



Energy Efficiency Economic Impact and Jobs Creation

2016 Illinois Renewable Energy
Conference
July 21, 2016



Midwest EE Investment Economic Impact

Nick Dreher,
Midwest Energy Efficiency Alliance



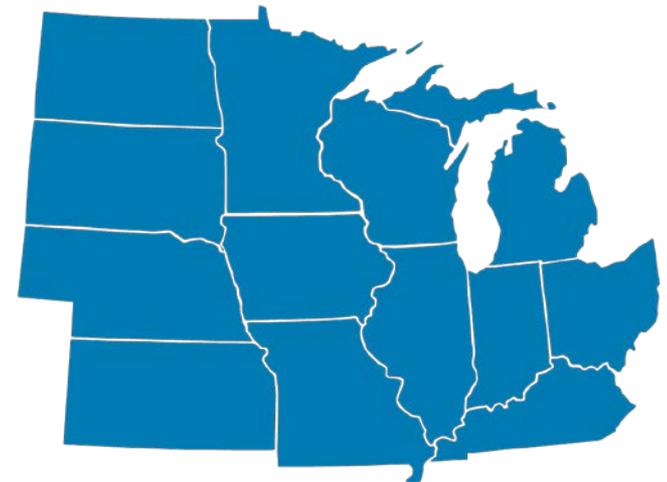
About MEEA

The Trusted Source on Energy Efficiency

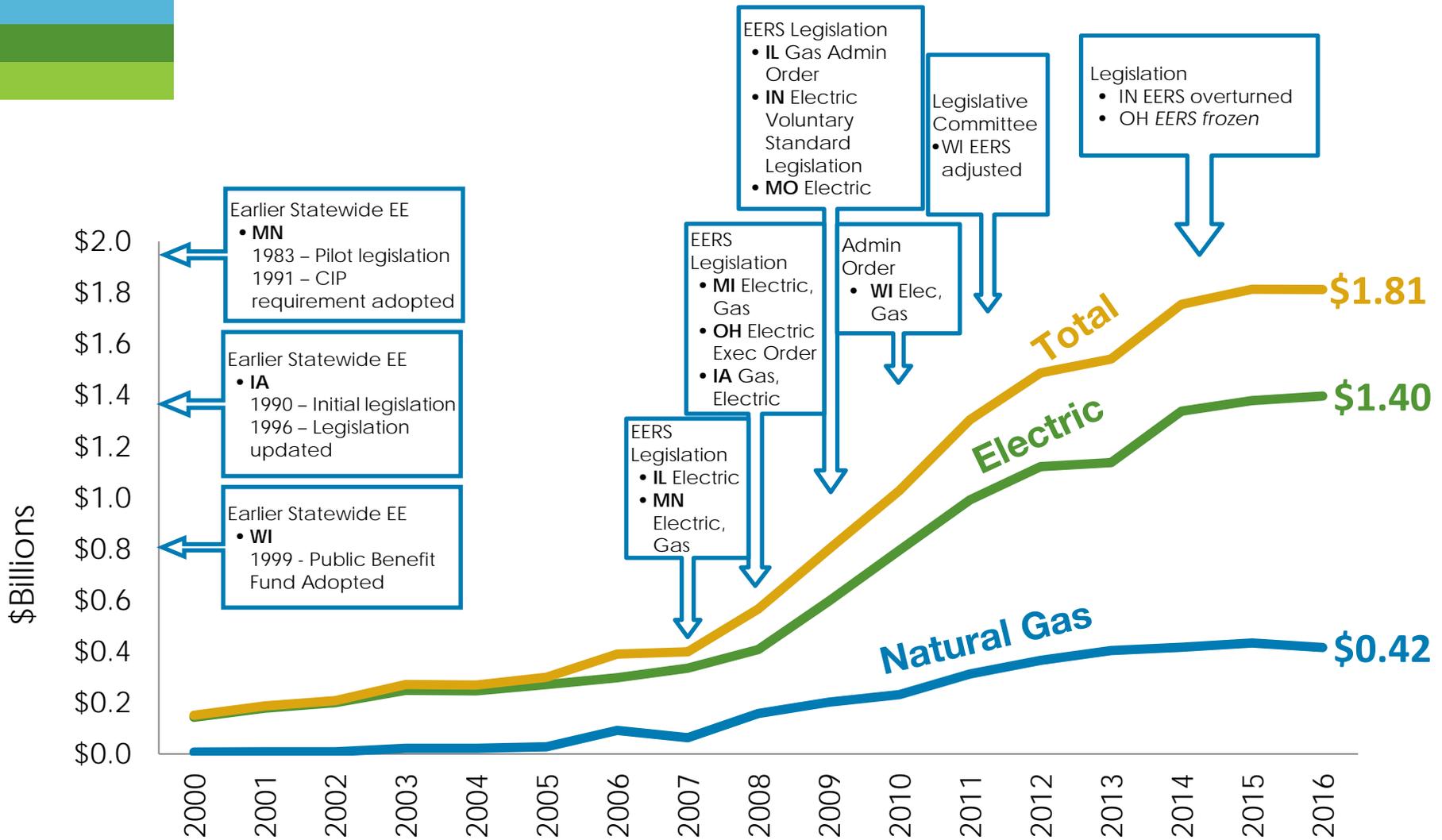
We are a nonprofit membership organization with **160+ members**, including:

