

## **Public Service Commission Report to the Legislature:**

Energy Efficiency and Renewable Resource Program Activities in Wisconsin

**Calendar Year 2009** 

# **TABLE OF CONTENTS**

2009 Report (January – December 2009)

- Focus on Energy Program Summary
- Program History
- 2009 Energy Savings Summary

#### **\*** Total Portfolio Results – 2009 contract period

- Annual kWh, kW, and Therm Savings
- Number of Program participants
- Annual Energy Savings
- Annual Dollar Value of Energy Saved
- Expenditures

#### • Economic and Environmental Benefits of the Focus on Energy Program

- Business Programs
  - Annual kWh, kW, and Therm Savings
  - Business Program Expenditures

#### \* Residential Programs

- Annual kWh, kW; and Therm Savings
- Residential Program Expenditures

#### Renewable Programs

- Annual kWh, kW; and Therm Savings
- Renewable Program Expenditures

#### **\*** Environmental & Economic Research & Development Program

- 2009 Focus on Energy Financial Summary
  - Oversight, Administrative, and Implementation Costs
  - Financial Sheet
- Municipal and Electric Cooperative Energy Savings

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

Focus on Energy works with eligible Wisconsin residents and businesses to install cost effective energy efficiency and renewable energy projects. Focus information, resources 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.

During the 2009 contract period, Focus on Energy helped Wisconsin residents and businesses annually save over 634 million kilowatt hours, 29 million therms of natural gas, and \$83 million.

Additional information regarding Focus on Energy 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 on Energy 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 state and local governments, the programs help residents and businesses make smart energy choices.

Under 2005 Wisconsin Act 141 (Act 141), oversight of Focus on Energy 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 and retail electric cooperative utilities to annually collect an average of \$8 per meter to fund energy efficiency programs. Municipal and retail electric cooperative utilities can collect the dollars and participate in the Focus on Energy program or can elect to operate their own Commitment to Community (CTC) programs.

Per Act 141, Focus on Energy 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.

# FOCUS ON ENERGY – ENERGY SAVINGS – PORTFOLIO RESULTS

Focus on Energy is Wisconsin utilities' statewide energy efficiency and renewable energy program. An award-winning, nationally recognized program, it 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 on Energy aids residents in lowering their cost of living and businesses in improving their bottom lines. This drives millions of dollars in annual energy savings, and helps to improve our state's environmental health and preserve our natural resources.

	<u>Participants</u>	Verified <u>Gross kWh*</u>	Verified <u>Gross kW</u>	Verified Gross <u>Therms</u>	Annual Value of Energy <u>Saved</u>
Dusinasa Dus susma	24 464	500 702 191	110 411	20 712 697	¢59 606 920
Business Programs	34,464	500,793,181	110,411	20,712,687	\$58,696,839
Renewable Energy					
Programs	555	16,933,010	2,722	5,357,821	\$5,915,428
<b>Residential Programs</b>	554,387	116,893,752	14,506	3,591,004	\$18,660,979
FOCUS ON ENERGY					
TOTAL	589,406	634,619,944	127,641	29,661,514	\$83,273,247

### Annual Energy Savings: January 1 – December 31, 2009

\* 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 two illustrates Focus on Energy program expenditures as a whole. Expenditures are divided into four categories: WECC Administration & Implementation<sup>1</sup>, Subcontractor Implementation, Marketing, and Incentives. WECC Administration refers to the expenses associated with overall portfolio management and planning. This consists of meetings with Commission staff, SEERA, and individual utilities; responding to data requests; setting up and monitoring subcontracts; expenses associated with the monthly program meetings; and other administrative tasks that are not associated with implementing a particular program.

WECC Implementation and Subcontractor Implementation 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 field the program, excluding marketing costs and incentives.

<sup>&</sup>lt;sup>1</sup> In 2009, WECC Administration and Implementation costs are grouped together due to the difficulty in separating these costs out because of WECC's role in both of these areas. In 2010, the definitions of administration and implementation were further refined, and new financial coding was put into place.



