

Public Service Commission Report to the Legislature

Energy Efficiency and Renewable Resource Program Activities in Wisconsin

Calendar Year 2014

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WISCONSIN UTILITIES' ENERGY EFFICIENCY AND RENEWABLE RESOURCES PROGRAM SUMMARY (FOCUS ON ENERGY)

Focus on Energy (Focus) works with eligible Wisconsin residents and businesses to install cost-effective energy efficiency and renewable energy projects. Focus technical assistance and financial incentives help to implement projects that otherwise would not be completed, or to complete projects sooner than scheduled. Its efforts help Wisconsin residents and businesses control the state's growing demand for electricity and natural gas, manage rising energy costs, promote in-state economic development, and protect our environment.

Additional information regarding Focus can be found at www.focusonenergy.com.

HISTORY

Originally formed by the Wisconsin Legislature in 1999 and funded by the Utility Public Benefits fund, Focus delivers energy efficiency and renewable energy services for <u>residential</u> and <u>business</u> customers throughout the state. In 2001, the Department of Administration rolled out the *Focus on Energy Program* statewide. In partnership with consumers, utilities, businesses, nonprofit organizations, and all government levels, the programs help residents and businesses make smart energy choices.

Under 2005 Wisconsin Act 141 (Act 141), oversight of Focus transferred to the Public Service Commission (Commission). Act 141 requires investor-owned electric and natural gas utilities to spend 1.2 percent of their annual gross operating revenues on energy efficiency and renewable resource programs. Act 141 also requires municipal utilities and retail electric cooperatives to collect an average of \$8 per meter to fund energy efficiency programs. Municipal utilities and retail electric cooperatives can collect the dollars and participate in the Focus program or can elect to operate their own Commitment to Community programs.

Per Act 141, Focus aims to:

- Reduce the amount of energy used per unit of production in Wisconsin, while improving energy reliability;
- Enhance economic development and make Wisconsin firms more competitive;
- Reduce the environmental impacts of energy use;
- Expand the ability of markets to deliver energy efficient and renewable energy goods and services to consumers and businesses;
- Deliver quantified financial returns on public investments in energy improvements.

2011-2014 QUADRENNIAL PERIOD

An award-winning, nationally-recognized program, Focus works with both public and private sectors and encourages Wisconsin residents and businesses to make informed energy decisions. By providing incentives, technical resources, and information, Focus aids residents in lowering their cost

of living and businesses in improving their bottom lines. This drives millions of dollars in energy savings, and helps to improve our state's environmental health and preserve our natural resources.

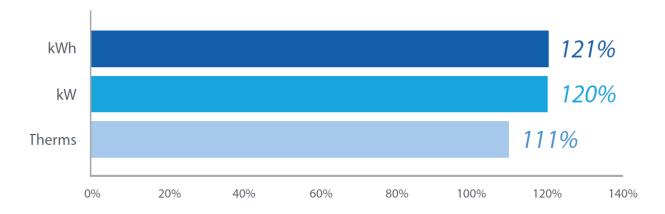
Calendar Year 2014 was the final year of the first quadrennial period for the Focus program which began in 2011. The benefit/cost analysis for the four-year period was 3.06, which means every dollar invested in energy efficiency during those four years yielded \$3.06 in economic and non-economic benefits. The table below shows energy savings for each of the four years as well as total energy savings for the quadrennium. The 28 billion kilowatt-hours (kWh) and 1.2 billion therms in energy savings is the equivalent of powering 1.8 million Wisconsin homes for one year and the avoided costs of five power plants.

Quadrennial Verified Gross Life Cycle by Calendar Year¹

Year	kWh	kW	Therms	
2011	5,259,904,739	77,076	246,171,404	
2012	6,881,823,059	94,219	353,518,681	
2013	8,595,656,185	126,143	318,094,901	
2014	8,187,283,631	105,843	357,805,563	
Total- All Years	28,922,667,614	403,280	1,275,590,549	

The figure below shows the life cycle savings achievement (2011-2014) compared to the Program Administrator's (CB&I Government Solutions, Inc. (CB&I)) savings goals. Focus achieved 121 percent of the electric (kWh) goal, 120 percent of the electric demand (kW) goal, and 111 percent of the gas (therm) savings goal.

