



CADMUS

THE ECONOMIC IMPACTS
OF ENERGY EFFICIENCY
INVESTMENTS IN THE MIDWEST

OCTOBER 2016



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ECONOMIC IMPACTS OF ENERGY EFFICIENCY

MIDWEST REGION

Multi-Year Impacts of 2014 Programs

104,925
JOBS CREATED



\$8.771 BILLION
BOOST TO
REGIONAL
INCOME

78,499 GWh
ELECTRICITY SAVED



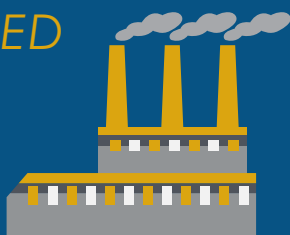
1.449 BILLION
THERMS GAS SAVED

EMISSIONS AVOIDED

111,630,380 TONS CO₂

278,548 TONS SO₂

112,742 TONS NO_x



ENERGY EFFICIENCY INVESTMENTS ARE CREATING JOBS AND INCREASING INCOMES IN THE MIDWEST.

Analysis conducted by Cadmus concludes that 2014 energy efficiency investments in the Midwest have yielded, and will continue to generate, net benefits for the regional economy. In 2014 alone, these benefits included over **18,600 new jobs**, nearly **\$1.2 billion in increased regional income**, over **\$1.8 billion in total net economic value**, and more than **\$3.3 billion in net sales**.

The analysis also concludes that the economic impacts of energy efficiency investments endure, providing positive returns for Midwest residents and businesses long after the utilities' initial investments. Over the entire 25-year study period, the 2014 energy efficiency programs are estimated to **create nearly 105,000 jobs**, **increase net regional income by almost \$8.8 billion**, **add over \$13.7 billion of total value to the region's economy**, and **generate about \$23 billion in net sales**.

Overall, energy efficiency investment has grown substantially in the Midwest since 2000. In 2000, total investment in energy efficiency across 13 states was \$151 million. By 2016, Midwest investment in energy efficiency will exceed \$1.8 billion. This investment leads directly to significant energy savings and economic benefits. Energy efficiency programs provide direct investment into the region's economy, creating real jobs and having a lasting impact.

INTRODUCTION

This report describes the net economic impacts of energy efficiency programs funded by utilities in the Midwest region. The Midwest Energy Efficiency Alliance (MEEA) commissioned Cadmus to model the first-year and forecasted impacts of 2014 utility program spending and savings across 13 Midwest states: Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. Specifically, Cadmus estimated the net impacts of utility program activities on four economic sub-regions: Michigan, Ohio, Indiana, and the Rest of the Midwest.

Cadmus also analyzed the economic impacts from just in-state efficiency program activities in Michigan, Ohio, and Indiana. Detailed findings from each of these state-specific analyses are provided in separate sections of this report.

Cadmus modeled annual impacts on employment, personal income, value added, and sales over a 25-year study period for each economic sub-region, as shown in Table 1.

As Figure 1 illustrates, energy efficiency investments affect the flow of money through the economy in three ways. **Direct economic effects** represent impacts on industries directly involved with utility programs, such as firms that manufacture energy technologies or provide project services. **Indirect economic effects** account for impacts on industries in the energy efficiency supply chain, such as firms that supply raw manufacturing inputs to the directly affected industries. **Induced economic effects** lead to additional impacts on other industries as utility program participants and employees of directly and indirectly affected industries spend money in the economy.

Midwest utilities' investments in energy efficiency create jobs, generate new income, and increase regional spending.

Over a 25-year period, the 2014 programs alone are estimated to:

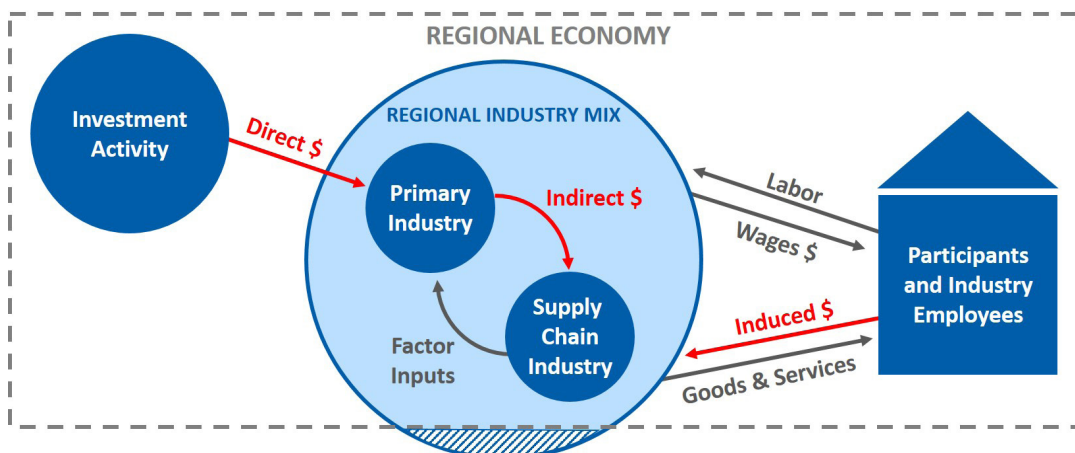
- *create nearly 105,000 regional jobs
- *increase regional income by almost \$8.8 billion
- *add over \$13.7 billion in regional economic value
- *generate about \$23 billion in regional sales

Table 1. Summary Findings

Economic Indicator	Net Study Period Impacts				
	Michigan	Ohio	Indiana	Rest of Midwest	Midwest Region Total*
Employment (jobs)	17,112	15,930	8,869	63,014	104,925
Personal Income (millions of 2015 dollars)	\$1,517	\$1,369	\$727	\$5,158	\$8,771
Value Added (millions of 2015 dollars)	\$2,191	\$2,153	\$1,089	\$8,315	\$13,749
Sales (millions of 2015 dollars)	\$3,551	\$3,700	\$1,882	\$13,859	\$22,992

*Totals may not sum due to rounding.

