

Big Data, Bigger Questions

2017 ACEEE Energy Efficiency as a Resource



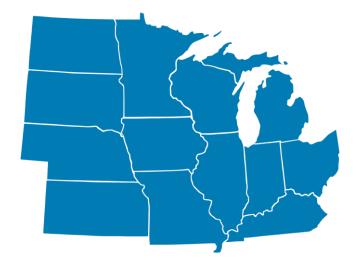
About MEEA

The Trusted Source on Energy Efficiency

We are a nonprofit membership organization with 160+ members, including:

- Utilities
- Research institutions
- State and local governments
- Energy efficiency-related businesses

As the key resource and champion for energy efficiency in the Midwest, MEEA helps a diverse range of stakeholders understand and implement cost-effective energy efficiency strategies that provide economic and environmental benefits.





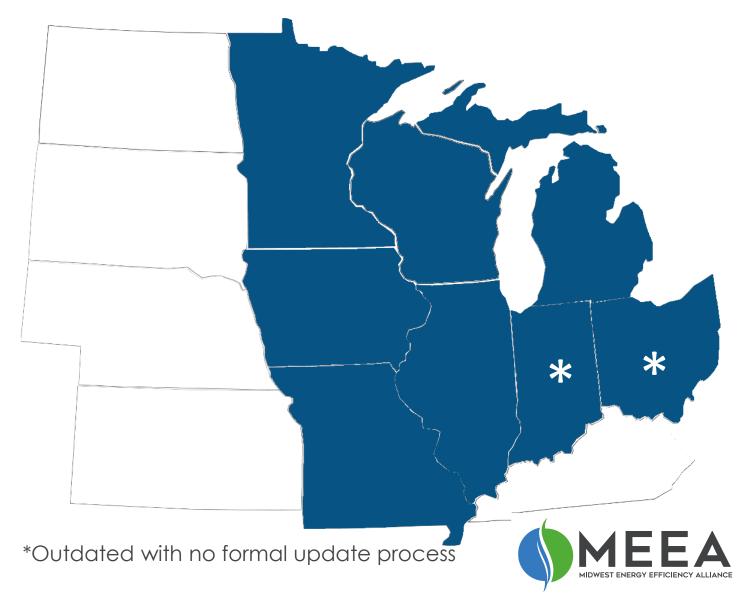
Current Landscape

TRMs, Industrial Opt-Outs, and Air Quality



Midwest TRMs

Statewide TRMs in Midwest States



Missouri Statewide TRM

"Once a TRM has been developed, it is vital that it is kept up to date, appended, and maintained in a timely and effective manner. Technology is constantly improving and markets are constantly changing. For a TRM to be considered a reliable document, it must keep pace with these changes or it will quickly become obsolete and the savings estimates may be perceived to be less reliable."