- 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.



Estimated Annual Utility Investment in EE



Timeline of Midwest EE Policy

- | | | | |
|------|--|------|--|
| 1983 | ● MN: Pilot Legislation | 2008 | ● MI: EERS Legislation (elec & gas)
● OH: EERS Legislation (elec)
● IA: EE Executive Order (elec & gas) |
| 1990 | ● IA: Initial Legislation | | |
| 1991 | ● MN: CIP Requirement Adopted | 2009 | ● IL: EERS Legislation (gas)
● IN: EERS Regulatory Order (elec)
● MO: Voluntary EE Legislation (elec) |
| 1996 | ● IA: Legislation Updated | 2010 | ● WI: EERS Regulatory Order (elec & gas) |
| 2005 | ● WI: Public Benefit Fund Restructured | 2011 | ● WI: EERS Adjusted by Legislation |
| 2007 | ● MN: EERS Legislation (elec & gas)
● IL: EERS Legislation (elec) | 2014 | ● IN: EERS Overturned by Legislation
● OH: EERS "Frozen" by Legislation |

● Legislative

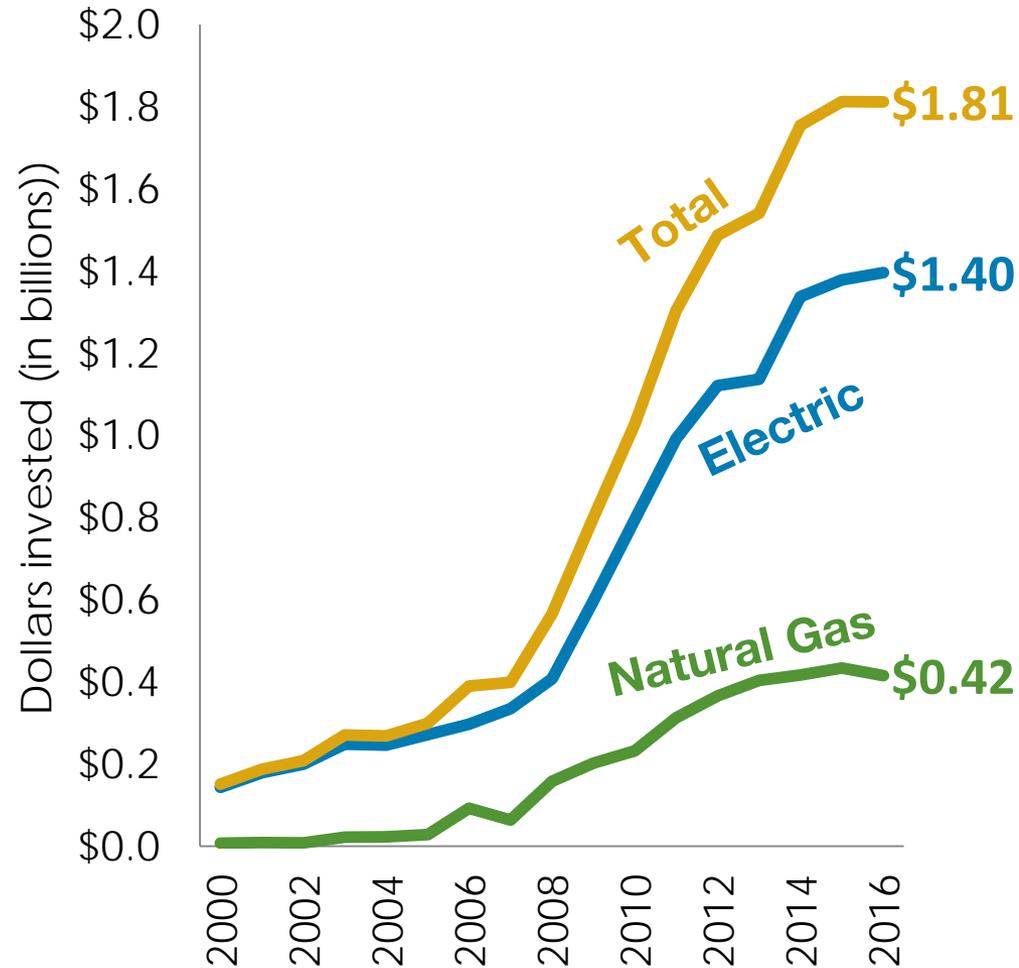
● Executive/Regulatory Order

● Rollback

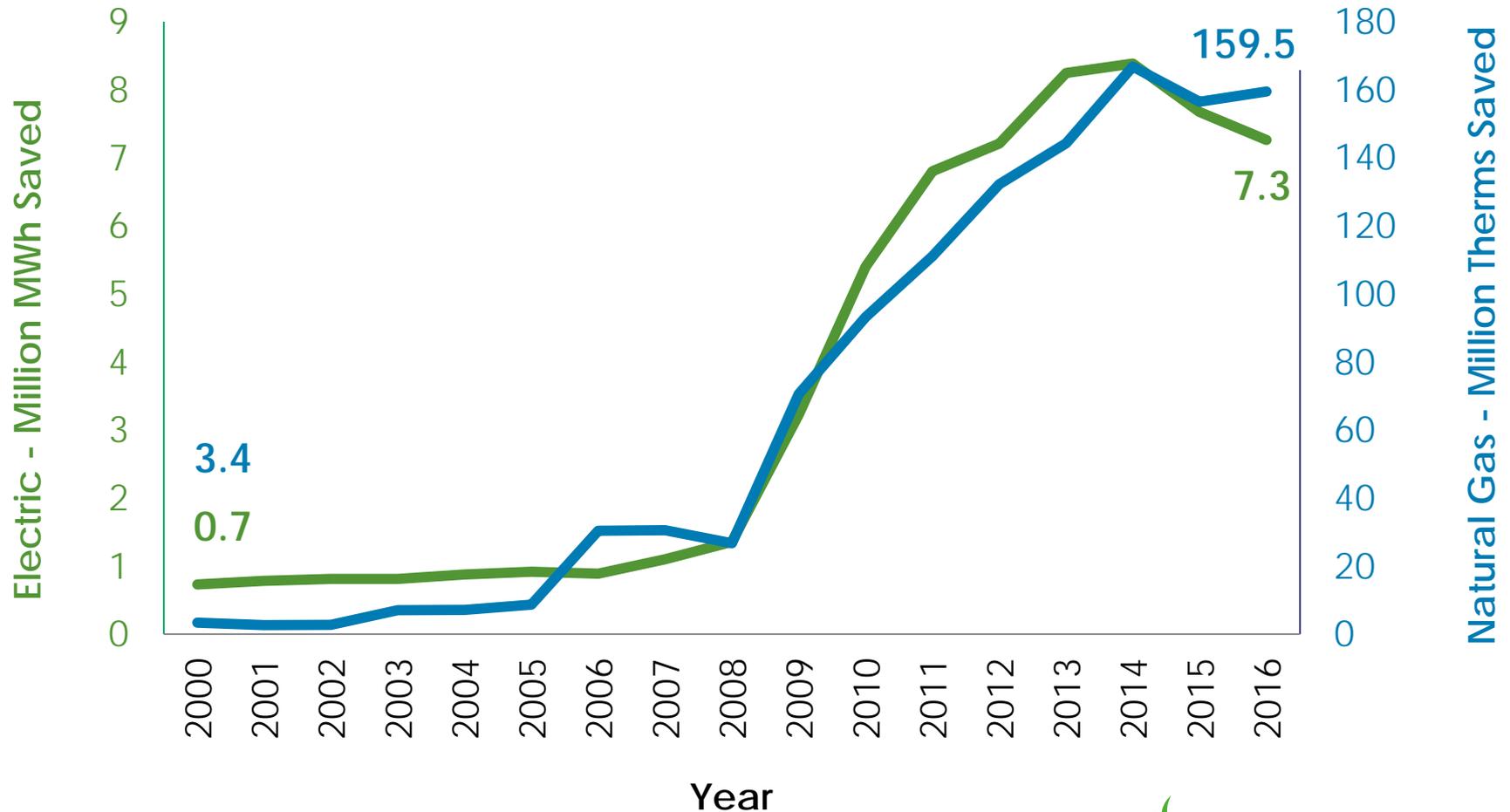
Energy Efficiency Policies and Investment in the Midwest

