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E N E R G Y I N N O V A T I O N
B U S I N E S S C O U N C I L

Testimony to the Michigan Senate Energy and Technology Committee

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President, Michigan EIBC

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www.mieibc.org

Michigan's Advanced Energy Industry



The business voice of advanced energy in Michigan.
www.mieibc.org

Michigan EIBC: the full spectrum of advanced energy

Efficiency

Solar

Bioenergy

Partners

Transportation

Geothermal

Wind

Advanced Energy Grid

Advanced Energy Economy

Logos include: DOW, TOGGLED, Ecotelligent Homes, Astraeus, VARNUM, 5lakes, B/A Bates and Associates PLLC, ACCIO ENERGY, GRAND VALLEY STATE UNIVERSITY, MIEIBC, PatriotSolarGroup, Sonali Solar, HELTOS, Four Elements Energy, NOVI ENERGY, AVITAS, SAKTIS.

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Advanced energy in Michigan

ADVANCED ENERGY MANUFACTURING
\$4.9 BILLION
 annual economic impact

ENERGY EFFICIENCY MANUFACTURING
\$2.3 BILLION
 annual economic impact

Ratepayer savings under
 EO program, 2011-2015:
\$2.5 BILLION

\$2.2 BILLION
 IMPACT TO
 DATE OF RPS
 UNDER PA 295

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Energy Optimization programs save money while boosting economy

Year	Expenditures	Savings
2011	~\$200 million	~\$700 million
2012	~\$250 million	~\$900 million

- EO program expected to net more than \$2.5 billion between 2011-15
- In 2012, customers saved \$4.07 for every \$1 in EO expenditures
- Cost of electricity use avoided = \$0.02/ kWh
 - 1/3 wholesale cost of generation
 - 1/5 retail cost of electricity

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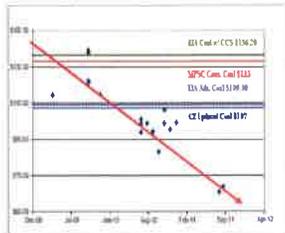
Significant efficiency savings remain – and will exist for years to come

- A number of states have programs with significantly higher efficiency targets and/or have had programs in place for much longer
- These programs continue to deliver value to ratepayers, and have led to market transformations
- Cost-effectiveness is built into the criteria for programs under PA295

2012 State Energy Efficiency Scorecard Rankings

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Cost of renewables is falling rapidly – and far faster than expected



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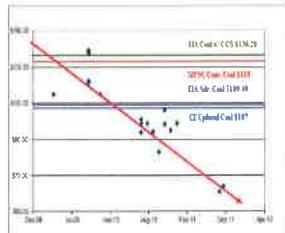
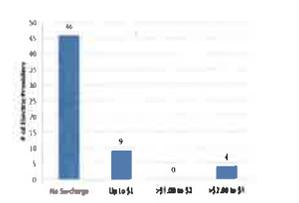
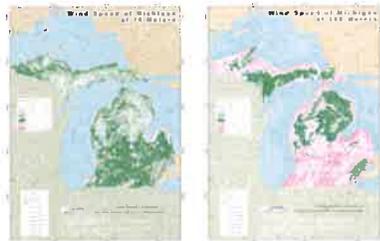


Figure 1: Residential Customer Renewable Energy Monthly Surcharge Summary



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Innovation driving new possibilities



Then: 2008 Technology

Now: 2012 Technology

- Capacity per turbine increased 23%
- Energy production per turbine increased almost 55%
- Economical wind production now possible in 60% of Michigan's total land area
- On-shore wind potential using 2012 technology is 478% of 2011 total electricity delivery in Michigan



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