Public Service Commission Report to the Legislature

Energy Efficiency and Renewable Resource Program
Activities in Wisconsin

Calendar Year 2015
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    - Lifecycle kilowatt hour and therm savings
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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. Focus 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](http://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 residential and business customers throughout the state. In 2001, the Department of Administration rolled out the Focus on Energy Program statewide. In partnership with consumers, utilities, businesses, non-profit 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 was 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. The utilities formed a non-profit board called the Statewide Energy Efficiency and Renewables Administration (SEERA) to fulfill its obligations under Act 141. 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; and,
- Deliver quantified financial returns on public investments in energy improvements.
2015 Focus 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 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 preserves our natural resources. Focus aims to empower the people and business of Wisconsin to make smart energy decisions with enduring economic benefits. Some of the highlights for 2015 include:

- For every dollar invested in energy efficiency, Focus provided $3.51 in economic and non-economic benefits; and,
- Over 920,000 homeowners and businesses participated in 15 statewide programs.


<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Participants</th>
<th>Verified Gross kWh*</th>
<th>Verified Gross kW*</th>
<th>Verified Gross Therms*</th>
<th>Benefit Cost Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Residential Programs</td>
<td>6,374</td>
<td>6,583,672,339</td>
<td>62,608</td>
<td>386,769,461</td>
<td>3.63</td>
</tr>
<tr>
<td>Residential Programs</td>
<td>914,094*</td>
<td>2,223,095,841</td>
<td>28,896</td>
<td>82,477,213</td>
<td>3.12</td>
</tr>
<tr>
<td><strong>FOCUS TOTAL</strong></td>
<td><strong>920,468</strong></td>
<td><strong>8,806,768,180</strong></td>
<td><strong>91,504</strong></td>
<td><strong>469,246,674</strong></td>
<td><strong>3.51</strong></td>
</tr>
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</table>

* Estimated. The Evaluation Team determined participation for lightbulbs using data from the residential general population survey. The survey collected data on the number of bulbs purchased annually by 609 Wisconsin residents. Using the average number of CFLs and LEDs purchased per household (6.8 and 5.8 bulbs annually, respectively) and the total number of bulbs purchased from the Program Implementer’s tracking system, the Evaluation Team estimated the number of households that participated in the Program in CY 2015. See Volume II of the 2015 Evaluation Report for methods used to determine annual participation.

Expenditures

Expenditures are divided into four categories: Administration, Implementation, Marketing, and Incentives. Administration refers to administrative costs and other 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

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1 Chicago Bridge and Iron (CB&I) is the third party program administrator that Act 141 requires the utilities to hire to manage Focus programs on a daily basis.
technical assistance, and assisting customers with incentive applications. In sum, implementation includes the time and materials required to operate the program.

Marketing costs are the costs incurred to inform utility customers and trade allies about program offerings and include but are not limited to: website design and maintenance; radio and print ads; display booth materials at trade shows; bill insert designs; fact sheets; and writing and distributing press releases.

Incentives are cash rewards paid to customers or trade allies for installing approved energy efficiency measures.

The chart below illustrates expenditures for the Focus program as a whole.

![2015 Focus Program Expenditures]

- **Economic and Environmental Benefits from the Focus Program**

The Focus program achieved an overall benefit/cost ratio of 3.51 to 1.00 for the 2015 contract period. That is, for every dollar of spending associated with the program, the state achieved $3.51 in economic and non-economic benefits. Non-economic benefits include the prevention of the following emissions:

- 7,932,278 tons of carbon dioxide;
- 4,930 tons of nitrogen oxide; and,
- 11,269 tons of sulfur dioxide.
**Business Energy Efficiency Programs**

All types of businesses, large and small, can benefit from the energy efficiency expertise provided by Focus staff. 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 help 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 a funding match.

**2015 Life Cycle Non-residential Savings (with Renewables)**

<table>
<thead>
<tr>
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<th>Participants</th>
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RESIDENTIAL ENERGY EFFICIENCY PROGRAMS

In 2015, demand for the broader portfolio of Residential programs continued to rise, helping residents save energy and money by providing information and incentives necessary to prompt smart energy choices. Whether residents purchased ENERGY STAR® qualified LED 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 programs were offered in the Residential sector during 2015:

- Express Energy Efficiency;
- Appliance Recycling (ended in November 2015);
- 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.

2 Non-Residential expenditures were 63 percent of total Focus program expenditures in 2015.
2015 Verified Life Cycle Residential Savings (with Renewables)

<table>
<thead>
<tr>
<th></th>
<th>Participants</th>
<th>Verified Gross kWh</th>
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Expenditures

![2015 Focus Residential Program Expenditures ($37,172,453)](image)

RENEWABLE PROGRAMS

Act 141 requires that the statewide program (Focus) includes renewable resource programs for Business and Residential end-use customers. As a result of the Quadrennial Planning II process in the fall of 2014, the Commission ordered the Program Administrator, Chicago Bridge & Iron (CB&I) to offer a Renewable Energy Revolving Loan Fund to begin in January of 2015. The Commission dedicated $10 million over the four year period from the undesignated Focus funds for this effort and further directed that $5 million be used for incentives in 2015 and $3.5 million be used for incentives in 2016. The Commission directed CB&I to report back no later than mid-2016 on the status of the fund. Due to unforeseen delays, the Renewable Energy Revolving Loan Fund was not launched until January of 2016. Therefore, the results below reflect savings from incentives recorded in 2015.