### **Economic and Environmental Benefits from Focus on Energy Program**

The Focus on Energy program achieved an overall benefit/cost ratio of 2.2 for the 2009 contract period. That is, for every dollar spent on the program, the state received \$2.20 back in energy savings benefits. In addition to these financial benefits, the environmental benefits in the form of emissions reductions include:

- 1.4 billion pounds of carbon dioxide
- 2.2 million pounds of sulfur dioxide
- 1.8 million pounds of nitrogen oxide
- 8.5 pounds of mercury

#### **BUSINESS PROGRAMS**

All types of businesses, large and small, can benefit from Focus on Energy's energy efficiency expertise. Focus on Energy works with eligible Wisconsin businesses to install cost-effective energy efficiency and renewable energy projects. Its efforts help businesses manage rising energy costs, promote in-state economic development, protect our environment and control the state's growing demand for electricity and natural gas. Focus on Energy's Business programs served the following market segments:

- Agriculture and Rural Businesses
- Commercial Businesses (targeting healthcare, hospitality, food service, grocery)
- Industrial Businesses (targeting pulp/paper, plastics, metals, wastewater, food processing)
- Schools and Government Facilities
- New Business Construction

Focus on Energy helped Wisconsin businesses by:

- Showing them 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
- Applying for federal grants from U.S. Department of Energy

### **Annual Energy Savings**

	Participants	Verified Gross <u>kWh</u>	Verified <u>Gross kW</u>	Verified Gross <u>Therms</u>	Annual Value of <u>Energy Saved</u>
Business Programs	34,464	500,793,181	110,411	20,712,687	\$58,696,839

### **Expenditures**



# **RESIDENTIAL PROGRAMS**

In 2009, Focus on Energy continued to help residents save energy and money by providing information and incentives necessary to prompt smart energy choices. Whether residents purchased ENERGY STAR<sup>®</sup> qualified compact fluorescent light bulbs, made efficiency upgrades to an existing home or built an entirely energy efficient new home, Focus on Energy experts offered the insight, technical assistance and financial incentives to get them started. The following programs were offered in the Residential sector during the 2009 contract period:

- Apartment and Condo Efficiency Services
- Appliance and Plug Load
- Efficient Heating and Cooling
- Home Performance with ENERGY STAR<sup>®</sup>
- Residential Information and Education Initiatives
- ENERGY STAR<sup>®</sup> Lighting
- Targeted Home Performance with ENERGY STAR®
- Wisconsin ENERGY STAR<sup>®</sup> Homes

### **Annual Energy Savings**

	Participants	Verified Gross <u>kWh</u>	Verified <u>Gross kW</u>	Verified Gross <u>Therms</u>	Annual Value of <u>Energy Saved</u>
Residential					
Programs	554,387	116,893,752	14,506	3,591,004	\$18,660,979

### **Expenditures**



## **RENEWABLE PROGRAMS**

As energy costs rise and environmental concerns grow, more and more Wisconsin residents and businesses are turning to renewable energy. Cleaner energy sources such as the sun, wind, and biomass save energy and money while reducing pollution to help protect the environment.

Focus on Energy offers information, technical assistance, and financial rewards to help customers select and install renewable energy solutions in their home, farm or business. The following Renewable Energy programs were offered during the 2009 contract period:

- Anaerobic Digestion Biogas
- Non-residential Biomass Combustion
- Solar Electric
- Solar Heating
- Wind
- Information & Education Initiatives

### **Annual Energy Savings**

	<u>Participants</u>	Verified Gross <u>kWh</u>	Verified Gross <u>kW</u>	Verified Gross <u>Therms</u>	Annual Value of <u>Energy Saved</u>
Renewable Energy					
Programs	555	16,933,010	2,722	5,357,821	\$5,915,428

### **Expenditures**



# **ENVIRONMENTAL AND ECONOMIC RESEARCH AND DEVELOPMENT**

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. EERD grant recipients are chosen by the Environmental Research Forum, a ten-member group chaired by Ken Rineer of Commission staff. Other forum members represent the Department of Commerce, the Department of Natural Resources, the Department of Agriculture, Trade and Consumer Protection, the State Energy Office, the USDA Forest Products Laboratory, the University of Wisconsin, Clean Wisconsin, We Energies, and Alliant Energy. The Forum is charged with identifying critical research gaps regarding the environmental and economic impacts of energy use in Wisconsin, and then recommending funding for new projects to fill those gaps. Forum members individually evaluated submitted proposals and then met to discuss and draft the final list of proposals to be recommended for funding.

