

Public Service Commission Report to the Legislature

Energy Efficiency and Renewable Resource Program Activities in Wisconsin

Calendar Year 2013

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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 achieve environmentally sound and adequate energy supplies at reasonable costs.

Additional information regarding Focus can be found at <u>www.focusonenergy.com</u>.

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.

2013 PROGRAM YEAR

Calendar Year 2013 saw the first full year of the redesigned Residential and Non-Residential programs which were rebid in 2011 by the new Program Administrator, Shaw Environmental and Infrastructure.¹

FOCUS ON ENERGY – ENERGY SAVINGS – PORTFOLIO RESULTS

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 lower their cost of living, and businesses improve 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.

Life-cycle Energy Savings²: January 1–December 31, 2013

	Participants	Verified Gross kWh*	Verified Gross kW*	Gross Gross KW* Therms*	
Non- Residential Programs	9,819	5,628,502,360	78,381	227,669,922	3.51
Residential Programs	1,679,355+	2,965,153,969	47,762	90,424,987	3.22
FOCUS TOTAL	1,689,174	8,593,656,329	126,143	318,094,910	3.41

+Estimated. Most participants in residential programs are customers that purchase light bulbs, showerheads, and clothes washers directly from retail stores, which only create a record of the number of measures purchased, not unique participants. In 2013, more than 7.2 million total measure units were purchased. In the absence of precise data, it was assumed that participants were buying only one clothes washer and one showerhead annually. For bulbs, the Evaluation Team relied on CY 2012 data obtained from customers who used coupons for purchases of compact fluorescent lamps or other bulbs through the program (4.56 bulbs per person). These coupons represent a small percentage of overall bulb sales recorded in the upstream lighting programs. At this time, the data from the coupons are the best available data on unit purchases by customer since customers do not interact directly with upstream programs. The CY 2012 total participation estimate for the Residential Lighting and Appliance Program is 1,601,063 customers.

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

¹ On February 13, 2013, Chicago Bridge and Iron (CB&I) announced that it had completed its acquisition of The Shaw Group. The Shaw Group name was not retained and as of February 13, 2013, Shaw began referring to itself as CB&I.

 $^{^{2}}$ Life-cycle savings represent the savings that will be achieved by the measures installed during CY 2013 over their useful lifetimes.

FOCUS ON ENERGY - 2013 FINANCIAL SUMMARY

Audited Revenue and Expenditures

Focus on Energy total revenue for 2013 was \$103,376,000 while total expenditures were \$110,209,275.³



Incentives are the payments made by Focus to a customer or trade ally to reduce the cost of an energy efficiency or renewable measure. Implementation, by contrast, is the labor and direct cost associated with a specific program. This includes time spent meeting with customers to provide technical assistance in order to identify energy saving opportunities, providing program information, and assisting customers with incentive applications.

Program Administration refers to the expenses associated with overall portfolio management and planning. Administration includes: 1) managing implementer contracts (implementers deliver the programs to customers); 2) financial management of the overall Focus budget for the Non-Residential, Residential, and Research Portfolios; 3) incentive payment management (this includes approval of applications, review of custom applications, confirmation of energy savings

³ The undesignated Focus fund had a balance in 2013 which made up the difference between revenue and expenditures.

estimates, and incentive check processing); 4) quality assurance and quality control; 5) tracking and reporting program results; 6) marketing; and 6) utility coordination.