Figure 1. How Energy Efficiency Investments Affect the Flow of Money Through the Economy



Although the modeling analysis assumes total statewide and regional spending is the same with or without programs, net impacts are positive because the *nature* of spending within the state and regional economies changes as a result of direct, indirect, and induced program effects. In the example shown in Figure 1, efficiency investments result in positive net economic impacts because funds that are directed to mainly local industries would otherwise have been spent primarily (but not exclusively) on energy resources, some of which are imported into the region.

In addition to the effects from program year expenditures, efficiency investments continue to generate positive net economic benefits as long as energy savings continue. Ongoing energy savings allow participants to spend less money on energy and more on other products and services, many of which have relatively localized supply chains. Furthermore, Midwest utilities benefit from reduced fuel and power purchases, transmission and distribution costs, emission allowance costs, and supply capacity requirements. However, customers purchase less energy after participating in energy efficiency programs; therefore, utilities also forego revenues equal to sales reductions.¹

The 2014 programs will create nearly 105,000 jobs through 2038.

ANALYSIS FINDINGS

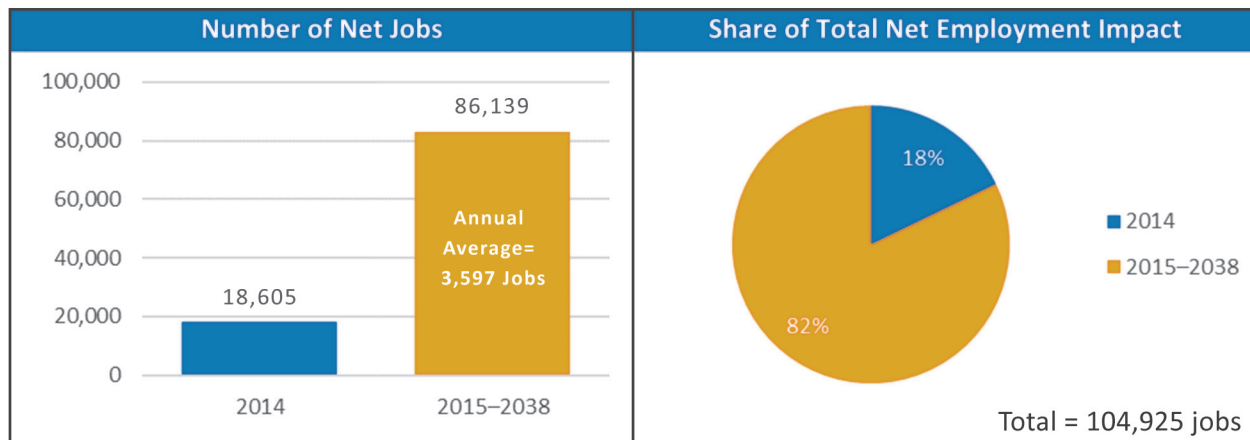
Cadmus aggregated the net economic impacts of 2014 program spending and energy savings in Michigan, Ohio, Indiana, and the Rest of the Midwest to determine total impacts across the 13-state MEEA region.

The following sections describe detailed employment, income, value added, and sales impact findings for the Midwest region and for each sub-region included in the analysis.²

REGIONAL EMPLOYMENT

Midwest utilities' efficiency programs generate positive near-term and long-term net employment effects. Figure 2 shows the net first-year and future-year regional job impacts. Analysis findings indicate that the 2014 programs created more than 18,600 net jobs in the first year, or approximately 18% of the study period total (nearly 105,000 jobs). Primarily due to increased sales of energy efficient equipment and program support services, more than half of these near-term employment effects were in the manufacturing and professional services sectors. Modeling also shows that spending on regional consumer goods and services will increase and remain relatively high mainly due to ongoing energy cost savings, resulting in another 86,319 net jobs—an average of 3,597 per year—through 2038.

Figure 2. First-Year and Future-Year Regional Employment Impacts



¹ The dollar value of these reductions represents a cost to the utilities, which we also considered in our analysis.

² Detailed descriptions of the impacts from just in-state efficiency program activities are provided for Michigan, Ohio, and Indiana in separate sections of this report.

REGIONAL PERSONAL INCOME

As a result of increased regional employment and ongoing energy cost savings, Midwest energy efficiency programs lead to positive net gains in near-term and long-term personal income. Figure 3 shows the net first-year and future-year regional personal income impacts. The modeling analysis revealed that the regional 2014 programs generated almost \$1.2 billion of net personal income the first year, or about 13% of the study period total (nearly \$8.8 billion). Ongoing energy savings benefits will continue generating an average of \$317 million of net personal income per year—a total of more than \$7.6 billion—from 2015 to 2038.

Energy efficiency programs generated almost \$1.2 billion boost to regional income in 2014 alone

REGIONAL VALUE ADDED

Efficiency investments and savings generate new demand for products and services that are provided largely by local industries, which adds net value to the regional economy. Figure 4 illustrates the net first-year and future-year value added impacts. The analysis findings show that the 2014 utility programs added over \$1.8 billion of net economic value the first year, representing approximately 13% of the study period total (more than \$13.7 billion). The programs' ongoing effects will add an average of \$496 million per year—a total of over \$11.9 billion—from 2015 to 2038.

