.mwalliance.org/sites/default/files/meea-research/missed_opportunities_-_midwest_ee_policy_impacts.pdf?current=/taxonomy/term/11).



October 27, 2021

## Updated Analysis on the Benefits of a 0.5% Energy Waste Reduction Target for Ohio

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### I. Introduction

On behalf of Ceres, the Environmental Law and Policy Center, Environmental Entrepreneurs, NRDC, the Ohio Environmental Council, and the Ohio Hospital Association, Gabel Associates, Inc., released research in March 2021 documenting the potential costs and benefits to Ohio of various energy waste reduction scenarios.<sup>1</sup>

This memorandum summarizes the results of an updated analysis that considers the costs and benefits of a 0.5% annual energy waste reduction target for Ohio, commensurate with the level of energy savings proposed in House Bill 389 sponsored by Representatives Bill Seitz and David Leland.

This updated analysis relies on the same methodology and underlying data used and documented in the March 2021 report.<sup>2</sup>

Specifically, we quantified four categories of benefits:

- (1) Utility system benefits, or the benefits achieved because energy waste reduction programs displace traditional power generation and reduce the need for and associated costs of future infrastructure expansion in generation, distribution, and transmission.
- (2) Environmental benefits, or the benefits achieved because energy waste reduction programs avoid power plant emissions, including nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), carbon dioxide (CO<sub>2</sub>), and particulate matter.
- (3) Economic benefits, or the benefits achieved because energy waste reduction programs increase the state's gross domestic product (GDP) and create new jobs. These benefits are created in multiple ways. First, investment in energy waste reduction programs generate direct jobs through the implementation and delivery of programs, which also stimulate

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<sup>1</sup> *Estimating the Benefits of Energy Waste Reduction in Ohio*. Gabel Associates, Inc., March 2021.  
<https://static1.squarespace.com/static/60268486dc92ef10a5ee5ed2/t/6172c24cb1c16e6a0bfe61c5/1634910796900/Final+Ohio+EWR+Report.pdf>

<sup>2</sup> *Ibid.*

many sectors of the economy. Second, the customer bill savings produced by the programs drive significant economic growth because customers inject these dollars back into the local economy, thus growing GDP. And

(4) Program participant bill savings.

Finally, we compare the utility system and environmental benefits against a projection of potential program costs, based on the most recent actual program costs per unit of saved energy in Ohio.

Notably, the benefits analyzed herein capture many, but not all of the benefits of energy waste reduction. Other benefits that we have not attempted to quantify include avoided renewable portfolio compliance costs, avoided compliance costs with existing environmental regulations, the value of reduced capacity reserve requirements, reduced arrearages, improved comfort and safety, reduced maintenance costs, reduced price volatility exposure, and other non-energy benefits.

## II. Results of the Analysis

Table 1 shows the estimated program costs and the utility system and environmental benefits of a 0.5% annual energy waste reduction target for Ohio in 2021 dollars (net present value or NPV).

In sum, a 0.5% annual energy waste reduction target would deliver utility system and environmental benefits that exceed \$6.5 billion dollars. This amount far outweighs the projected costs of achieving these savings (\$491 million),<sup>3</sup> even when those costs are compared with just utility system benefits (\$1.8 billion). All utility ratepayers will experience cost savings from these benefits whether or not they participate directly in programs.

**Table 1. Cost Benefit Results, Ohio Cost to Achieve (NPV 2021\$)**

<b>Benefits</b>		<b>Value</b>
	Utility System Benefits	\$1,777,000,000
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	Program Costs	\$491,000,000
	<b>Total Costs</b>	<b>\$491,000,000</b>
<b>Net-Benefits</b>		
	Total	\$6,046,000,000
	<b>Benefit-to-Cost Ratio</b>	<b>13.3</b>

Table 2 shows the results of the economic benefits associated with a 0.5% annual energy waste reduction target for Ohio. Those benefits include \$1.2 billion added to the state’s GDP and the

<sup>3</sup> The estimated program costs shown in Table 1 are based on the most recent actual program costs per unit of saved energy in Ohio.

creation of ~2,055 jobs per year over the next two decades. These jobs occur in program implementation, construction, electricians, and other energy efficiency related industries.