For the 2009 contract period, the Forum reviewed 27 research proposals, and recommended 10 for funding. Total funding recommended was \$1,347,418, which was approved by SEERA and the Commission. Many of these projects were multi-year studies, and focused on a variety of research areas, from biomass to climate change. The 10 approved projects fell into the following categories:

- Wind energy impacts: (2)
- Biomass impacts & economics: (4)
- Climate change: (3)
- Particulate matter 2.5 concentrations in Wisconsin: (1)

### FOCUS ON ENERGY – 2009 FINANCIAL SUMMARY

During the 2009 contract period, the Focus on Energy program provided technical assistance and incentives and offered energy efficiency and renewable energy information to 589,406 businesses and residents in Wisconsin. This resulted in annual savings of more than 634 million kWh of electricity and more than 29 million therms of natural gas. The annual value, or first year value, of these energy savings totaled over \$83 million. These dollar savings continue to accrue over the lifetime of each measure installed in 2009.

#### **Oversight, Administrative, and Implementation Costs**

The Public Service Commission reported administrative costs in 2009 costs totaling \$732,047 for five staff to oversee the Focus on Energy Program. Due to the timing of billing, this amount represents two years of Commission oversight costs.

During 2009, Wisconsin Energy Conservation Corporation (WECC) was the Program Administrator for the Business, Residential and Renewable Programs. WECC reported administrative and implementation costs of \$9,162,518 for the 2009 contract period, which represents approximately 10 percent of their total program budget. WECC administration and implementation costs by program are: \$3,713,284 for Business Programs; \$4,659,815 for Residential Programs; and \$789,416 for Renewable Programs. Program administration costs of overall portfolio management and planning; meetings with

Commission staff, the Statewide Energy Efficiency and Renewable Administration<sup>2</sup> (SEERA) and individual utilities; responding to data requests; setting up and monitoring subcontracts; expenses associated with monthly program meetings; and other administrative tasks that are not associated with implementing a particular program. WECC implementation costs include program-specific management and delivery costs incurred by WECC in its role as a program implementer, primarily on the Residential Programs.

Subcontractor implementation costs were \$23,025,190 in 2009. Subcontractor implementation consists of program-specific management and delivery costs related to customer technical assistance, training, tracking, and other activities to drive customer projects to completion.

The Energy Center of Wisconsin was the Program Administrator for the Environmental and Economic Research and Development Program in 2009, and reported administrative costs totaling \$99,597.

The investor-owned utilities did not report any administrative costs related to their program obligations under Act 141.

The Financial Sheet on page seven summarizes revenue, expenditures and Focus on Energy obligations for the 2009 contract period.

 $<sup>^2</sup>$  The Statewide Energy Efficiency and Renewable Administration is the non-profit organization formed by the investor-owned utilities to meet their Act 141 obligations.

## 2009 Focus on Energy Financial Sheet

<b>Revenue:</b>	
Investor Owned Utilities	\$84,644,992
Municipal Electric Providers/Electric Cooperatives	<u>\$ 1,523,916</u>
2009 REVENUE	\$86,168,908
Carry-over from the 18 month contract period	\$10,113,097
TOTAL REVENUE	\$96,282,005
EXPENSES:	
Residential Programs	\$26,724,791
Business Programs	\$56,045,457
Renewable Programs	\$ 8,537,385
Environmental & Economic Research & Development	\$ 1,046,111
Evaluation	\$ 2,859,168
Other Program Support <sup>3</sup>	<u>\$ 521,243</u>
TOTAL EXPENSES	\$95,734,155
Carry-over Funds <sup>4</sup>	\$ 547,850

Focus on Energy Contractual Obligations<sup>5</sup>

\$ 23,571,952

<sup>&</sup>lt;sup>3</sup> Includes Fiscal Agent and Compliance Agent expenses.

<sup>&</sup>lt;sup>4</sup> Carry-over funds are funds remaining at the end of the contract period which were obligated into the 2010 calendar year.

year. <sup>5</sup> 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, 2010 Financial Position Report.

# MUNICIPAL ELECTRIC AND RETAIL ELECTRIC COOPERATIVE REPORTING FOR COMMITMENT TO COMMUNITY PROGRAMS

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 on Energy 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 2009 contract period, 49 municipal electric utilities and 15 retail electric cooperatives reported CTC activities. The table below summarizes energy savings and expenditures for municipal electric utilities and retail electric cooperatives with CTC activities.

	kW (includes Load Management)	kWh (includes Load Management)	Therms	Expenditures for Energy Efficiency	Expenditures For Load Management	Admin. Costs
Electric						
Cooperatives	2,522	6,882,132	NA	\$3,723,868	NA	\$44,046
Municipal						
(includes WPPI)	1,996	14,146,668	NA	\$1,002,939	NA	\$66,560

#### Municipal Utility and Retail Electric Cooperative Summary - 2009