Ongoing program effects will add an average of \$496 million of net economic value per year—a total of over \$11.9 billion—from 2015 to 2038.

Figure 3. First-Year and Future-Year Regional Personal Income Impacts

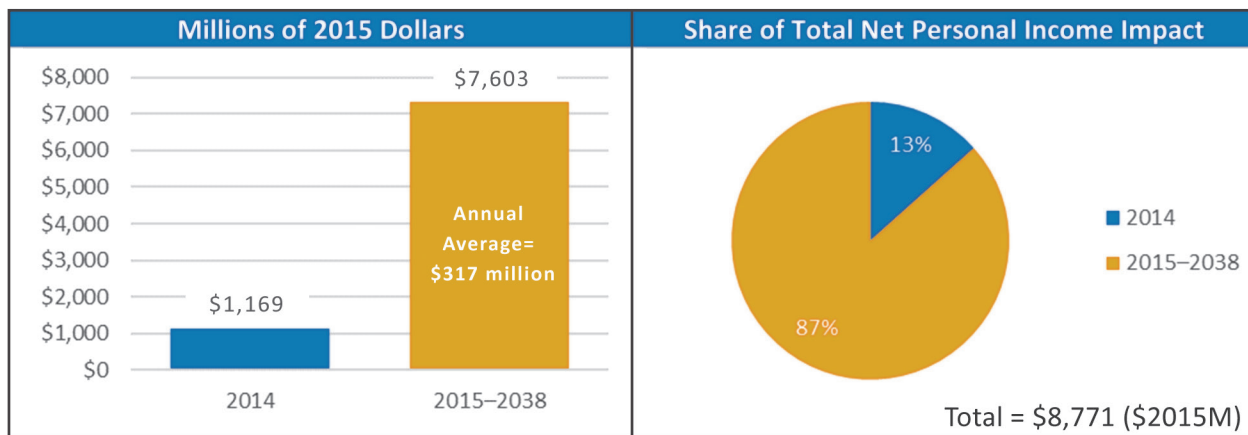


Figure 4. First-Year and Future-Year Regional Value Added Impacts

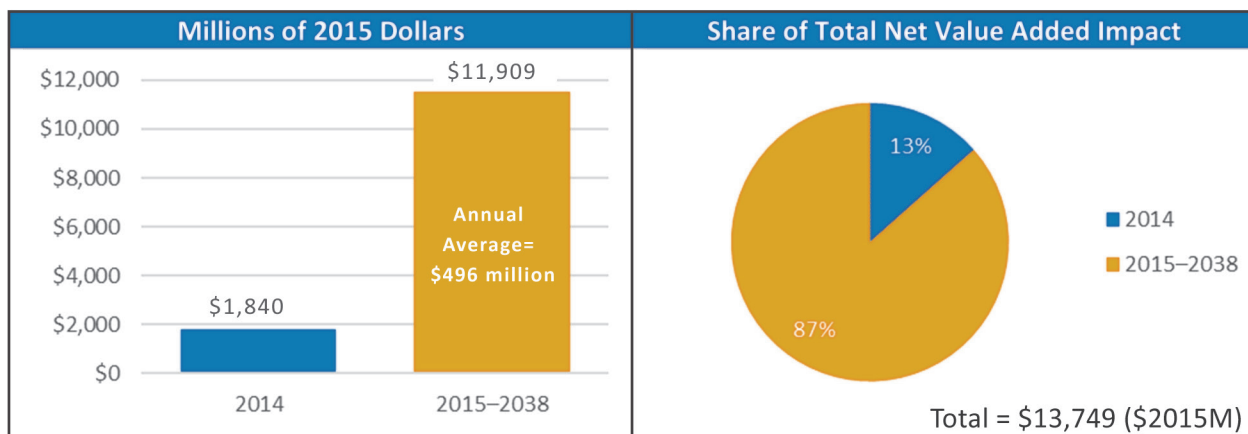
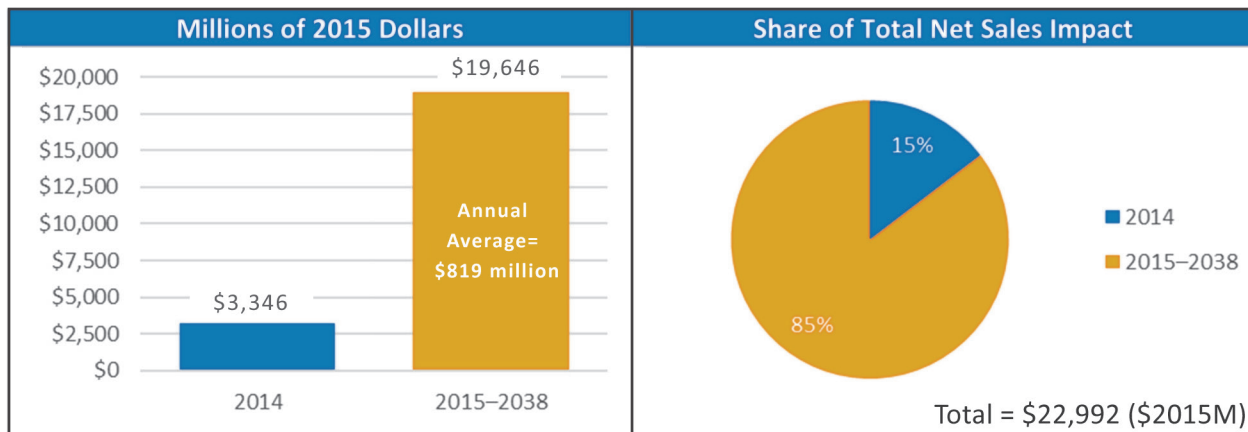


Figure 5. First-Year and Future-Year Regional Sales Impacts



REGIONAL SALES

Energy efficiency program activities and resulting energy savings lead to positive net sales impacts in the Midwest region. Figure 5 shows the net first-year and future-year sales impacts. Model findings suggest that the 2014 programs generated \$3.3 billion of net sales the first year, or around 15% of the study period total (nearly \$23 billion). The programs will generate an average of \$819 million of net sales per year—a total of nearly \$20 billion—from 2015 to 2038.