Focus on Energy Achievement of Four-Year (2011-2014) Verified Gross Life Cycle Savings Goal²



¹ Life cycle savings represent the savings that will be achieved by the measures installed during CY 2014 over their useful lifetimes. Reports before 2011 listed annual savings or savings by measure for one year. The Commission determined in the Quadrennial Planning Process I to report life cycle savings since it represents future savings which is more useful for planning purposes.

 $^{^{2}}$ 100 percent reflects Focus established verified gross life cycle goals of 24,000,000,000 kWh, 335,080 kW, and 1,152,000,000 therms.

2014 FOCUS ON ENERGY – ENERGY SAVINGS – PORTFOLIO RESULTS

Focus aims to empower the people and business of Wisconsin to make smart energy decisions with enduring economic benefits. Some of the highlights for 2014 include:

- For every dollar invested in energy efficiency, Focus provided \$3.33 in economic and non-economic benefits
- 55 percent of the state's largest energy users completed a project with Focus
- Over 995,000 homeowners and businesses participated in 15 statewide programs

Verified Gross Life Cycle Energy Savings: January 1-December 31, 2014

Portfolio	Participants	Verified Gross kWh*	Verified Gross kW*	Verified Gross Therms*	Benefit Cost Ratio
Non- Residential Programs	6,273	5,490,288,656	62,305	263,264,489	3.54
Residential Programs	988,839+	2,696,994,975	43,538	94,541,074	2.88
FOCUS TOTAL	995,112	8,187,283,631	105,843	357,805,563	3.33

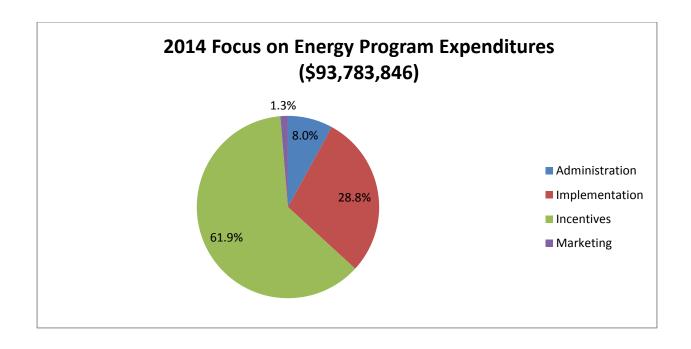
⁺ Estimated. The Evaluation Team determined participation for lightbulbs using newly available data from a Wisconsin Homescan survey panel of randomly recruited households. The data contained all purchases made by households that purchased CFLs in 2014. Because Homescan data can track the same people over time, the Evaluation Team could estimate the number of unique participating customers by calculating the average number of CFL packages each household purchased in each calendar year. Using the average packages purchased per household from the Homescan analysis and the total number of packages purchased from the implementer tracking system, the Evaluation Team estimated the number of households that participated in the program in 2014. The Evaluation Team assumed one showerhead or clothes washer per participant.

Expenditures

The chart on page 3 illustrates expenditures for the Focus program as a whole. Expenditures are divided into four categories: Administration, Implementation, Marketing, and Incentives. Administration refers to the expenses associated with overall portfolio management and planning by CB&I. Administration includes: 1) managing implementer contracts (implementers deliver the programs to customers); 2) financial management of the overall Focus budget for the Business, Residential, and Research Portfolio; 3) incentive payment management (this includes approval of applications, review of custom applications, confirmation of energy savings estimates, and incentive check processing); 4) quality assurance and quality control; 5) tracking and reporting program results; and 6) utility coordination.

Implementation or delivery costs, by contrast, are the labor and direct costs associated with a specific program. This includes time spent meeting with customers to provide information and technical assistance, and assisting customers with incentive applications. In sum, implementation includes the time and materials required to operate the program, excluding marketing costs and incentives.

^{*} Verified gross savings numbers are savings that have gone through an engineering review by evaluators to determine whether the reported gross savings were reasonable.