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3 Residential expenditures were 37 percent of total Focus program expenditures in 2015.
2015 Verified Gross Life Cycle Renewable Impacts

<table>
<thead>
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<th>Participants</th>
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<th>Verified Gross Therms</th>
<th>Benefit/Cost Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-residential Renewables</td>
<td>89</td>
<td>18,392,783</td>
<td>2761</td>
<td>239,698</td>
</tr>
<tr>
<td>Residential Renewables</td>
<td>456</td>
<td>2,631,298</td>
<td>984</td>
<td>193</td>
</tr>
<tr>
<td>TOTAL</td>
<td>545</td>
<td>21,024,081</td>
<td>3,745</td>
<td>239,891</td>
</tr>
</tbody>
</table>

Expenditures

**2015 Focus Renewable Program Expenditures ($6,222,389)**

- **Incentives**: 82.0%
- **Implementation**: 9.3%
- **Marketing**: 0.0%
- **Administration**: 9.0%

**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 Commission also reduced the annual EERD budget from $1,900,000 to $100,000 per year through 2014. The $100,000 annual budget was then approved for the 2015-2018 program period. There was no change to the mechanism for soliciting new research projects; therefore, the EERD program continued to solicit new projects through a competitive procurement process.
The program issued a call for concept papers (a two-page summary of a larger proposal) in July which were due in August. The evaluation team (utility, program implementers, CB&I, and Commission staff) reviewed the concept papers and selected five entities to submit full proposals which were due November 2, 2015. The evaluation team selected one proposal from Tetra Tech for $63,140 in funding to study ductless mini-split heat pumps.

**FOCUS 2015 FINANCIAL SUMMARY**

During the 2015 contract period, the Focus program provided technical assistance; incentives; and energy efficiency and renewable energy information to an estimated 920,468 business and residential customers in Wisconsin. This resulted in life cycle savings of 8,806,768,180 kWh of electricity and more than 469 million therms of natural gas. Annual kW savings were 91,504.

**Administrative Costs**

The Commission’s administrative costs for 2015 were $394,877. SEERA did not report any administrative expenses in 2015.

During calendar year 2015, CB&I reported total costs of $7,627,222 ($6,292,150 for administrative and other tasks and $1,335,072 for marketing.) This represents 7.7 percent of the total program budget. CB&I costs by program are $4,953,316 for business programs ($4,120,846 for administrative and other tasks and $832,470 for marketing), and $2,673,906 for residential programs ($2,171,304 for administration and other costs and $502,602 for marketing.) CB&I costs are expenses associated with administration in addition to 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 the Statewide Energy Efficiency and Renewable Administration (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 2015 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.
2015 Focus Financial Sheet

<table>
<thead>
<tr>
<th>Revenue</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor Owned Utilities</td>
<td>$99,197,025</td>
<td></td>
</tr>
<tr>
<td>Municipal Electric Providers/Electric Cooperatives</td>
<td>$3,282,779</td>
<td></td>
</tr>
<tr>
<td>Interest Income</td>
<td>39,507</td>
<td></td>
</tr>
<tr>
<td>Education and Training Revenue</td>
<td>18,114</td>
<td></td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>$102,537,425</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenses</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Programs</td>
<td>$37,172,453</td>
<td></td>
</tr>
<tr>
<td>Non-Residential Programs</td>
<td>$62,423,846</td>
<td></td>
</tr>
<tr>
<td>Environmental and Economic Research and Development</td>
<td>$101,450</td>
<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td>$3,516,644</td>
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<tr>
<td>Other Program Support</td>
<td>$3,475,155</td>
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</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$106,689,548</strong></td>
<td></td>
</tr>
<tr>
<td>Carry-Over Funds</td>
<td>$7,568,526</td>
<td></td>
</tr>
<tr>
<td>Focus Contractual Obligations</td>
<td>$9,747,393</td>
<td></td>
</tr>
</tbody>
</table>

1 Taken from the SEERA Expense Report, Expenses through December 31, 2015.
2 Includes Fiscal Agent; Compliance Agent; Commission; SEERA; consulting services; software; SPECTRUM development and maintenance; bank fees and depreciation; and PA performance bonus for 2011-2014.
3 Carry-Over funds are funds remaining at the end of the contract period which were obligated into the 2015 calendar year.
4 Contractual 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 2015, 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.

2015 Retail Electric Cooperative CTC Summary*

<table>
<thead>
<tr>
<th></th>
<th>kW (with Load Mgt.)</th>
<th>Annual kWh (with Load Mgt.)</th>
<th>Program Admin.</th>
<th>Program Delivery</th>
<th>Incentives</th>
<th>General marketing</th>
<th>Load Mgt. Costs</th>
<th>Wholesale Supplier Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coop CTC Totals</td>
<td>2,858</td>
<td>22,681,182</td>
<td>$39,777</td>
<td>$92,047</td>
<td>$1,016,347</td>
<td>$140,469</td>
<td>$843,142</td>
<td>$301,746</td>
</tr>
</tbody>
</table>

*Washington Island has not yet reported