The 2014 programs will generate nearly \$23 billion of net sales through 2038.

IMPACTS BY SUB-REGION

For each sub-region included in the analysis, Cadmus determined the net economic impacts attributable to in-region program activities as

well as the spillover impacts of program activities in the other sub-regions. The following sections summarize these findings for Michigan, Ohio, Indiana, and the Rest of the Midwest.

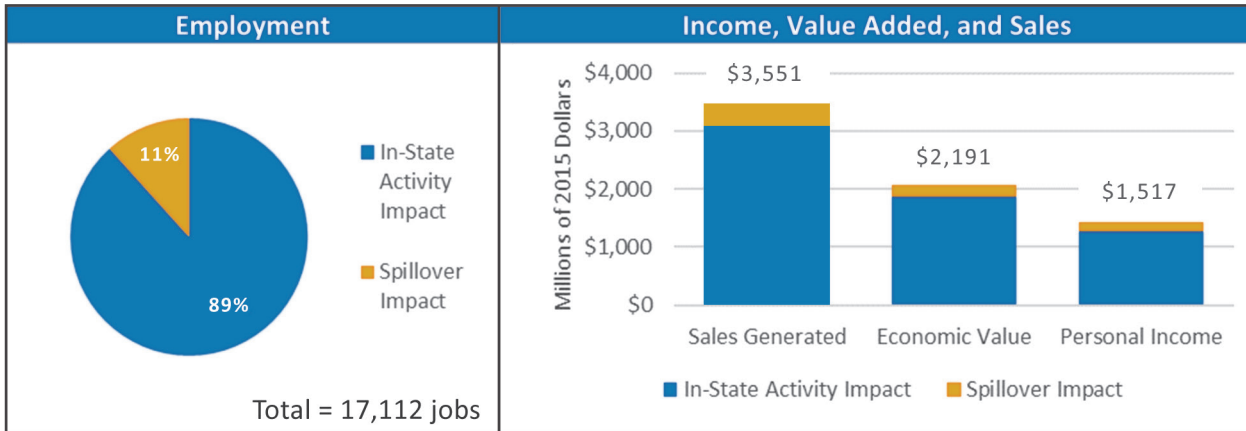
MICHIGAN

As shown in Table 2 and Figure 6, the Michigan economy benefits mainly from in-state energy efficiency program activities, although a small portion of statewide employment, income, value added, and sales impacts result from program activities in other Midwest states. These spillover impacts represent a small percentage of Michigan's total impacts. Energy efficiency investments and savings are relatively high in Michigan (Table 2), and these activities result in similarly high net economic impacts. However, the impacts are relatively local. The Michigan economy's own manufacturing, professional services, and consumer goods and services industries are large enough to satisfy a substantial majority of in-state increases in demand.

Table 2. In-State Activity and Spillover Impacts on the Michigan Economy

Economic Indicator	In-State Activity Impacts		Spillover Impacts		Michigan Total
	Value	Percent of Total	Value	Percent of Total	
Employment (jobs)	15,203	89%	1,909	11%	17,112
Personal Income (millions of 2015 dollars)	\$1,353	89%	\$164	11%	\$1,517
Value Added (millions of 2015 dollars)	\$1,975	90%	\$216	10%	\$2,191
Sales (millions of 2015 dollars)	\$3,190	90%	\$362	10%	\$3,551

Figure 6. In-State Activity and Spillover Impacts on the Michigan Economy



OHIO

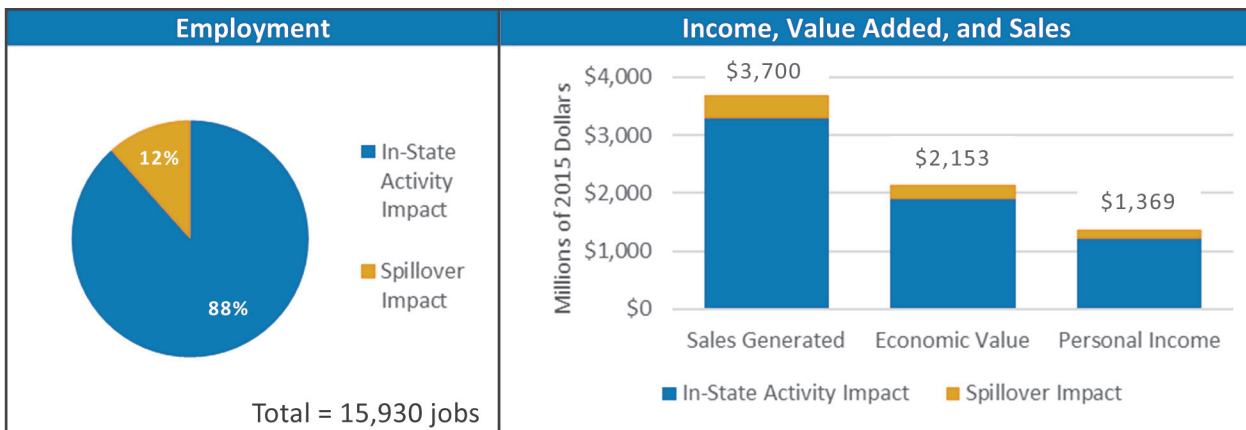
As shown in Table 3 and Figure 7, the Ohio economy also benefits mainly from in-state energy efficiency program activities, although a small share of statewide employment, income, value added, and sales impacts result from program activities in other states included in the Midwest region analysis. These spillover impacts account for