Economic and Environmental Benefits from the Focus on Energy Program

The Focus program achieved an overall benefit/cost ratio of 3.33 for the 2014 contract period. That is, for every dollar spent on the program, the state achieved \$3.33 in economic and non-economic benefits. Non-economic benefits include the prevention of the following emissions:

- 18,472,273 tons of carbon dioxide
- 26,699 tons of nitrogen oxide
- 17.800 tons of sulfur dioxide

BUSINESS ENERGY EFFICIENCY PROGRAMS

All types of businesses, large and small, can benefit from Focus's energy efficiency expertise. Focus works with eligible Wisconsin businesses to install cost-effective energy efficiency and renewable energy projects. Its efforts help businesses manage rising energy costs, protect our environment, control the state's growing demand for electricity and natural gas, and promote in-state economic development. Programs were organized by type of business delivery method which is more closely aligned with utility customer classes. This makes it easier to target customer classes using utility data. Programs include:

- Large Energy Users;
- Chain Stores and Franchises;
- Business Incentive Program;
- Small Business Program; and
- Design Assistance Program (New Construction

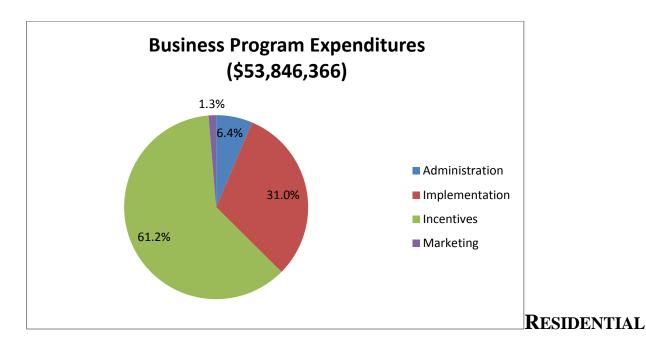
These Focus programs helped Wisconsin businesses by:

- Demonstrating practical ways to implement energy strategies;
- Rewarding businesses with financial incentives for these strategies;
- Providing no-cost or low-cost energy tips;
- Offering training opportunities on energy efficiency; and
- Applying for federal grants from the U.S. Department of Energy and in some cases using Focus incentives as match.

2014 Life Cycle Non-residential Savings (with Renewables)

			Verified	Verified	
		Verified	Gross	Gross	Benefit/Cost
	Participants	Gross kWh	kW*	Therms	Ratio
Non-Residential Programs	6,273	5,490,288,656	62,305	263,264,489	3.54

Expenditures³



RESIDENTIAL ENERGY EFFICIENCY PROGRAMS

In 2014, demand for the broader portfolio of Residential programs which were launched in 2012 continued to rise. Programs continued to help residents save energy and money by providing information and incentives necessary to prompt smart energy choices. Whether residents purchased ENERGY STAR® qualified compact fluorescent light bulbs, made efficiency upgrades to an existing home, or built an energy efficient new home, Focus experts offered the insight,

³ Non-Residential expenditures were 57 percent of total Focus program expenditures in 2014.

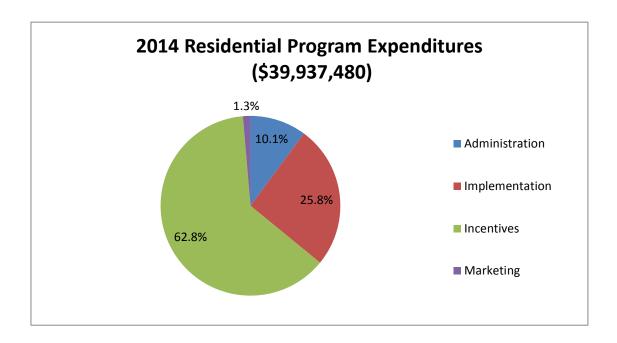
technical assistance, and financial incentives to get them started. The following programs were offered in the Residential sector during 2014:

- Express Energy Efficiency;
- Appliance Recycling;
- Home Performance with ENERGY STAR®;
- Residential Rewards;
- Residential Lighting and Appliances program;
- New Homes;
- Multifamily Direct Install;
- Multifamily Energy Savings;
- Assisted Home Performance with ENERGY STAR[®];
- Enhanced Rewards; and
- Residential Renewables.