Timeline of Midwest EE Policies

1983	MN	Pilot legislation
1990	IA	Initial legislation
1991	MN	CIP requirement adopted
1996	IA	Legislation updated
1999	WI	Public Benefit Fund adopted (electric & gas)
2007	IL	EERS legislation adopted (electric)
2007	MN	EERS legislation adopted (electric & gas)
2008	MI	EERS legislation adopted (electric & gas)
2008	OH	EERS legislation adopted (electric)
2008	IA	EE mandated by Executive Order (electric & gas)
2009	IL	EERS legislation adopted (gas)
2009	IN	EERS implemented by regulatory order
2009	MO	Voluntary EE standard legislation adopted (electric)
2010	WI	EERS implemented by regulatory order
2011	WI	EERS adjusted by legislation
2014	IN	EERS overturned by legislation
2014	OH	EERS 'paused' by legislation



Midwest **Energy** Savings through Utility Energy Efficiency



What is the economic impact
that results after this level of
investment?

The logo for CADMUS, consisting of the word "CADMUS" in white, uppercase, sans-serif font centered within a solid blue rectangular background.

CADMUS

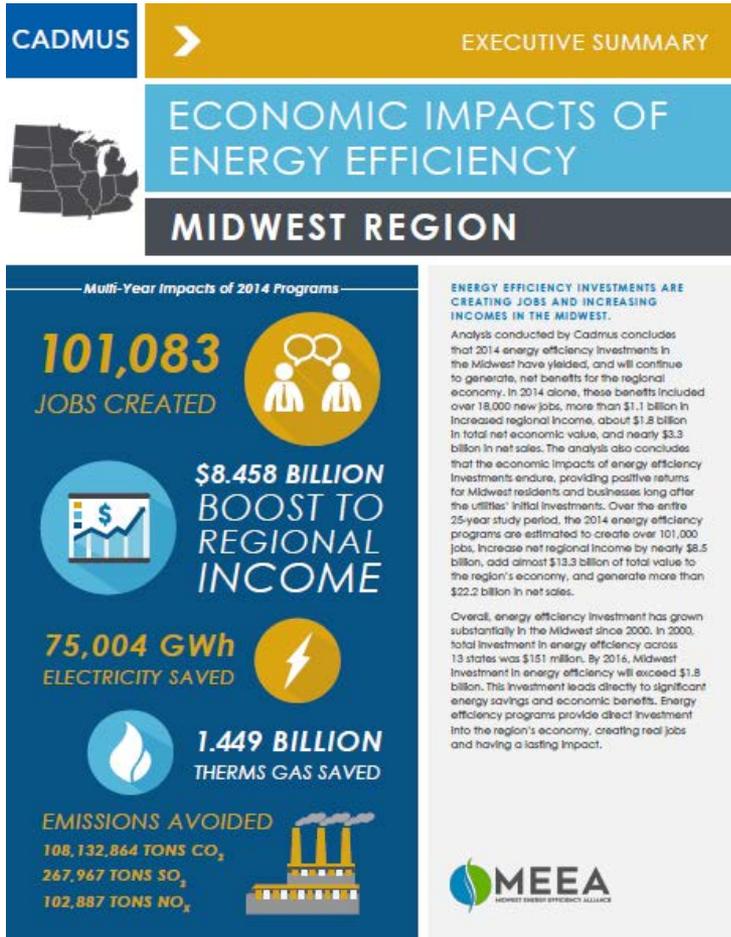
A large yellow arrow graphic pointing to the right, with a white outline, positioned to the left of the main title.

Economic Impacts of Energy Efficiency

Analyzing the Effects of Regional and
State-Level Investments

July 2016

Study Overview



MEEA commissioned a study of the economic impacts of energy efficiency investments