a low percentage of Ohio's total impacts. Similar to Michigan, energy efficiency investments and savings are comparatively high in Ohio (Table 2), and these activities result in correspondingly high net economic impacts. Furthermore, the impacts are relatively local because Ohio's industries are large enough to satisfy a significant majority of increased in-state demand.

Table 3. In-State Activity and Spillover Impacts on the Ohio Economy

Economic Indicator	In-State Activity Impacts		Spillover Impacts		Ohio Total
	Value	Percent of Total	Value	Percent of Total	
Employment (jobs)	14,002	88%	1,928	12%	15,930
Personal Income (millions of 2015 dollars)	\$1,211	88%	\$158	12%	\$1,369
Value Added (millions of 2015 dollars)	\$1,891	88%	\$263	12%	\$2,153
Sales (millions of 2015 dollars)	\$3,277	89%	\$423	11%	\$3,700

Figure 7. In-State Activity and Spillover Impacts on the Ohio Economy



INDIANA

As shown in Table 4 and Figure 8, the Indiana state economy benefits considerably from in-state energy efficiency program activities, although a comparatively large portion of statewide employment, income, value added, and sales impacts result from program activities in other Midwest states. The magnitude of these spillover impacts, as well as their percentage of total statewide impacts, is comparatively high in Indiana partly because in-state energy efficiency program investments and savings are lower (Table 2), and partly because the Indiana economy's own manufacturing, professional services, and retail services industries are smaller than in neighboring states. In effect, a larger portion of in-state demand is met with supply from out-of-state industries.

REST OF THE MIDWEST

As shown in Table 5 and Figure 9, analysis findings show that the Rest of the Midwest sub-region benefits almost exclusively from in-region energy efficiency program activities, and just a small portion of the sub-region's employment, income, value added, and sales impacts result from program activities in Michigan, Ohio, and Indiana. These spillover impacts represent a relatively small percentage of the sub-region's total impacts for two reasons. First, total spending and savings across the sub-region are independently high (Table 2), and these activities result in similarly high net economic impacts. Second, the Rest of the Midwest sub-region is a group of 10 contiguous state economies that shares just its eastern border with Michigan, Ohio, and Indiana (i.e., the only other states included in the analysis). As a result, most increases in demand for energy efficiency are satisfied with goods and services supplied by industries located within the sub-region itself.

Table 4. In-State Activity and Spillover Impacts on the Indiana Economy

Economic Indicator	In-State Activity Impacts		Spillover Impacts		Indiana Total
	Value	Percent of Total	Value	Percent of Total	
Employment (jobs)	6,238	70%	2,631	30%	8,869
Personal Income (millions of 2015 dollars)	\$513	71%	\$214	29%	\$727
Value Added (millions of 2015 dollars)	\$804	74%	\$285	26%	\$1,089
Sales (millions of 2015 dollars)	\$1,348	72%	\$535	28%	\$1,882

Figure 8. In-State Activity and Spillover Impacts on the Indiana Economy

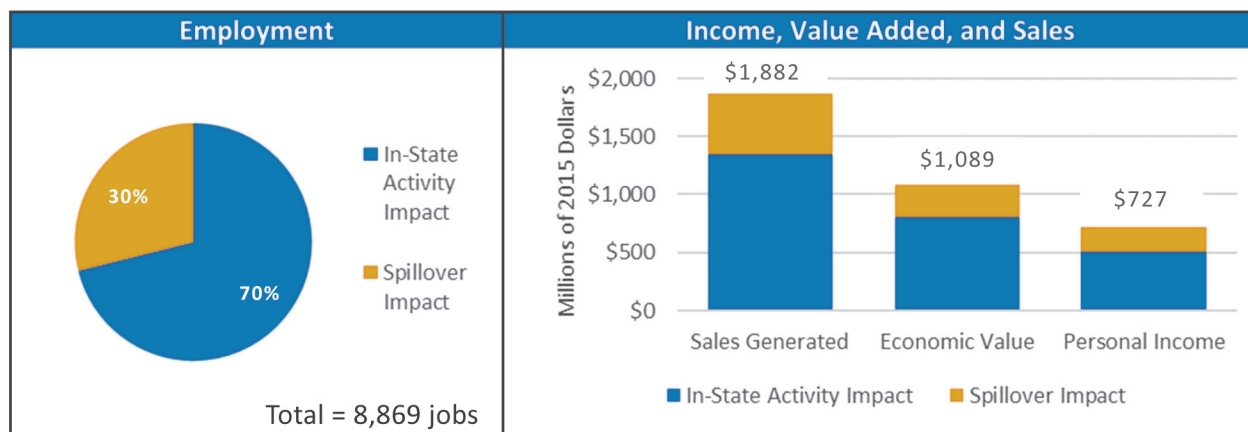
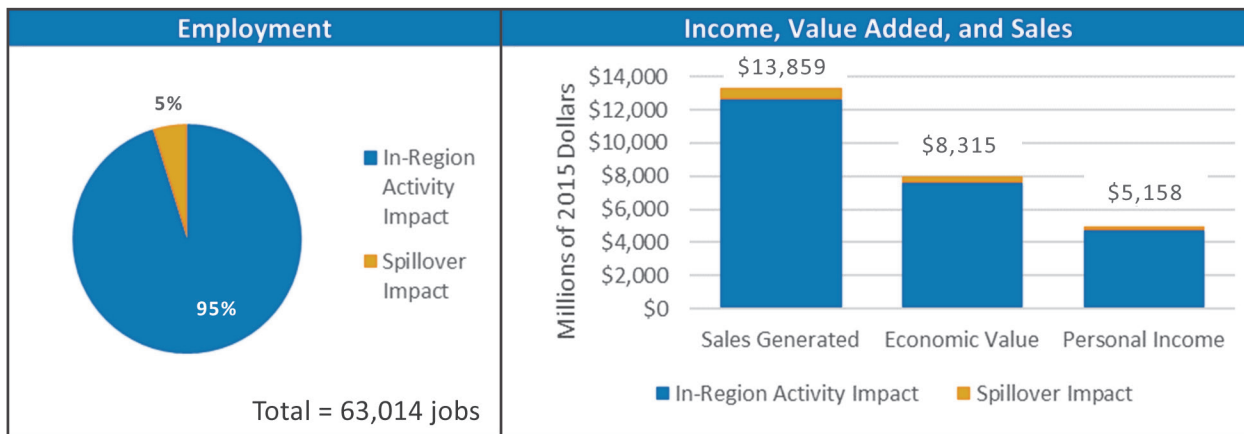