2014 Verified Life Cycle Residential Savings (with Renewables)

	Participants	Verified Gross kWh	Verified Gross kW*	Verified Gross Therms	Benefit/Cost Ratio
Residential Programs	988,839	2,696,994,975	43,538	94,541,074	2.88

Expenditures⁴



⁴ Residential expenditures were 43 percent of total Focus program expenditures in 2014.

RENEWABLE PROGRAMS

Act 141 requires that the statewide program include renewable resource programs for Business and Residential end-use customers. In 2010, renewable energy technologies were integrated into the Residential and Business programs for more efficient delivery of renewable incentives to customers.

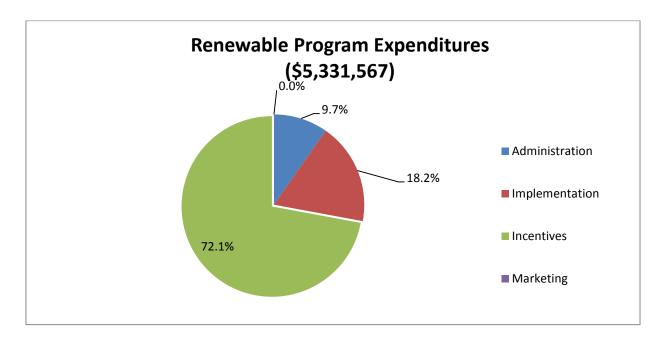
On April 26, 2012, the Commission issued an Order regarding renewable energy that required that the annual renewable energy incentive level for 2012, 2013, and 2014 not exceed \$10 million in a given year. In addition, for program years 2013 and 2014, the Order required 75 percent of total incentives be allocated to the more cost-effective Group 1 Technologies (biomass, biogas, and geothermal) and 25 percent of total incentives be allocated to the less cost-effective Group 2 Technologies (solar photovoltaic, solar thermal, and wind). That Order also stipulated that renewable energy incentive funding is contingent upon Focus' overall benefit-to-cost ratio being at least 2.3 (inclusive of renewables) and required that the inclusion of renewable energy technology incentives not reduce energy savings by more than 7.5 percent in comparison to an efficiency-only program.

In June 2013, CB&I provided a memorandum to the Commission that requested clarification of particular issues in the Order from 2012. (PSC REF#: 163778.) As a result, the Commission met in September 2013 and a subsequent Order was issued on September 26, 2013, to clarify and modify the issues in question. (PSC REF#: 191060.) The table below shows renewable energy impacts for 2014 by sector with the overall benefit/cost ratio for renewable projects.

2014 Verified Gross Life Cycle Renewable Impacts

	Participants	Verified Gross kWh	Verified Gross kW	Verified Gross Therms	Benefit/ Cost Ratio
Non-residential Renewables	54	427,210,614	4,837	9,784,793	1.88
Residential Renewables	438	53,157,117	762	37,089	0.61
TOTAL	492	480,367,731	5,599	9,821,882	1.52

Expenditures



RESEARCH PORTFOLIO

Per a January 2012 Commission decision, the Environmental and Economic Research and Development Program (EERD) was directed to focus on research that informs program design and delivery rather than contributing practical and useful knowledge for planning the state's energy future. At the time of that decision, the PSC also reduced the annual EERD budget from \$1,900,000 to \$100,000 per year through 2014. There was no change to the mechanism for soliciting new research projects; as before, the EERD program solicited new projects through a competitive procurement process.

Due to the Quadrennial Planning Process II, no new proposals were solicited in 2014. Rather, time was spent closing out old projects, adding the budgets and invoices of existing projects into SPRECTRUM, and seeking input for the 2015 solicitation.

FOCUS ON ENERGY – 2014 FINANCIAL SUMMARY

During the 2014 contract period, the Focus program provided technical assistance and incentives and offered energy efficiency and renewable energy information to an estimated 995,112 business and residential customers in Wisconsin. This resulted in life cycle savings of 8,187,283,631 kWh of electricity and more than 357 million therms of natural gas. Annual kW savings were 105,843.