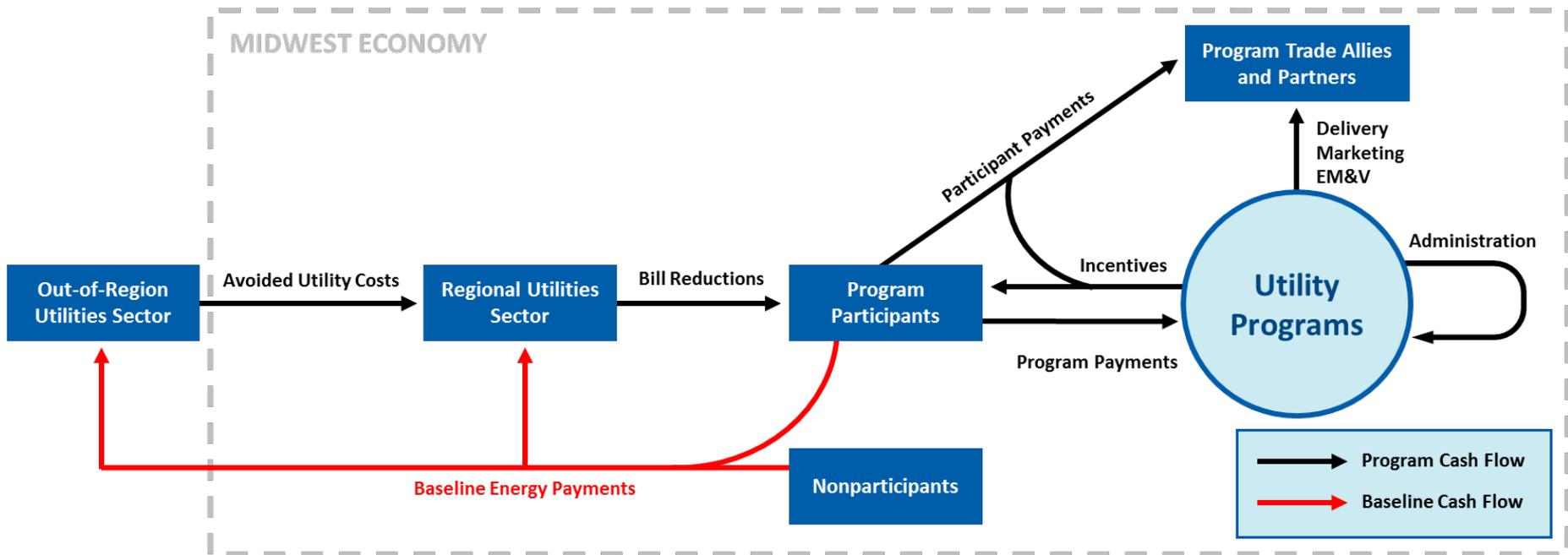
- Analyzed regional program activities
 - Midwest Region
- Estimated impacts on four economic indicators
 - Employment
 - Income
 - Economic Value Added
 - Sales



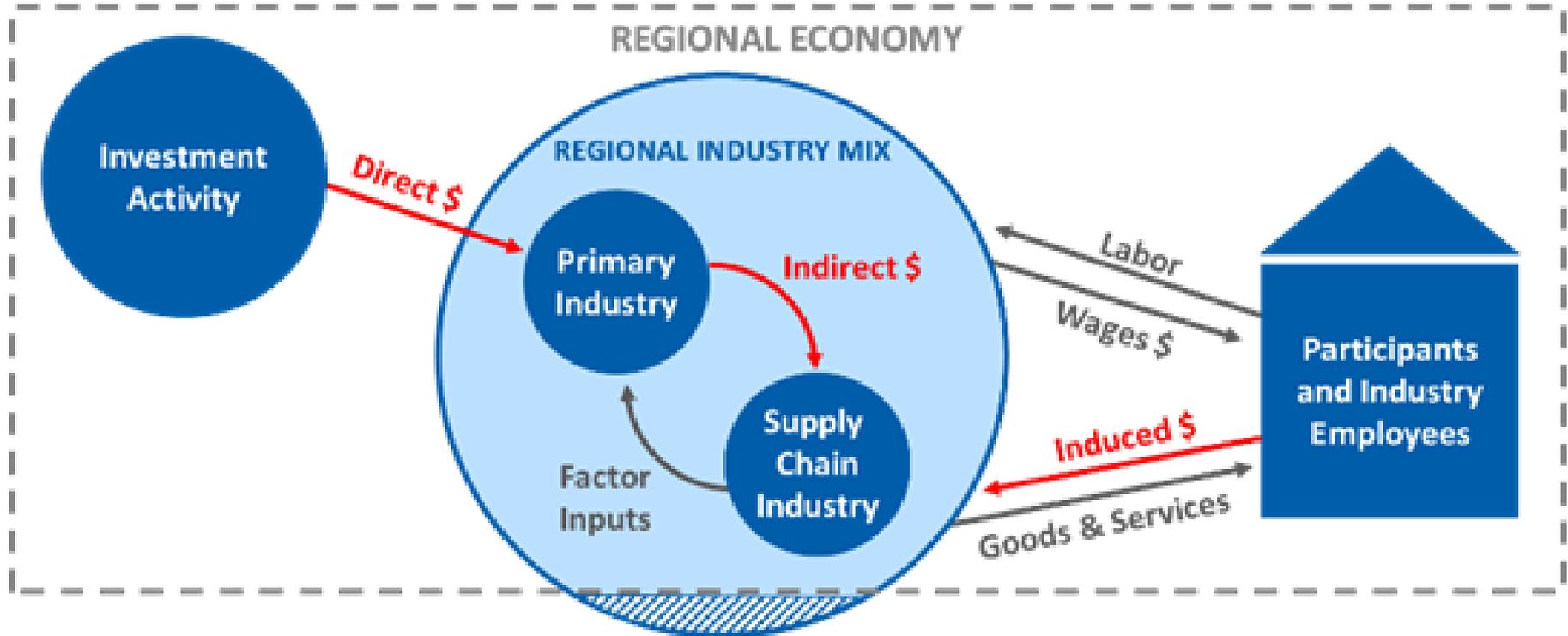
Why Dynamic Forecast Modeling?