Table 5. In-Region Activity and Spillover Impacts on the Rest of the Midwest Economy

Economic Indicator	In-Region Activity Impacts		Spillover Impacts		Rest of the Midwest Total
	Value	Percent of Total	Value	Percent of Total	
Employment (jobs)	60,007	95%	3,007	5%	63,014
Personal Income (millions of 2015 dollars)	\$4,959	96%	\$199	4%	\$5,158
Value Added (millions of 2015 dollars)	\$7,896	95%	\$419	5%	\$8,315
Sales (millions of 2015 dollars)	\$13,136	95%	\$722	5%	\$13,859

Figure 9. In-Region Activity and Spillover Impacts on the Rest of the Midwest Economy



ANALYSIS METHOD

Cadmus assessed the impacts of 2014 energy efficiency programs administered over 200 utilities across the 13-state Midwest region. Appendix A provides a complete list of utilities by state.

We estimated the net economic impacts of annual program spending and resulting energy savings for each utility using the Regional Economic Models, Inc. Policy Insight+ (REMI PI+) model, a dynamic economic forecasting tool.³ We determined net annual impacts on four key economic indicators.⁴

1. **Employment** is an estimate of the number of jobs by place of work. For the purposes of this multiyear analysis, a job is defined as one full-time equivalent job for one year (i.e., 2,080

hours). In other words, a job equals one full-time job lasting one year; two half-time jobs lasting one year each; two full-time jobs lasting a half year each; and so on.

2. **Personal income** represents the change in money available to Midwest customers for purchasing goods and services, saving money, and paying taxes.
3. **Value added** measures the net contribution of each private industry and of government to the Midwest's gross regional product or to a given state's gross state product. It represents total net economic benefits, including wages, profits (minus intermediate goods purchased), and taxes (minus subsidies).

³ <http://www.remi.com/>

⁴ This Midwest region analysis was over a 25-year study period, from 2014–2038.

4. **Sales** equal total industry output, or production, including all intermediate goods purchased, employee compensation, and profits. Sales include purchases of intermediate goods and are therefore greater than value added.

To isolate the net regional or statewide effects on these variables from each program scenario, Cadmus modeled six cash flows against the REMI PI+ model's built-in forecast of the baseline economy.

1. **Program Payments.** Funding for the programs originates from utility revenues, which are collected from Midwest ratepayers and equal total program spending.
2. **Program Spending.**⁵ Program funds are spent on administration activities, as well as on delivery and other services provided by program trade allies and partners.

3. **Incentives.** Program funds are also spent on direct financial and service-based incentives that encourage customers to invest in energy efficiency.

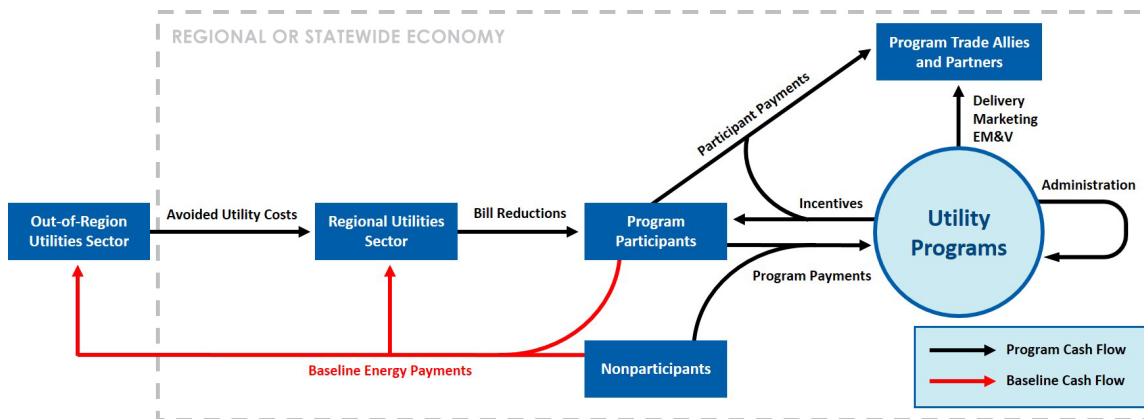
4. **Participant Payments.**⁶ To complete project payments, participants provide their own co-funding in addition to receiving incentives.

