Public Service Commission Report to the Legislature

Energy Efficiency and Renewable Resource Program Activities in Wisconsin

Calendar Year 2011
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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 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, 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 Program Year

Calendar Year 2011 is considered a transitional year for the Focus program due to numerous and significant changes in program structure, administration, implementation, and program design. Prior to posting the Request for Proposals (RFP) to select a new program administrator in
December 2010, the Statewide Energy Efficiency and Renewables Administration (SEERA), contracted with an independent consultant to determine the most efficient program structure for Focus going forward. After analyzing various options, a single program administrator model was selected with clear distinctions between administrative and implementation activities which wasn’t the case with the previous model. In February 2011, the selection process was completed and a new Program Administrator was selected. From 2004 through April 2011, the Focus on Energy Program Administrator was the Wisconsin Energy Conservation Corporation (WECC). Beginning in May 2011, Shaw Environmental and Infrastructure, Inc. (Shaw) began administering the Focus on Energy Program in the newly selected model.

**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 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.

**Life-cycle Energy Savings**: January 1–December 31, 2011

<table>
<thead>
<tr>
<th></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>13,033</td>
<td>4,374,342,776</td>
<td>57,747</td>
<td>185,735,647</td>
<td>2.71</td>
</tr>
<tr>
<td>Residential Programs</td>
<td>182,615</td>
<td>885,561,963</td>
<td>19,327</td>
<td>60,435,758</td>
<td>1.84</td>
</tr>
<tr>
<td><strong>FOCUS TOTAL</strong></td>
<td><strong>195,648</strong></td>
<td><strong>5,259,904,739</strong></td>
<td><strong>77,074</strong></td>
<td><strong>246,171,405</strong></td>
<td><strong>2.46</strong></td>
</tr>
</tbody>
</table>

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

**Expenditures**

The chart on page 3 illustrates expenditures for the Focus program as a whole. Expenditures are divided into four categories: Administration (both for WECC and Shaw), Implementation, Marketing, and Incentives. Administration refers to the expenses associated with overall portfolio management and planning. With the selection of Shaw, administration includes: 1) managing implementer contracts (implementers deliver the programs to customers); 2) financial management of the overall Focus budget for the Targeted Markets, Mass Markets 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);

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1 SEERA is the organization formed by the utilities to fulfill its obligations under Act 141 in regarding the statewide energy efficiency and renewable program.

2 Life-cycle savings represent the savings that will be achieved by the measures installed during CY 2011 over their useful lifetimes. Previous reports listed annual savings or savings by measure for one year. The Commission determined in the Quadrennial Planning Process to report life-cycle savings since it represents future savings which is more useful for planning purposes.
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, excluding marketing costs and incentives.

Economic and Environmental Benefits from Focus on Energy Program

The Focus program achieved an overall benefit/cost ratio of 2.46 for the 2011 contract period. That is, for every dollar spent on the program, the state achieved $2.46 in energy savings benefits. In addition to the financial benefits, the environmental benefits in the form of emissions reductions include:

- 7.8 billion pounds of carbon dioxide;
- 8.3 million pounds of sulfur dioxide;
- 12 million pounds of nitrogen oxide; and
- 43.7 pounds of mercury.

**NON-RESIDENTIAL 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. Focus’s 2011 non-residential programs served the following market segments:
• Agriculture and rural businesses;
• Commercial businesses (including healthcare, hospitality, food service, grocery);
• Industrial businesses (pulp/paper, plastics, metals, wastewater, food processing);
• Schools and government facilities; and
• New business construction.

Focus 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.

2011 Life-cycle Non-residential Savings (with Renewables)

<table>
<thead>
<tr>
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Expenditures[^3]

2011 Non-Residential Program Expenditures ($51,737,458)

[^3] Non-Residential expenditures were 69 percent of total Focus program expenditures in 2011.
RESIDENTIAL ENERGY EFFICIENCY PROGRAMS

Focus continued to help residents save energy and money by providing the 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, technical assistance, and financial incentives to get them started. The following programs were offered in the Residential sector during the 2011 contract period:

- Apartment and condo efficiency services;
- Appliance and plug load program;
- Efficient heating and cooling;
- Home performance with ENERGY STAR®;
- Residential information and education initiatives;
- ENERGY STAR® lighting program;
- Targeted Home Performance with ENERGY STAR® (thru May 2011);
- Wisconsin ENERGY STAR® Homes;
- Residential renewables.

2011 Life-cycle Residential Savings (with Renewables)

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

Expenditures

2011 Residential Program Expenditures ($23,027,485)

- Administration
- Implementation
- Incentives
- Marketing

4 Residential expenditures were 31 percent of total Focus program expenditures in 2011.
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 programs for more efficient delivery of renewable incentives to customers.

When Shaw became Program Administrator in May 2011, it reviewed the pace of spending for renewable incentives and determined that it needed to suspend accepting applications for non-residential renewable projects beginning July 1, 2011. Incentives for residential renewable projects continued through December 2011. Shaw projected that if renewable incentive spending for the remainder of 2011 continued at the same pace as in the first four months, the Focus program as a whole might not meet its cost-effectiveness requirement. The Commission ordered Shaw to make a detailed examination of the costs and benefits of renewable technologies and report back in the spring of 2012.