Analysis Method

Used REMI PI+ to model annual impacts on employment, income, economic value added, and sales from energy efficiency program-related cash flows:



Analysis Method



Midwest Region

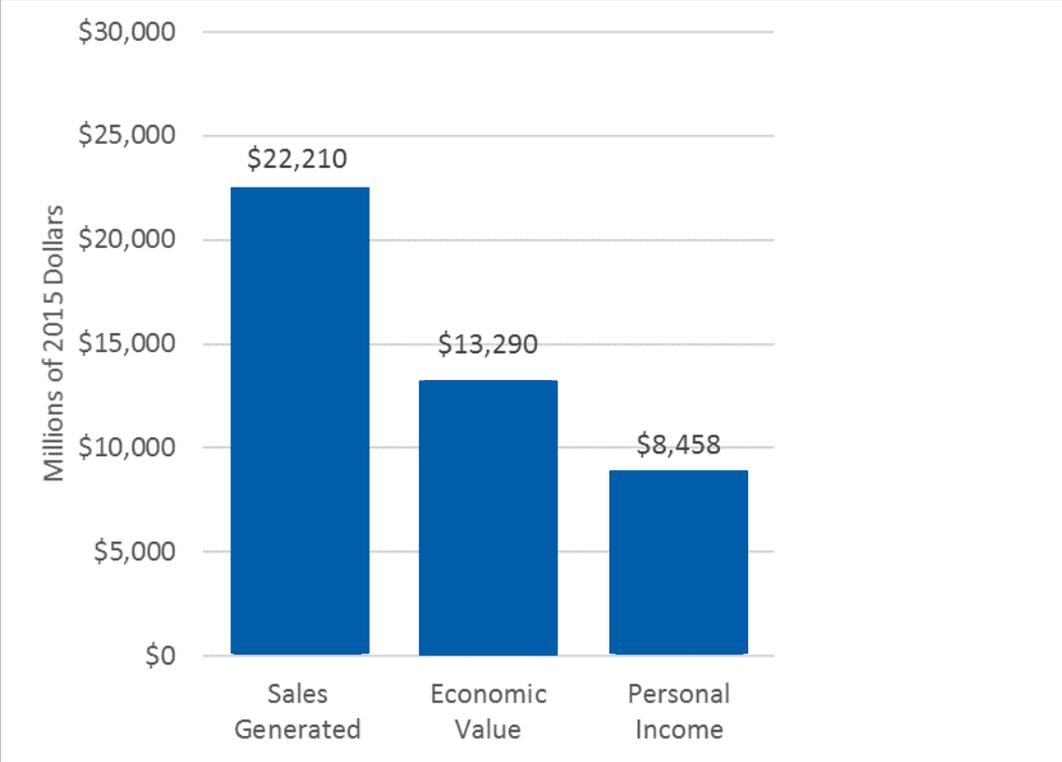
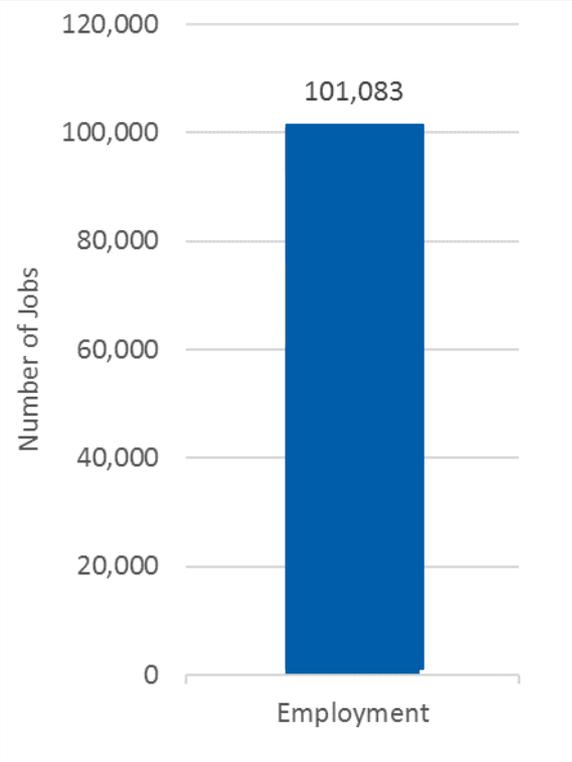
State	Spending (\$2015)	GWh Savings	therm Savings*	Avoided CO ₂ (tons)	Avoided SO ₂ (tons)	Avoided NO _x (tons)
Illinois	\$346,397,221	8,737	310,881,694	18,013,384	31,185	10,208
Indiana	\$126,920,331	6,894	21,437,150	7,481,057	23,281	7,266
Iowa	\$184,502,608	7,098	97,547,514	9,980,063	30,442	10,953
Kansas	\$510,605	9	NR	10,493	8	10
Kentucky	\$48,073,549	3,767	15,519,685	4,142,658	9,195	3,858
Michigan	\$203,832,401	10,731	376,847,434	20,371,031	61,712	20,996
Minnesota	\$134,717,250	8,543	403,698,727	16,534,313	17,873	19,617
Missouri	\$36,957,959	4,415	NR	4,333,918	9,841	4,718
Nebraska	\$20,281,045	2,351	NR	2,722,321	6,203	3,771
North Dakota	\$385,457	25	NR	31,119	190	66
Ohio	\$210,872,860	16,212	NR	13,029,988	62,886	13,863
South Dakota	\$5,328,317	167	NR	166,709	504	470
Wisconsin	\$92,937,455	6,055	222,781,830	11,315,810	14,647	7,091
Total	\$1,411,717,058	75,004	1,448,714,034	108,132,864	267,967	102,887