5. **Bill Reductions.**⁷ Participants save energy for as long as installed efficiency measures remain operational,⁸ benefitting from energy bill reductions while utilities forego those revenues.

6. **Avoided Utility Costs.**⁹ As a result of decreased demand for energy resources, utilities benefit from avoided fuel, supply capacity, and emissions costs.

Figure 10 illustrates these cash flows, as well as the cash flows that occur in a program's absence.

Figure 10. Energy Efficiency Program and Baseline Scenario Cash Flows



⁵ E Source DSM Insights database. Available online: <https://www.esource.com/about-dsm insights>.

⁶ Cadmus developed program-specific assumptions about participant co-funding using findings from a Lawrence Berkeley National Laboratory analysis comparing participant and administrator costs. "The Total Cost of Saving Electricity through Utility Customer-Funded Energy Efficiency Programs: Estimates at the National, State, Sector, and Program Level." April 2015. Available online: <https://emp.lbl.gov/sites/all/files/total-cost-of-saved-energy.pdf>.

⁷ MEEA collected annual electric and gas energy savings by program from DSM Insights and Cadmus calculated bill reductions by multiplying those annual energy savings by annual average retail rates. To develop rate forecasts, Cadmus used 1997–2014 annual average rates by fuel type and end-use sector from the Energy Information Administration (EIA). Available online: <http://www.eia.gov/electricity/>.

⁸ Cadmus modeled energy savings from the utility programs across the 25-year study period. We generated measure life data using weighted averages reported by utilities to the EIA via 2014 EIA-861 forms. Available online: <http://www.eia.gov/electricity/data/eia861/index.html>.

⁹ Cadmus used CO₂, NO_x, and SO₂ emissions costs from other Midwest evaluations as a basis for estimating the economic benefits of reduced emissions. We used state-level supply mix forecasts and Levelized Avoided Cost of Energy forecasts from the 2015 EIA Annual Energy Outlook report to estimate avoided fuel and capacity costs. Available online: http://www.eia.gov/forecasts/aeo/electricity_generation.cfm.

Table 6. 2014 Utility Reported Spending and Lifetime Savings, by State

State	Spending (Millions of \$2015)	GWh Savings	therm Savings*	Avoided CO ₂ (tons)	Avoided SO ₂ (tons)	Avoided NO _x (tons)
Illinois	\$346.4	8,737	310,881,694	18,013,384	31,185	10,208
Indiana	\$126.9	6,894	21,437,150	7,481,057	23,281	7,266
Iowa	\$184.5	7,098	97,547,514	9,980,063	30,442	10,953
Kansas	\$0.5	9	NR	10,493	8	10
Kentucky	\$48.1	3,767	15,519,685	4,142,658	9,195	3,858
Michigan	\$220.0	11,663	376,847,434	21,303,908	64,534	23,625
Minnesota	\$163.0	11,106	403,698,727	19,098,952	25,632	26,843
Missouri	\$37.0	4,415	NR	4,333,918	9,841	4,718
Nebraska	\$20.3	2,351	NR	2,722,321	6,203	3,771
North Dakota	\$0.4	25	NR	31,119	190	66
Ohio	\$210.9	16,212	NR	13,029,988	62,886	13,863
South Dakota	\$5.3	167	NR	166,709	504	470
Wisconsin	\$93.0	6,055	222,781,830	11,315,810	14,647	7,091
Total	\$1,456.2	78,499	1,448,714,034	111,630,380	278,548	112,742

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

Table 6 summarizes the 2014 reported spending and lifetime savings data used to develop REMI PI+ model inputs for each state in the Midwest region. Spending varied by state across the region, from as low as \$385,457 in North Dakota to \$346,397,221 in Illinois. Although returns on investment differ from state to state,¹⁰ energy savings and avoided emissions tend to correlate with spending – larger investments lead to greater savings.

CONCLUSION

Midwest utilities' energy efficiency programs create jobs, boost personal income, and increase spending. The 2014 programs alone are estimated to create nearly 105,000 regional jobs, increase regional income by almost \$8.8 billion, add over \$13.7 billion of value to the regional economy, and generate about \$23 billion in regional sales between 2014 and 2038. Model

findings suggest that program year activities generate substantial positive net impacts on all four economic indicators analyzed, and that additional positive net impacts result from sustained energy savings through most of the study period. Sub-region analyses of the Michigan, Ohio, Indiana, and Rest of the Midwest economies reveal that a majority of economic impacts from utility efficiency programs are local, although spillover impacts from activities in other areas are also positive to varying degrees.

Cadmus also analyzed the economic impacts from just in-state efficiency program activities in Michigan, Ohio, and Indiana. Detailed findings from each of these state-specific analyses are provided in separate sections of this report.

¹⁰ Energy savings and emission reduction returns on investment may vary by state for many reasons, including energy efficiency market size and potential, program offerings, and power supply resource mix.

