

Increasing Energy Productivity in Michigan

The State of Michigan has taken great strides on energy efficiency, implementing numerous policies and programs that align with the Energy 2030 recommendations and will help achieve the national goal of doubling U.S. energy productivity by 2030.

Educating and Engaging the Public

In 2012, Governor Rick Snyder conveyed a "[Special Message on Energy and the Environment](#)," to engage the public on the next generation of energy efficiency and renewable energy policies and programs. This resulted in four reports, including one on [energy efficiency](#), which were circulated in December 2013.

Soon after, the governor [set goals](#) to eliminate energy waste by 2025 by relying less on coal-powered energy, and increasing energy efficiency and renewable energy. In order to be successful, future policies should adopt cleaner technologies, increase reliability by reducing outages, and offer affordable competitive energy pricing.

Modernizing State Regulations and Infrastructure

Michigan is ranked 12th in the nation for its effective energy efficiency policies by the [American Council for Energy Efficiency Economy](#). To date, the [Clean, Renewable, and Efficient Energy Act \(Public Act 295\) of 2008](#) is the last comprehensive energy law passed by the state legislature. An energy efficiency resource standard (EERS) requires all electric providers and rate-regulated natural gas utilities to file energy optimization (EO) or energy efficiency programs with the Michigan Public Service Commission (PSC). The EERS placed target saving percentages on electric utilities starting in 2009, then achieving 1% by 2012, and maintaining this percentage until 2015. Thereafter, it shall continue at 1% annual electricity savings, subject to PSC's approval. The percentage in savings are relative to the prior year's total retail electricity sales.

Customers incur a utility charge to fund EO programs, but these programs have paid off. They cost less than one-third of new electric generation, reduced carbon emissions, lowered utility bills, and stimulated the energy service job industry. A total of \$1.2 billion has been saved in lower electricity costs since 2008. These programs have helped the state surpass its EO annual electricity savings target each year. Michigan is projected to continue meeting the 1% annual electricity savings target this year.

Utility customers have saved \$3.55 in electricity costs for every \$1 invested in energy efficiency.

PSC is now working on reducing paperwork in existing energy efficiency programs, and has found ways to streamline collaboration between smaller municipal utilities and cooperatives. PSC is working with three other state agencies that run weatherization programs on geographic targeting, the act of geographically targeting energy efficiency in specific regions of the state, where local demand is high and suffers from reliability problems.



In the area of buildings, Michigan has reduced energy use by nearly 25 percent in the last 10 years in state buildings. Advocates are pushing for 2012 adoption of international energy conservation code (IECC). The state currently adheres to the 2009 IECC. In his 2012 Special Message on Energy and the Environment, Governor Snyder called for a benchmarking study of state buildings, to compare them to other states

and private buildings and identify best practices. He also offered local governments and schools assistance in identifying tools to help them achieve savings through energy savings performance contracting.

Investing in Energy Efficiency

As a result of the American Recovery and Reinvestment Act of 2009, the state received a \$30 million grant (the second highest award in the country) from the U.S. Department of Energy for the [Better Buildings for Michigan Program](#). It consisted of a residential program made up of 27 neighborhoods throughout the state, and a commercial program for commercial, institutional and public buildings in Detroit. A variety of financial incentives were offered in both programs. The Better Buildings for Michigan exceeded its goals in many areas.

Better Buildings for Michigan Program Goal	Actual Performance
Make EE improvements to 9,180 homes	11,571 homes improved
Retrofit 13.5M square feet of commercial, industrial, and public buildings	14.8M square feet completed
Avoid 0.74 TBTUs of energy consumption per year	0.36 TBTUs avoided
Avoid 70,754 metric tons of CO2 emissions per year	29,780 metric tons avoided
Create 2,063 green jobs	3,214 jobs created
Achieve 5:1 ratio in terms of leveraged dollars	5:1 ratio met

Source: [Better Buildings for Michigan Final Report, 2013](#).

The state also used Recovery Act funds for the [Michigan Agri-Energy Program](#). This program identified ways to make improvements to agricultural energy use with efficiency measures or by switching to renewable energy sources. Fifty farms underwent energy audits, and outreach and trainings were administered to the farming community.

This year, private financial institutions across the state will make more than \$68 million available for efficiency improvements in buildings. [Michigan Saves](#) is a public-private partnership that finances business and home energy loans. It was established through a grant from the Michigan Public Service Commission. Since 2010, more than 1,700 homeowners have used these funds to upgrade their homes, saving about \$350 per year in energy costs. The default rate on these loans are almost 30 times lower than on similar consumer loans. Michigan Saves is expanding its program to small businesses and has a goal of investing \$150 million in energy efficiency projects by 2017.

Others are investing in energy efficiency research and development. The NGO [Next Energy](#) works to increase the market share of energy technologies, businesses and industries and has helped attract more than \$1.3 billion of new investment in the state. Created in 2011 with a state grant, Oakland University's [Clean Energy Research Center](#) studies energy efficiency solutions like advanced lighting technology, and looks at ways to develop new technology and create clean energy jobs by providing energy project development support and energy infrastructure strategic planning for public and private entities.

The Michigan and Ohio Energy Offices just announced a joint effort called the "[Michigan-Northeastern Ohio Regional Clean Energy Roadmap Project](#)." The U.S. Department of Energy and the two state energy offices pooled funding in the sum of \$702,500 to offer assistance in developing technology, designing prototypes, improving processes to manufactures of energy-efficiency products, and fostering growth of the clean-energy sector in Michigan and Ohio.