*Kansas, Missouri, Nebraska, North Dakota, Ohio, and South Dakota utilities do not report gas savings.

Midwest Region

Economic Indicator	Net Study Period Impacts: Midwest Region
Employment (jobs)	101,083
Income (2015 dollars (M))	\$8,458
Value Added (2015 dollars (M))	\$13,290
Sales (2015 dollars (M))	\$22,210

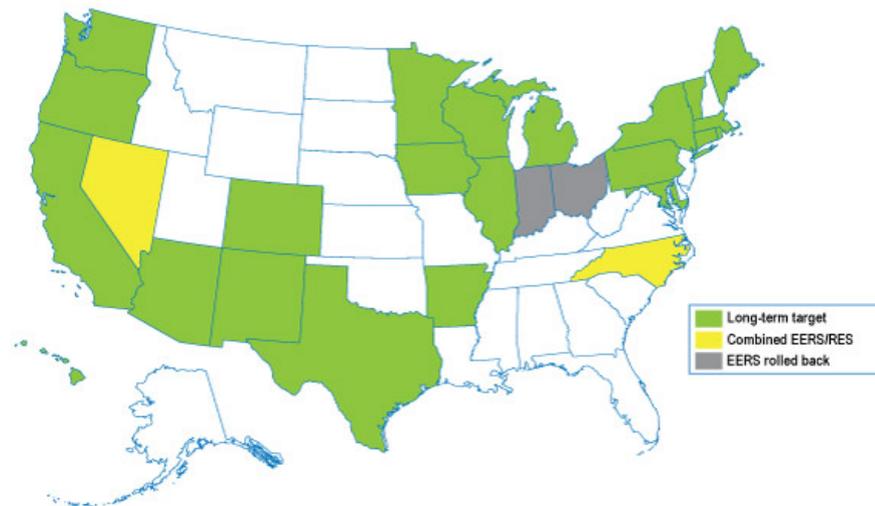
Midwest Region



Policy/Economics Correlation

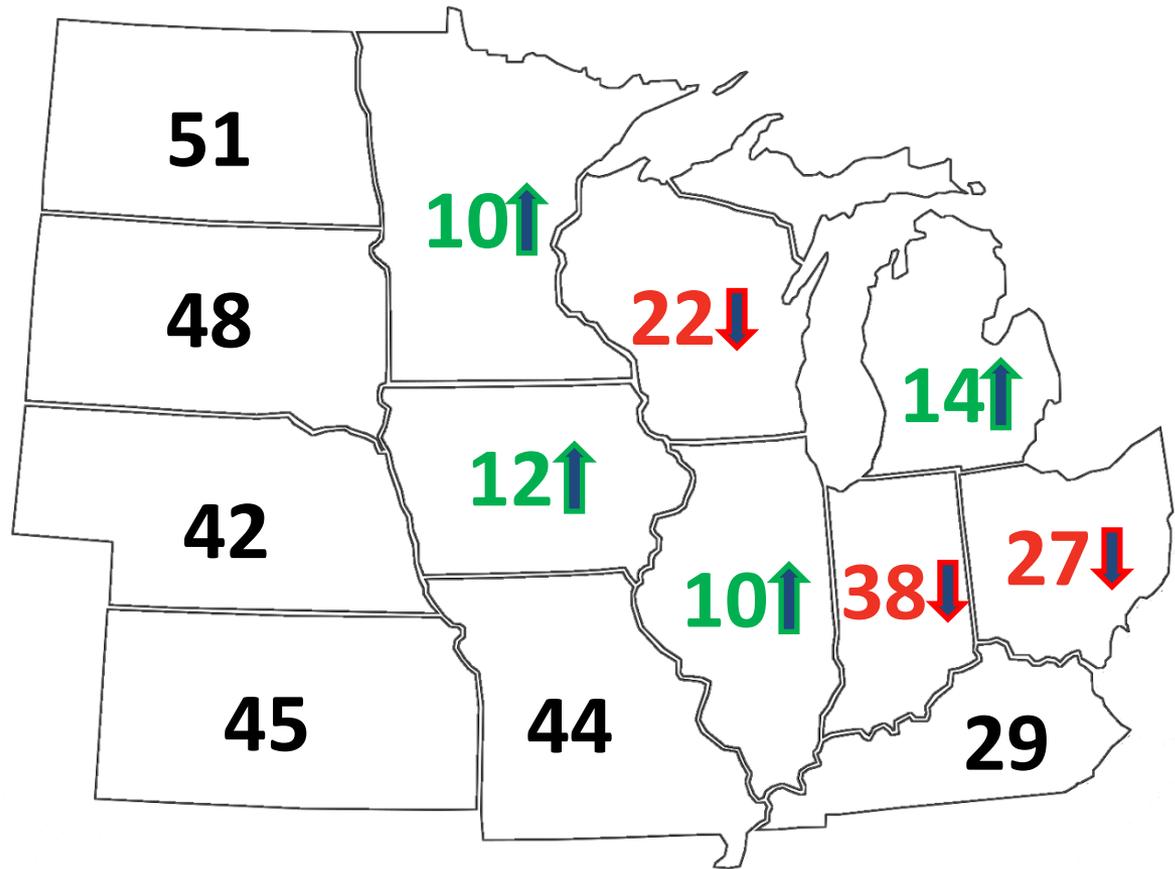
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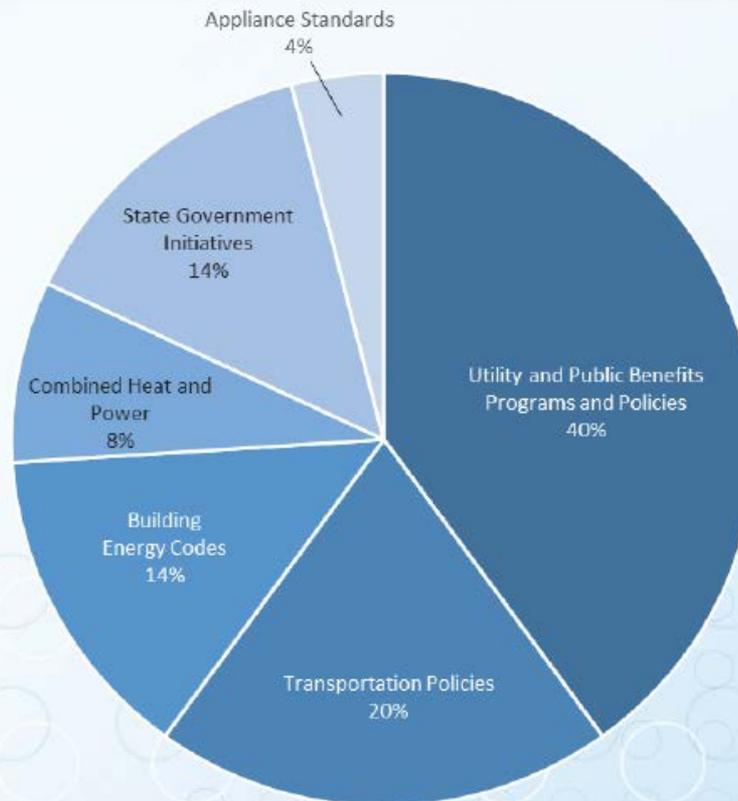
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2015 ACEEE State Scorecard



2015 ACEEE State Scorecard

Policy Categories



Outlook

Upcoming Energy Policy Debates Across the Region

- Illinois Energy Bills
- Indiana Rulemaking
- Michigan House and Senate Energy Packages
- Ohio House and Senate Energy Bills

Questions?

Contact

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Thank you!

*Gail Parson,
Environmental Entrepreneurs*

*Nick Dreher,
MEEA*

*Moderator: Leah Scull,
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