



CADMUS

FOCUS ON ENERGY ECONOMIC IMPACTS 2011–2014

PREPARED BY: Tyler Browne, Cadmus | Charles Bicknell, Cadmus | Scott Nystrom, REMI

DECEMBER 2015



focus on energysm

Partnering with Wisconsin utilities

This document summarizes the net statewide economic development impacts of Focus on Energy's 2011–2014 energy efficiency and renewable energy programs. Cadmus analyzed these economic impacts using Regional Economic Models, Inc.'s Policy Insight⁺ model (REMI PI⁺), an economic forecasting tool that models the annual and long-term effects of different spending choices on multiple components of the state economy.

Cadmus used Focus on Energy spending and energy-savings data to model the programs' net economic impacts in REMI PI⁺. To determine Focus on Energy's unique effects on the Wisconsin economy, Cadmus calculated net economic impacts as the difference between Focus on Energy spending and savings impacts and the impacts that would have occurred if ratepayers instead spent the same amount of funds on other goods and services, including electricity and natural gas expenditures that would have been necessary if they had not saved energy through program participation. Focus

on Energy achieves positive net economic impacts by affecting the flow of money through the Wisconsin economy and regional economies in three ways: direct, indirect, and induced effects.

Focus on Energy has positive net economic impacts largely because it increases in-state spending.

Wisconsin utilities import fuel and power from other states, so a significant share of Wisconsin ratepayer funds are spent outside of the state economy. Focus on Energy reduces those electricity and natural gas purchases, instead promoting spending on Wisconsin's own energy efficiency and renewable energy industries and providing long-term savings that continue to support increased in-state spending on other local goods and services.

DIRECT

Direct economic effects represent increases in employment, income, and economic activity among industries directly involved with Focus on Energy, such as firms that manufacture, sell, and install energy technologies or firms that provide project services.

INDIRECT

Indirect economic effects account for increases in employment, income, and economic activity among industries in the energy efficiency and renewable energy supply chains, such as firms that supply raw manufacturing inputs to directly affected industries.

INDUCED

Induced economic effects lead to additional increases in employment, income, and economic activity among other industries as Focus on Energy participants and employees of directly and indirectly affected industries spend new disposable income from bill savings and increased business in the Wisconsin economy.

SUMMARY OF STUDY FINDINGS

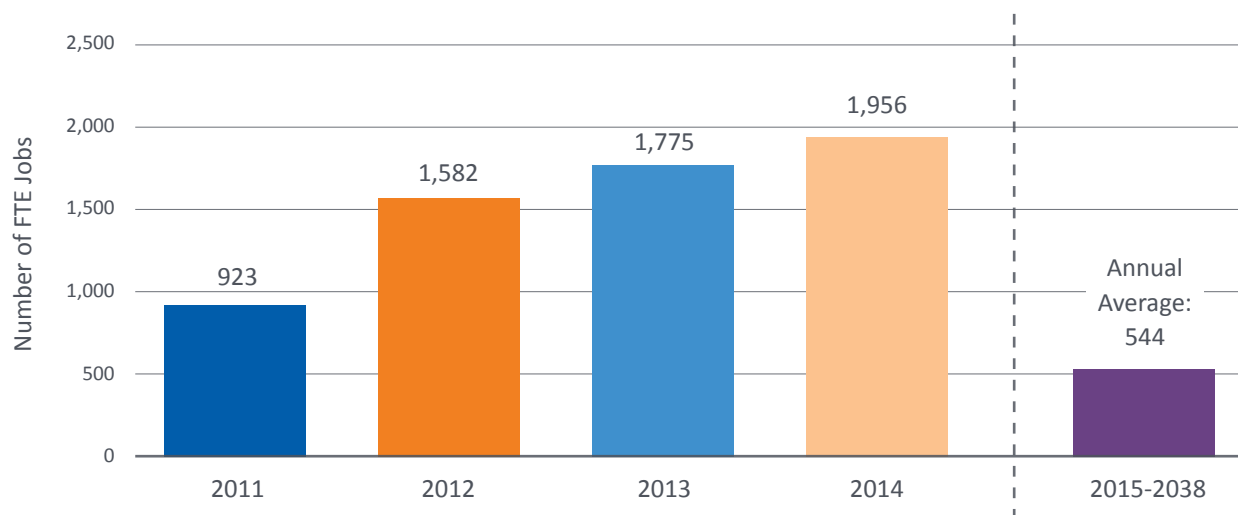
Figure ES-1 illustrates Focus on Energy's positive net employment impacts. The program portfolio created full-time equivalent (FTE) jobs at an annually increasing rate during the quadrennial period. From 2011 to 2014, annual net employment growth ranged from approximately 1,000 to 2,000 FTE jobs. Primarily because residential and business customers continue to spend disposable income from bill savings, annual net job growth is projected to continue at lower levels—approximately 544 FTE jobs per year—thereafter. The quadrennial portfolio will create a cumulative net total of 19,291 FTE jobs through 2038. These findings of positive employment impacts are consistent with the results from a 2015 survey of energy efficiency and renewable energy contractors participating in Focus on Energy. Nearly 25% of survey respondents reported that they had hired more staff as a direct result of increased business activity from the programs.