APPENDIX A: UTILITIES BY STATE

Table 1. Utilities by State

State	Utility Program Administrator
Illinois	Ameren Illinois
	Commonwealth Edison
	Nicor Gas
	North Shore Gas
	Peoples Gas
Indiana	Duke Energy Indiana
	Indiana Michigan Power
	Indiana Municipal Power Agency
	Indianapolis Power and Light
	NIPSCO
Iowa	Vectren
	Alliant Energy
	Black Hills Energy
Kansas	MidAmerican Energy
	Butler Rural Electric Cooperative Association, Inc.
	DS&O Electric Cooperative, Inc.
	City of Gardner
	City of Kansas City
	Kansas City Power and Light Company
	Kansas Gas & Electric Company
Sedgwick County Electric Cooperative Association, Inc.	
Kentucky	Westar Energy, Inc.
	AEP Kentucky Power
Michigan	Louisville Gas & Electric and Kentucky University
	Alger Delta
	Baraga
	Bay City
	Bayfield
	Charlevoix
	Chelsea
	Cherryland
	Clinton
	Cloverland/Edison
	Coldwater
	Consumers Energy
	Croswell
	Crystal Falls
	Dagget Electric Company
Detroit PLD	
Dowagiac	

State	Utility Program Administrator
Michigan	DTE
	Eaton Rapids
	Escanaba
	Gladstone
	Grand Haven
	Great Lakes
	Harbor Springs
	Hart
	Hillsdale
	Holland
	L'Anse
	Lansing Board of Water and Light
	Lowell
	Marquette
	Marshall
	Midwest
	Negaunee
	Newberry
	Niles
	Norway
	Ontonagon
	Paw Paw
	Petoskey
	Portland
	Presque Isle
	Sebewaing
	South Haven
	St. Louis
	Stephenson
	Sturgis
	Thumb
	Traverse City
	Tri-County
	Union City
Wakefield	
Wyandotte	
Zeeland	
Minnesota	Adrian Public Utilities Commission
	Alliant Energy
	Bagley Public Utilities Comm
	Beltrami Electric Cooperative, Inc.

State	Utility Program Administrator
	City of Alexandria
	City of Anoka
	City of Arlington
	City of Austin
	City of Barnesville
	City of Benson
	City of Breckenridge
	City of Brewster
	City of Chaska
	City of Detroit Lakes
	City of East Grand Forks
	City of Jackson
	City of Lake City
	City of Luverne
	City of Marshall
	City of Moorhead
	City of Mora
	City of Owatonna
	City of Saint Peter
	City of Sauk Centre
Minnesota	City of St. James
	City of Staples
	City of Thief River Falls
	City of Virginia
	City of Wadena
	City of Waseca
	City of Windom
	City of Worthington
	Clearwater-Polk Electric Cooperative, Inc.
	Fairmont Public Utilities Commission
	Freeborn-Mower Cooperative Services
	Grand Rapids Public Utilities Commission
	Great Plains Natural Gas Company
	Great River Energy
	Interstate Power and Light Company
	Litchfield Public Utilities
	Melrose Public Utilities
	Mille Lacs Energy Cooperative
	Minnesota Energy Resources Corporation
	Minnesota Power
	New Prague Utilities Commission

State	Utility Program Administrator
Minnesota	New Ulm Public Utilities Commission
	North Itasca Electric Cooperative, Inc.
	Otter Tail Power
	P K M Electric Cooperative, Inc.
	People's Cooperative Services
	Princeton Public Utilities Commission
	Red Lake Electric Cooperative, Inc.
	Red River Valley Cooperative Power Association
	Rochester Public Utilities
	Roseau Electric Cooperative, Inc.
	Shakopee Public Utilities Commission
	Sioux Valley SW Electric Cooperative
	Sleepy Eye Public Utility Commission
	Stearns Cooperative Electric Association
	Steele-Waseca Cooperative Electric
	Tri-County Electric Cooperative
	Wild Rice Electric Cooperative, Inc.
Willmar Municipal Utilities	
Xcel Energy	
Missouri	Ameren Missouri
Nebraska	Burt County Public Power District
	Butler Public Power District
	Cedar-Knox Public Power District
	City of Gothenburg
	City of Holdrege
	City of Minden
	City of North Platte
	Dawson Power District
	Elkhorn Rural Public Power District
	Highline Electric Association
	KBR Rural Public Power District
	Lincoln Electric System
	Loup River Public Power District
	Municipal Energy Agency of Nebraska
	Nebraska Public Power District
Norris Public Power District	
North Central Public Power District	
Northeast Nebraska Public Power District	
Omaha Public Power District	
Panhandle Rural Electric Member Association	
Perennial Public Power District	

State	Utility Program Administrator
Nebraska	South Central Public Power District
	Southern Public Power District
	Stanton County Public Power District
	Wheat Belt Public Power District
North Dakota	Capital Electric Cooperative, Inc.
	KEM Electric Cooperative, Inc.
	McKenzie Electric Cooperative, Inc.
	McLean Electric Cooperative, Inc.
	North Central Electric Cooperative, Inc.
	City of Valley City
	Verendrye Electric Cooperative, Inc.
	Cass County Elec Cooperative, Inc. Roughrider Electric Cooperative
Ohio	AEP Ohio
	Dayton Power and Light
	Duke Energy Ohio
	First Energy Illuminating Company
	First Energy Ohio Edison
	First Energy Toledo Edison
South Dakota	City of Brookings
	Butte Electric Coop, Inc.
	East River Elec Power Coop, Inc.
	City of Flandreau
	City of Fort Pierre
	LaCreek Electric Assn, Inc.
	Lake Region Electric Assn, Inc.
	MidAmerican Energy Company
	Northern States Power Company
	NorthWestern Energy
	Otter Tail Power Company
	Sioux Valley Southwest Electric Cooperative
	Black Hills Power, Inc.
	City of Vermillion
	City of Volga
Watertown Municipal Utilities	
West River Electric Association, Inc.	
Winner Municipal Utility	
Town of Pickstown	
Wisconsin	Focus on Energy

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