Administrative Costs

The Commission's administrative costs for 2014 were not captured during the reporting period and will appear in the 2015 annual report. SEERA had miscellaneous administrative expenses totaling \$74,765.

During calendar year 2014, CB&I reported total administrative costs of \$8,737,742. This represents approximately 8 percent of the total program budget. Administrative costs by program are \$4,147,941 for business programs, and \$4,589,801 for residential programs. Administrative costs refer to expenses associated with overall portfolio management and planning. This includes setting up and monitoring subcontracts; incentive processing; responding to data requests; expenses associated with monthly program meetings; meetings with SEERA, individual utilities and Commission staff; and other administrative tasks that are not associated with implementing a particular program.

The Financial Sheet below summarizes revenue, expenditures and Focus obligations for the 2014 contract period. Please note that the expenses for both the Residential and Business Programs include renewable resource program expenditures in addition to the energy efficiency program expenditures. In any given program year, not all dollars contributed are budgeted to programs in order to cover contractual obligations to be paid the following year.

2014 Financial Sheet¹

REVENUE			
Investor Owned Utilities	\$98,808,636		
Municipal Electric Providers/Electric Cooperatives	\$3,224,043		
TOTAL REVENUE	\$102,032,679		
EXPENSES			
Residential Programs	\$39,937,480		
Non-Residential Programs	\$53,846,366		
Environmental and Economic Research and Development	\$373,428		
Evaluation	\$2,594,511		
Other Program Support ²	\$2,155,106		
TOTAL EXPENSES	\$98,906,891		
Carry-Over Funds ³	\$9,181,762		
Focus on Energy Contractual Obligations ⁴	\$6,054,819		

¹Taken from the SEERA Expense Report, Expenses through December 31, 2014.

² Includes Fiscal Agent; Compliance Agent; PSC; SEERA; consulting services; software; SPECTRUM development and maintenance; and depreciation.

³ Carry-Over funds are funds remaining at the end of the contract period which were obligated into the 2014 calendar year.

⁴Contractual Obligations refer to contracts with customers for the receipt of incentives when a project is installed/completed. Large projects can take up to 16 months from start to finish and therefore span from one calendar year to the next. This amount is taken from SPECTRUM.

MUNICIPAL ELECTRIC AND RETAIL ELECTRIC COOPERATIVE REPORTING FOR COMMITMENT TO COMMUNITY PROGRAMS (CTC)

Act 141 requires municipal utilities and retail electric cooperatives to collect an annual average of \$8 per meter for energy efficiency programs. The monthly fee may not exceed 1.5 percent of the total of every other charge for which the customer or member is billed for that month or \$375 per month, whichever is less. Each municipal utility or retail electric cooperative can choose to send the dollars collected to the Focus fund or keep them and operate its own Commitment to Community (CTC) programs. Although Act 141 excludes load management from the definition of energy efficiency, it allows municipals and retail electric cooperatives to include load management in their CTC program offerings.

Act 141 requires that an electric cooperative or municipal utility operating its own CTC program file a report that includes the following: 1) an accounting of fees charged to customers or members in the year, 2) expenditures on CTC programs, 3) a description of CTC programs established for the year, and 4) the effectiveness of the CTC programs in reducing demand for electricity by customers or members.

In 2014, CTC programs were operated by 13 retail electric cooperatives. The other 11 cooperatives, all 41 WPPI Energy (WPPI) municipal electric utilities, and all 41 non-WPPI municipal utilities sent their energy efficiency funds to Focus. The table below summarizes energy savings and expenditures for all 13 CTC programs operated by cooperatives. It should be noted that the energy savings estimates are calculated by the cooperatives and are not subject to the same evaluation procedures as the Focus savings. As a result, Commission staff cannot verify these CTC energy savings claims and does not recommend adding these savings to the Focus savings for the purposes of calculating statewide energy savings.

2014 Retail Electric Cooperative CTC Summary

	kW (with Load Mgt.)	Annual kWh (with Load Mgt.)	Program Admin.	Program Delivery	Incentives	General marketing	Load Mgt. Costs	Wholesale Supplier Credit
Coop CTC Totals	7,245	7,402,536	\$39,853	\$115,959	\$958,715	\$137,582	\$747,836	\$305,798

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