The largest program year employment increases occurred in the manufacturing sector.

Because of increased purchases of energy efficiency and renewable energy technologies, more than half of the FTE jobs created by Focus on Energy between 2011 and 2014 were in the manufacturing sector. Other private sector industries that experienced significant job growth include:

- Professional, scientific, and technical services;
- Management of companies and enterprises;
- Administrative and waste management services; and
- Wholesale trade.

Figure ES-1. Program Year and Future Year Annual Employment Growth, Quadrennial



Focus on Energy will generate more than \$2.8 billion in net economic benefits through 2038.

Figure ES-2 illustrates Focus on Energy's positive net economic benefits, which describe net effects on Wisconsin's gross state product. The quadrennial program portfolio generated more than \$600 million in net economic benefits through 2014 and will generate more than \$2.2 billion – approximately \$92 million per year – from 2015 to 2038. These findings are consistent

with reports from contractors involved with Focus on Energy. Approximately 59% of contractors responding to the 2015 program survey reported that their business activity had increased since their involvement with Focus on Energy.

Cadmus also analyzed the influence of economic benefits on Focus on Energy's cost-effectiveness. Table ES-1 summarizes the benefit-cost ratios previously reported for Focus on Energy, which did not include economic benefits, and identifies the revised benefit-cost ratios achieved when economic impacts are included among program benefits.

Figure ES-2. Program Year and Future Year Annual Economic Benefits, Quadrennial

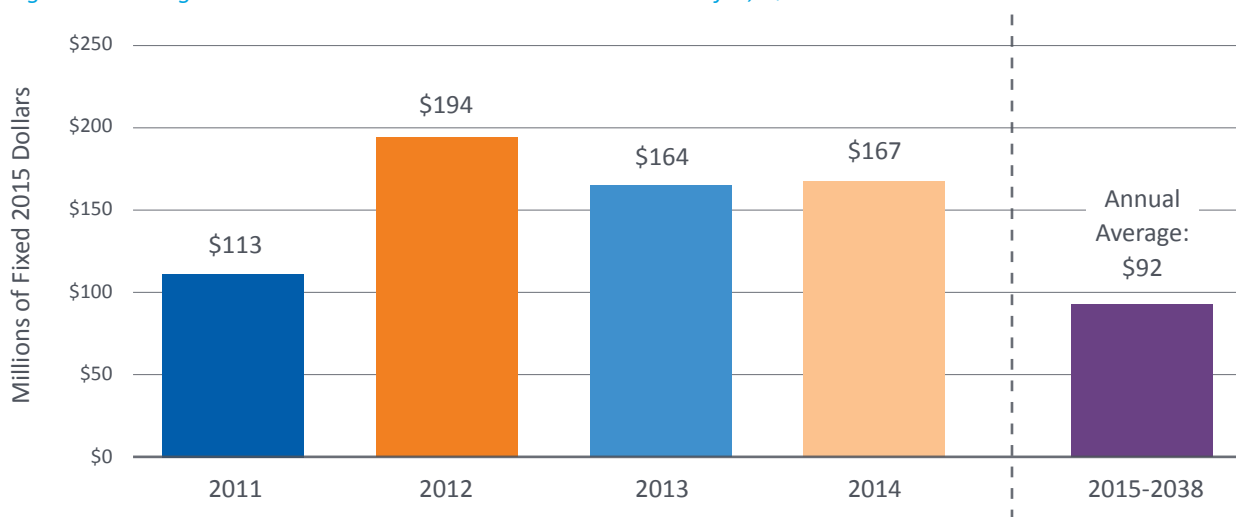


Table ES-1. Focus on Energy Benefit-Cost Ratios With and Without Economic Benefits

Program Calendar Year(s)	Without Economic Benefits	With Economic Benefits
2011	2.46	5.75
2012	2.89	6.75
2013	3.41	6.58
2014	3.33	6.66
Quadrennial (2011–2014)	3.06	6.49

¹ "Focus on Energy Calendar Year 2014 Evaluation Report, Volume 1" May 2015, available online: <https://focusonenergy.com/sites/default/files/Evaluation%20Report%202014%20-%20Volume%20I.pdf>



When economic benefits are counted, cost-effectiveness findings suggest that Focus on Energy provided

\$6.66 in benefits for every \$1.00

invested during the 2014 program calendar year.

CADMUS

CADMUS

16 N. Carroll Street, Suite 900

Madison, WI 53703

Phone: 608.250.1920

www.cadmusgroup.com

Copyright © 2015 by The Cadmus Group, Inc.

All rights reserved. Any unauthorized use of this material is prohibited. This document or any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of The Cadmus Group, Inc.

