

FOUNDATIONS FOR OPTIMISM: OPTIONS FOR EMPOWERING OHIO'S ENERGY MARKET

EXECUTIVE SUMMARY

Ohio policymakers have expressed interest in a set of renewable energy and efficiency policies that would maximize financial benefits to the state, while keeping Ohio on track to meet potential future environmental regulations. To evaluate the most effective mix of resources that would meet these two objectives, the Greenlink Group, in consultation with Runnerstone, produced four forecasts of the state's electricity market: a baseline case that models an extended freeze of Ohio's renewable and energy-efficiency standards, and three scenarios based on varying, but achievable, levels of renewable energy and energy efficiency.

Each of the three alternative scenarios would meet potential federal carbon reduction regulations as well as provide financial benefits to the state. Responding to concerns of Ohio policymakers regarding existing law, each of the scenarios – Accelerated Efficiency, Intermediate Pathway, and Expanded Renewables – also reduces the efficiency and renewable standard levels established in Senate Bill (S.B.) 221/310 and is based on clear trends and achievable targets within the state's growing clean energy industry. Our analysis found that the Accelerated Efficiency scenario offers the most economic and environmental benefits of the three options.

MARKET-FOCUSED REFORMS

This report also suggests five market-focused reforms that would advance energy innovation and investment within Ohio.







1. Ensure all electricity generators are treated equally, that incumbents do not enjoy unfair advantages over new competitors
2. Modify the wind farm zoning rules that block development
3. Allow on-bill repayment to spur investments in energy efficiency projects
4. Adopt a market for energy efficiency credits
5. Maintain and promote volumetric electric rate structures that incorporate price signals.

MODEL RESULTS

Compared to baseline, each of the three scenarios produces net economic benefits for Ohio. To appreciate how those benefits vary, this report evaluates each scenario according to several factors:

- **Net-Benefit and Benefit-to-Cost Ratio** – These standard economic metrics show that the best results come from Accelerated Efficiency, although Intermediate Pathway and Expanded Renewables are close behind.
- **Jobs** – The renewable energy and energy efficiency industries, according to these scenarios, are expected to create between 82,300 and 136,000 new jobs in Ohio. Wind energy development, which is labor intensive and has Ohio supply chain manufacturers, is the major driver to such job growth.
- **Payroll** – These clean energy businesses are poised to increase Ohio's payroll by between \$4.6 billion and \$7.6 billion by 2030. Again, wind energy development generates the highest payrolls.
- **GDP** – The three scenarios enhance Ohio's GDP by \$6.7 billion to \$10.7 billion by 2030. Higher GDP gains are associated with greater levels of wind development.
- **Health** – Each scenario would avoid pollution, leading to reduced health-care costs. Savings are expected to be approximately \$800 million annually in the near term and reaching \$3 billion per year by 2030. Accelerated Efficiency achieves the most health care cost reductions.
- **Electric Bill Impacts** – The scenarios would provide customer savings between \$28.8 and \$50.9 million in 2030. Accelerated Efficiency offers the most cost reductions for consumers, while Intermediate Pathway produces the least of the three options.
- **Clean Power Plan** – Each scenario puts Ohio on a path to comply with the federal Clean Power Plan if it should be necessary. A state implementation plan (SIP) can successfully build on any of these three approaches.

The table below presents three annual benchmarks simulated for the Accelerated Efficiency, Intermediate Pathway, and Expanded Renewables scenarios.

	ACCELERATED EFFICIENCY		INTERMEDIATE PATHWAY		EXPANDED RENEWABLES	
Year						
2017	3.5%	1.0%	3.5%	1.0%	3.5%	0.5%
2020	6.5%	1.3%	6.5%	1.0%	7.5%	0.5%
2026	10.0%	1.5%	12.5%	1.0%	19.5%	0.5%
2030	11.0%	1.5%	13.5%	1.5%	19.5%	1.0%
Through 2030	11.0%	18.5%	13.5%	16.0%	19.5%	10.3%
2009-2026	10.0%	16.7%	12.5%	14.2%	19.5%	9.2%
SB 221/310	12.5%	22.0%	12.5%	22.0%	12.5%	22.0%

In all, these scenarios represent no-regret strategies that will avoid handcuffing the state and maintain flexibility for Ohio. They would also place Ohio in line with what other states have already adopted and, in many cases, achieved. Regarding energy efficiency savings, for instance, Accelerated Efficiency's 2030 goals, although lower than called for in current Ohio law, were achieved by six states in 2014 and were nearly achieved by several Ohio utilities in that year. Regarding renewable energy goals, 21 U.S. states and territories have adopted more aggressive renewable portfolio standards than called for by Expanded Renewables. Stated frankly, all three scenarios set achievable and conservative goals that are in line with what other states, and even several of Ohio's own utilities, have adopted.