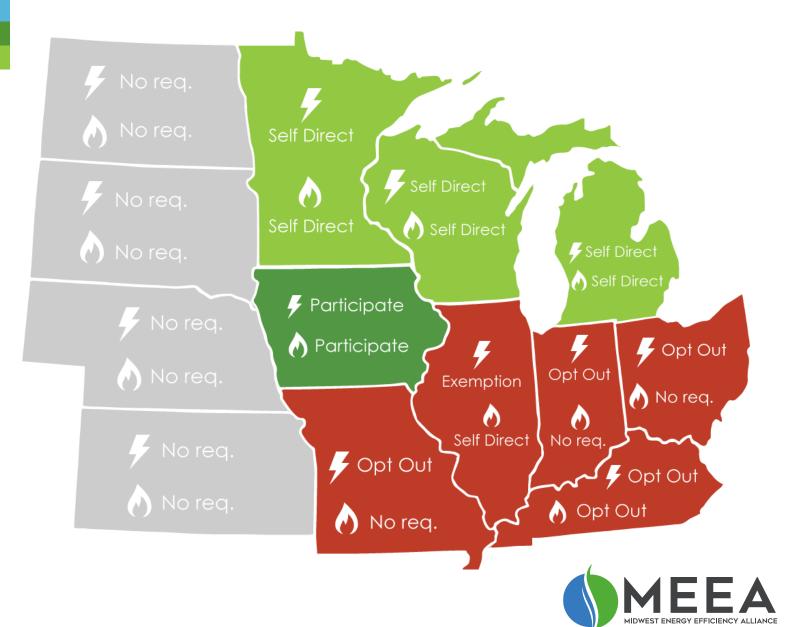






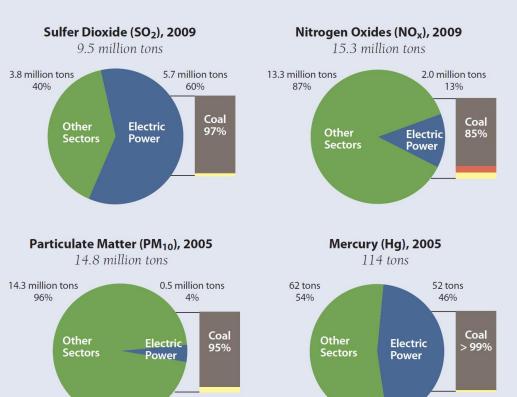


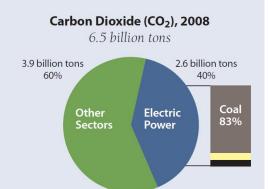
Industrial Energy Efficiency Polices



Air Quality EE for Emissions Reductions







Coal-fired power plants: vast majority of power sector air emissions

Source:Quantifying the Air Quality Impacts of Energy Efficiency Policies and Programs. Regulatory Assistance Project. August 2013.



Shifting Landscape

State Efforts to Drive Advanced M&V



Missouri

M&V Collaborative

What is the EM&V 2.0 Roadmap?

Assets – Data and Skills

Program Models

Audience / Market

Technologies

Data Analytics

Pilots

Program Planning

Partners and Vendors

Source: Vermont Energy Investment Corporation and Missouri Division of Energy.



Missouri EW-2017-0245

- What are the current levels of distributed energy resources (energy efficiency, distributed generation, demand-response, etc.) in Missouri?
- Is any new behind-the-meter technology or hardware needed to accommodate or facilitate the development of distributed energy resources?
- Will any distribution system upgrades be required to accommodate or facilitate the development of distributed energy resources?



Illinois

Future Energy Jobs Act

Future Energy Jobs Act
 (Illinois Public Act 99-0906)

"When practicable, electric utilities shall incorporate advanced metering infrastructure data into the planning, implementation, and evaluation of energy efficiency measures and programs, subject to the data privacy and confidentiality protections of applicable law."

ICC Policy Session



Illinois NextGrid



- New Technology
 Deployment and Grid

 Integration
- Metering, Communications and Data
- Customer and Community
 Participation

Image Source: https://nextgrid.illinois.gov/stream.html





Thank you!

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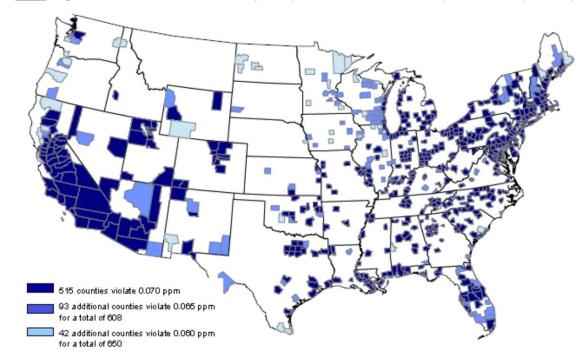


Using Energy Efficiency in SIPs NAAQS Compliance

Counties With Monitors Violating Primary 8-hour Ground-level Ozone Standards 0.060 - 0.070 parts per million

(Based on 2006 - 2008 Air Quality Data)

EP A will not designate areas as nonattainment on these data, but likely on 2008 - 2010 data which are expected to show improved air quality.



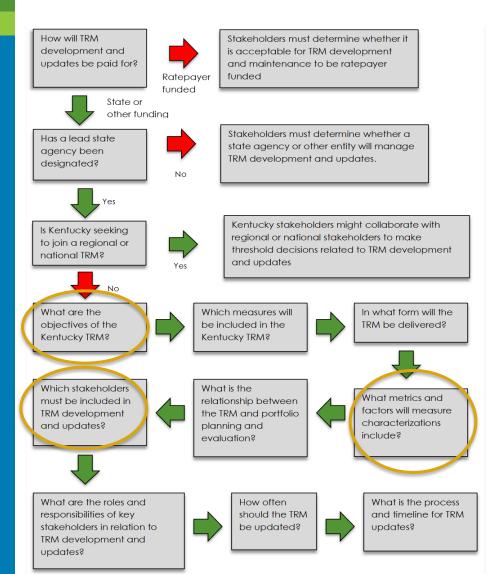
Notes:

- 1. No monitored counties outside the continental U.S. violate.
- 2. EPA is proposing to determine compliance with a revised primary ozone standard by rounding the 3-year average to three decimal places.

Source: Capturing the Emissions Reduction Benefits of Energy Efficiency. Regulatory Assistance Project. February 6, 2013.



Kentucky TRM Roadmap



- Significant amount of the state in TVA territory
- EKPC has significant AMI rollout, other utilities do not
- Cost, cost, cost