SPECTRUM (State Program for Energy Customer Tracking, Resource Utilization and data Management) is a comprehensive customer relationship management (CRM)-based data management system that serves as the center for the major functional components of Focus on Energy. SPECTRUM tracks and manages:

- Customer service and relations
- Customer, property, and utility information
- Energy efficiency and renewable energy applications
- Incentive applications, payments and processing
- Measures of energy savings
- Program/Implementer budgets and expenditures
- Subcontractor/Implementer invoicing, budgeting, approval, and payment

The remaining expenditures are comprised of payments to the Fiscal Agent, Compliance Agent, Evaluation, PSC Oversight, the Environmental and Economic Research and Development Program and Bank Fees/Expenses. The Fiscal Agent (Wipfli, LLC.) contracts with SEERA to receive, distribute and account for the dollars in the statewide energy efficiency and renewable resource program fund under Act 141. The Compliance Agent (Baker Tilly) contracts with the Commission to perform compliance audits to ensure Focus program contractors comply with the Policy Manual and the terms specified in their contracts. The Compliance Agent also performs the annual financial audit of the Focus program as required by Act 141. The Evaluator (Cadmus) is the independent third party hired by the PSC to evaluate the performance of all programs administered by the Program Administrator per the requirements of Act 141.

The Financial Sheet below summarizes revenue and all Focus expenditures and obligations described above. Please note that the expenses for both the Residential and Non-Residential Programs include renewable resource program expenditures in addition to the energy efficiency program expenditures.

2013 Financial Sheet¹

REVENUE:	
Investor Owned Utilities	\$100,095,144
Municipal Electric Providers/Electric Cooperatives	\$3,280,876
TOTAL REVENUE	\$103,376,020
EXPENSES:	
Residential Programs	\$40,745,203
Non-Residential Programs	\$54,082,444
Program Administration (CB&I)	\$7,905,658
Environmental and Economic Research and Development	\$624,707
Evaluation	\$ 4,744,632
Other Program Support ²	\$ 2,106,632
TOTAL EXPENSES	\$110,209,275
Carry-Over Funds ³	\$18,261,824
Focus on Energy Contractual Obligations ⁴	\$ 21,385,655

¹Taken from the SEERA *Expense Report, Expenses through December 31, 2013*

² Includes Fiscal Agent; Compliance Agent; PSC, SEERA; SPECTRUM development software and maintenance; and bank fees and depreciation.

³ Carry-Over funds are funds remaining at the end of the 2012 contract period which were obligated into the 2013 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 the January 31, 2013 Financial Position Report.

Non-Residential and Residential Portfolio Expenditures

Figure 2 below shows the expenditures for the Focus Non-Residential and Residential programs which make up nearly 94% of all expenditures in 2013. Expenditures are divided into four categories: Administration, Implementation, Marketing, and Incentives. Administration refers to the expenses associated with overall portfolio management and planning. 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 Portfolios; 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.

The 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. Incentives are the payments made by Focus to a customer or trade ally to reduce the cost of an energy efficiency or renewable measure. Finally, marketing includes all costs associated with informing customers about the programs available to them for reducing their energy use. This includes but is not limited to: web site maintenance, mailings, newsletters, newspaper ads, membership fees, and radio spots.



Economic and Environmental Benefits from Focus on Energy Program

The Focus program achieved an overall benefit/cost ratio of 3.41 for the 2013 contract period. That is, for every dollar spent on the program, the state achieved \$3.41 in energy and societal benefits. In addition to the financial benefits, the environmental benefits include the prevention of the following emissions:

- 4,801,890 tons of carbon dioxide
- 6,940 tons of nitrogen oxide
- 4,627 tons of sulfur dioxide

NON-RESIDENTIAL ENERGY EFFICIENCY & RENEWABLE PROGRAM

Non-Residential includes all types of businesses, large and small as well as churches, schools, government, non-profit organizations and other customers that are not residential. Focus works with eligible Wisconsin non-residential customers to install cost-effective energy efficiency and renewable energy projects. Its efforts help non-residential customers manage rising energy costs; protect our environment; control the state's growing demand for electricity and natural gas; and promote in-state economic development. 2013 was the first full year with the redesigned non-residential programs. Programs were organized by type of customer 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;
- Design Assistance Program (New Construction); and
- Retrocommissioning

These Focus programs helped Wisconsin non-residential customers by:

- Demonstrating practical ways to implement energy strategies;
- Rewarding non-residential customers 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.