In 2011, the Focus renewable energy program offered information, technical assistance, and financial rewards to help customers select and install renewable energy solutions in their home, farm, or business. Incentives were available for the following measures through June 2011 for the non-residential sector, and through December 2011 for the residential sector:

- Anaerobic digestion biogas;
- Non-residential biomass combustion;
- Solar electric;
- Solar heating;
- Wind;
- Information and Education.

2011 Life-cycle Renewable Impacts

<table>
<thead>
<tr>
<th></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 Renewables</td>
<td>226</td>
<td>16,173,588</td>
<td>3,003</td>
<td>427,021</td>
<td>.60</td>
</tr>
<tr>
<td>Residential Renewables</td>
<td>462</td>
<td>2,171,124</td>
<td>815</td>
<td>19,616</td>
<td>.30</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>688</strong></td>
<td><strong>18,344,713</strong></td>
<td><strong>3,818</strong></td>
<td><strong>446,636</strong></td>
<td><strong>.52</strong></td>
</tr>
</tbody>
</table>
The Environmental and Economic Research and Development (EERD) Program was created to fund research about the impact of energy use on the Wisconsin environment and economy. Due to the transition in Program Administrators, no Requests for Proposals (RFP) for new research grants were released in 2011. From January through April, the Energy Center of Wisconsin managed a portfolio of 34 grants, researching topics ranging from biomass impacts and economics to climate change. Shaw assumed these responsibilities on May 6, 2011.

**Focus on Energy – 2011 Financial Summary**

During the 2011 contract period, the Focus program provided technical assistance and incentives and offered energy efficiency and renewable energy information to 195,648 non-residential and residential customers in Wisconsin. This resulted in life-cycle savings of 5,259,904,739 kWh of electricity and more than 246 million therms of natural gas. Annual kW savings were 77,074.

**Administrative Costs**

The Public Service Commission reported administrative costs totaling $435,009 for four staff to oversee the Focus program during the 2011 contract period.

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5 If you break out renewable expenditures from energy efficiency expenditures, renewables were 15 percent of total Focus program expenditures in 2011.
During the January to April 2011 timeframe, WECC was the Program Administrator for the Non-Residential and Residential Programs with Shaw assuming this role beginning on May 6, 2011. WECC and Shaw reported total administrative costs of $6,383,320 for the 2011 contract period, which represents approximately 8.5 percent of the total program budget. Administrative costs by program are $3,760,910 for non-residential programs, and $2,622,411 for residential programs. Administrative costs refer to expenses associated with overall portfolio management and planning. This includes setting up and monitoring subcontracts; responding to data requests; expenses associated with monthly program meetings; meetings with SEERA and individual utilities; Commission staff; and other administrative tasks that are not associated with implementing a particular program. Administrative costs (Energy Center of Wisconsin and Shaw) for the EERD program were $25,517 in 2011.

The Financial Sheet below summarizes revenue, expenditures and Focus obligations for the 2011 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. Additionally, in 2011 dollars were not budgeted to programs to create a three-month reserve to manage spikes in monthly incentive check payments.

**2011 Financial Sheet**

<table>
<thead>
<tr>
<th>REVENUE:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor Owned Utilities</td>
<td>$116,166,059</td>
</tr>
<tr>
<td>Municipal Electric Providers/Electric Cooperatives</td>
<td>$3,720,845</td>
</tr>
<tr>
<td><strong>TOTAL REVENUE</strong></td>
<td><strong>$119,886,904</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXPENSES:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Programs</td>
<td>$23,027,485</td>
</tr>
<tr>
<td>Non-Residential Programs</td>
<td>$51,737,458</td>
</tr>
<tr>
<td>Environmental and Economic Research and Development</td>
<td>$1,206,457</td>
</tr>
<tr>
<td>Evaluation</td>
<td>$ 731,305</td>
</tr>
<tr>
<td>Other Program Support^2</td>
<td>$ 1,144,218</td>
</tr>
<tr>
<td><strong>TOTAL EXPENSES</strong></td>
<td><strong>$77,846,923</strong></td>
</tr>
<tr>
<td>Carry-Over Funds^3</td>
<td>$4,038,192</td>
</tr>
<tr>
<td>Focus on Energy Contractual Obligations^4</td>
<td>$15,522,476</td>
</tr>
</tbody>
</table>

1 Taken from the Focus Program Expense Report, Expenses through December 31, 2011
2 Includes Fiscal Agent, Compliance Agent, PSC, consulting services, software, and depreciation
3 Carry-Over funds are funds remaining at the end of the contract period which were obligated into the 2012 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 the January 31, 2012 Financial Position Report.
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.

During the 2011 contract period, all 41 WPPI Energy (WPPI) municipal electric utilities and all 41 non-WPPI municipal utilities had joined Focus. As for retail electric cooperatives, 11 reported CTC activities in 2011 with 13 sending their dollars to Focus. The table below summarizes energy savings and expenditures for the retail electric cooperatives. It should be noted that CTC retail electric cooperative energy savings estimates are calculated by the cooperatives and are not subject to the same measurement, verification, and evaluation as are 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.

### 2011 Retail Electric Cooperative CTC Summary

<table>
<thead>
<tr>
<th></th>
<th>kW (with Load Mgt.)</th>
<th>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>6,273</td>
<td>3,632,761</td>
<td>$39,775</td>
<td>$7,186</td>
<td>$418,568</td>
<td>$91,651</td>
<td>$1,343,053</td>
<td>$294,924</td>
</tr>
</tbody>
</table>

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