Solutions for States
Energy, Economy & Environment

Michigan Efficiency for a Clean Energy Future

Michigan has an energy efficiency standard that requires electric utilities to help Michiganders stop wasting energy by setting annual energy savings goals. These goals gradually increase and will save 5.6% of energy consumption by 2016.[1] The savings from Michigan's efficiency standard are enough to offset generation from several power plants, avoiding thousands of tons of air pollution. In order to plan for a reliable, affordable and clean energy future in Michigan, it is useful to understand the impact the energy efficiency standard is having on Michigan's air quality and its people.

Michigan's Efficiency Standard Avoids Pollution and Saves Money by Cutting Waste

Large amounts of useful energy are wasted in Michigan. Meanwhile Michigan utilities get paid for all the electricity they generate, even what's wasted. They are paid by their customers, the people of Michigan, who watch this money go up in smoke. Michigan's efficiency standard reduces this waste, cutting energy costs for Michiganders through programs that upgrade their homes, replace old furnaces, and insulate their walls to keep cold air out. This means more money in people's pockets that would otherwise have gone to pay for wasted energy. It also means fewer taxpayer dollars are spent heating and cooling leaky government buildings.

These energy savings are also providing significant emission benefits for air quality. By receiving credit for cost-effective policies that are already on the books, Michigan could reduce the cost of complying with air quality standards and create more certainty for utilities, manufacturers, industrial facilities and families in Michigan. A number of areas in Michigan are currently facing obligations to reduce pollution from power plants and the efficiency standard is already doing some of that work.

The Pollution Reduced by Michigan's Energy Efficiency Standard

Michigan's efficiency standard helps avoid a lot of pollution that would have otherwise been emitted by power plants. How much? Over 6,000 tons of nitrogen oxide and over 20,000 tons of sulfur dioxide are avoided annually. Installation of pollution controls on a power plant can be very expensive. In fact, to get the same with reductions as the efficiency standard, Michiganders would have to invest over $1 billion in pollution control equipment, more than $90 million every single year for over a decade!

Here's the breakdown of some of the air pollution reductions attributable to Michigan's efficiency standard:[2]

- *Nitrogen Oxides (NO_x)* - Over 6,000 tons of this smog forming pollutant are reduced annually with an energy savings target. Without these savings nearly $400 million in investments would be required to get the same NO_x reductions from pollution control equipment.
- *Sulfur Dioxide (SO_2)* - Annual energy savings reduce over 20,000 tons of this lung irritant annually. Without the efficiency standard Michigan would have to invest over $500 million in pollution controls to make sure that SO_2 emissions don't increase.
- *Mercury* – Michigan's savings target will annually prevent over 347 pounds of mercury emissions, a pollutant that causes birth defects in children. Utilities would have to invest over $280 million in plant upgrades to get these same emissions reductions.

[1] Michigan's energy efficiency resource standard (EERS) is commonly referred to as the Michigan Energy Optimization Standard (MEOS) and was created under Public Act 295 of 2008 (PA 295 or the Act).
[2] This data comes from ACEEE's *Energy Efficiency Pollution Control Calculator* available here: http://www.aceee.org/research-report/e134