**Table 2. Total Net Economic and Job Creation Impacts (Jobs, NPV 2021\$)**

Total Value Added to GDP	Total Jobs Created Per Year
\$1,204,000,000	2,055

Table 3 shows the program participant supply and distribution bill savings associated with a 0.5% annual energy waste reduction target for Ohio. These savings exceed \$3 billion and represent the primary reason why customers invest in energy waste reduction technologies and change behavior. These savings drive economic growth as customers inject dollars back into the local economy. Businesses are also able to reduce operating costs and improve profit margins, while also reducing maintenance costs.

**Table 3. Total Program Participant Bill Savings (NPV 2021\$)**

Cost	Value
Supply	\$1,403,000,000
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<b>Total</b>	<b>\$3,020,000,000</b>

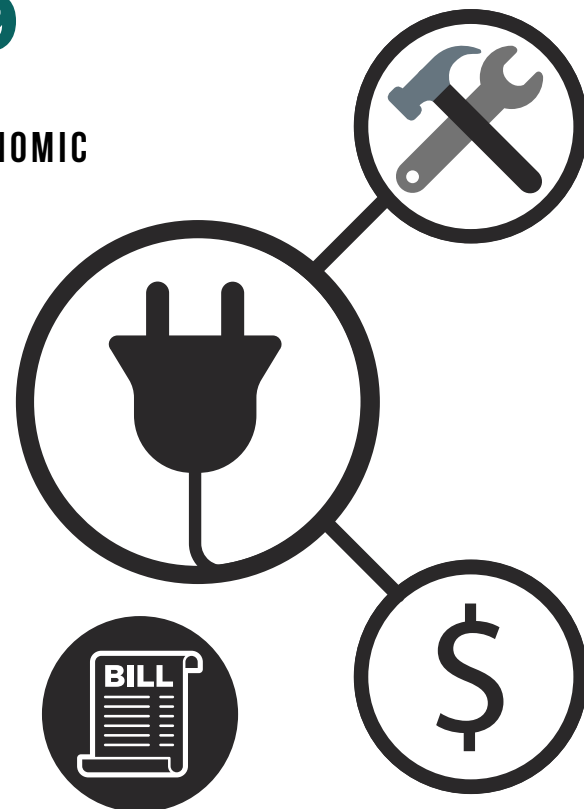
In conclusion, a 0.5% energy savings target will produce benefits that far exceeded its costs, which means bills for all Ohioans will be lower if the 0.5% savings level is achieved.



# BENEFITS OF HB 389

## NEW ANALYSIS: HB 389 WOULD DRIVE BILLIONS IN ECONOMIC ACTIVITY, CREATE THOUSANDS OF LOCAL JOBS

An recent analysis by Gabel Associates, a leading energy consulting firm, analyzed the benefits of cutting energy waste in Ohio at levels commensurate with those proposed by HB 389 and found that the immediate investment in energy waste reduction programs would create an economic windfall of billions for Ohio.



## ACCORDING TO THE ANALYSIS:



Ohio electric utilities would avoid spending \$1.8 billion on electricity purchases and grid investments such as distribution lines, transformers, substations, and more that would otherwise be paid for by customers.



Ohio would add \$1.2 billion to its GDP as money saved by customers on their electricity bills is spent in the local economy - strengthening local restaurants, businesses, and stores.



Customers participating in energy saving programs would save \$3 billion on their bills - money that they could redirect elsewhere into the local economy.

These benefits would be realized by ramping up investments in energy-saving programs that help Ohio residents and businesses upgrade their buildings, improve manufacturing production lines, install new sensors and controls, and otherwise cut energy waste.