2013 Life-cycle Non-Residential Savings (with Renewables)

			Verified	Verified	
		Verified	Gross	Gross	Benefit/Cost
	Participants	Gross kWh	kW*	Therms	Ratio
Non-Residential Programs	9,819	5,628,502,360	78,381	227,669,922	3.51

Non-Residential Expenditures



RESIDENTIAL ENERGY EFFICIENCY & RENEWABLE PROGRAMS

2013 was the first full year of new Focus Residential programs. The programs continued to help residents save energy and money by providing information and incentives necessary to prompt smart energy choices. However, there were new programs such as Appliance Recycling and Express Energy Efficiency that covered new market opportunities. 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, technical assistance, and financial incentives to get them started. The following new programs were offered in the Residential sector during the 2013 contract period:

- 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

2013 Life-cycle Residential Savings (with Renewables)

	Participants	Verified Gross kWh	Verified Gross kW*	Verified Gross Therms	Benefit/Cost Ratio
Residential Programs	1,679,355	2,965,153,969	47,762	90,424,987	3.22

Residential Expenditures⁴



⁴ Residential expenditures were 43 percent of total Focus program expenditures in 2013.

RENEWABLE PROGRAMS

Act 141 requires Focus to include renewable resource programs for Non-Residential and Residential end-use customers. In 2010, renewable energy technologies were integrated into the Non-Residential and Residential 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 annual renewable energy incentive levels for 2012, 2013, and 2014 not exceed \$10 million in a given year. In addition, for program years 2013 and 2014, the Commission required 75 percent of total incentives be allocated to the more cost-effective technologies (biomass, biogas, and geothermal) and 25 percent of total incentives be allocated to the less cost-effective technologies (solar photovoltaic, solar thermal, and wind). The Commission 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 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, the Focus Program Administrator, provided the Commission a memorandum that requested clarification of particular issues related to the April 26, 2012 order. (<u>PSC REF#: 163778</u>). 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. (<u>PSC REF#: 191060</u>). The table below shows renewable energy impacts for 2013 by sector with the overall benefit/cost ratio for renewable projects.

	Particip ants	Verified Gross kWh	Verifie d Gross kW	Verified Gross Therms	Benefit/ Cost Ratio
Non-Residential Renewables	35	147,711,752	390	1,190,994	0.97
Residential Renewables	297	20,985,004	538	83,302	0.99
TOTAL	332	168,696,756	928	1,274,296	0.97

2013 Life-cycle Renewable Impacts

Renewable Program Expenditures



RESEARCH PORTFOLIO

In 2013, the Focus on Energy Research Portfolio, including the Environmental and Economic Research and Development Program (EERD) and other research initiatives, incorporated a new research priority and broadened funding sources. Per a January 2012 ruling by the Commission, EERD was directed to focus on research that informs program design and delivery. At the time of that ruling, 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.

In July 2013, a Request for Concept Papers (RCP) was issued seeking two-page papers to be used as the basis to invite full proposals for research projects. Using carry-over dollars from previous years, up to \$550,000 was available for research projects in the 2013 funding cycle. Three out of ten full project proposals were selected for funding: 1) **Residential**, *Motivating High Energy Users to Save Energy*-Cool Choices, Inc. \$79,192; 2) **Building Codes**, *Wisconsin Building Code Analysis: Identifying Low Cost, High Impact Measures*-Sustainable Engineering Group LLC, \$90,000; and 3) **Custom Topic**, *Biogas Storage for On-Farm Anaerobic Digesters in Wisconsin: Technical Assessment, Market Assessment, and Focus on Energy Opportunity*, Tetra Tech MA, Inc \$98,649.

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 2013, Commitment to Community 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.

2013 Retail Electric Cooperation	ative CTC Summary
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	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	2,200	17,481,274	\$33,810	\$171,526	\$789,122	\$124,515	\$661,094	\$333,161