

Public Service Commission Report to the Legislature:

Energy Efficiency and Renewable Resource Program Activities in Wisconsin

July 2007 – December 2008

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STATEWIDE 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 July 1, 2007, through December 31, 2008, the 18-month contract period, Focus on Energy helped Wisconsin residents and businesses annually save 591,021,365 kilowatt hours and \$77,421,470.

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 all government levels, 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 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 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 – 18-MONTH FINANCIAL SUMMARY

The contract period covered by this report is the 18-month period from July 1, 2007, through December 31, 2008. During the 18-month contract period, the Focus on Energy program provided technical assistance and incentives and offered energy efficiency and renewable energy information to over 217,000 businesses and residents in Wisconsin. This resulted in annual savings of more than 591 million kWh of electricity and more than 26 million therms of natural gas.¹ The annual value of these energy savings totaled over \$77 million.

Administrative Costs

The Public Service Commission reported administrative costs totaling \$376,400 for four staff to oversee the Focus on Energy Program during the 18-month contract period.

Currently the Wisconsin Energy Conservation Corporation (WECC) is the Program Administrator for the Business, Residential and Renewable Programs. WECC reported administrative costs of \$2,472,183 for the Focus on Energy Program for the 18-month contract period, which represents approximately 3 percent of the total program budget. Administrative costs by program are: \$1,580,183 for Business Programs; \$638,887 for Residential Programs; and \$253,113 for Renewable Programs. WECC administration costs refer to expenses associated with overall portfolio management and planning. This includes meetings with Commission staff, the Statewide Energy Efficiency and Renewable Administration² (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.

Currently the Energy Center of Wisconsin is the Program Administrator for the Environmental and Economic Research and Development Program with reported administrative costs for the 18-month contract period totaling \$105,850.

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

The Financial Sheet on page five summarizes revenue, expenditures and Focus on Energy obligations for the 18-month contract period.

¹ The 18-month contract period reflects the transition of the program from a state fiscal year to a calendar year. Future reports will cover a 12-month calendar year.

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

Financial Sheet

Revenue:	
Investor Owned Utilities	\$104,139,392
Municipal Electric Providers/Electric Cooperatives	<u>\$ 977,150</u>
TOTAL REVENUE	\$105,116,542
Expenses:	
Residential Programs	\$34,299,290
Business Programs	\$51,175,470
Renewable Programs	\$ 7,519,405
Environmental & Economic Research & Development	\$ 938,880
Evaluation	\$ 2,841,626
Other Program Support ²	<u>\$ 1,061,216</u>
TOTAL EXPENSES	\$97,835,887

Carry-Over Funds ³	\$ 6,418,400
Focus on Energy Contractual Obligations ⁴	\$ 19,769,085

² Includes Fiscal Agent and Compliance Agent Expenses

³ Carry-Over funds are funds remaining at the end of the contract period which were obligated into the 2009 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, 2009 Financial Position Report.

FOCUS ON ENERGY – ENERGY SAVINGS – PORTFOLIO RESULTS

Focus on Energy is Wisconsin's 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>
Business Programs	16,509	403,836,022	85,387	20,248,020	\$50,283,907
Renewable Energy	10,509	403,830,022	05,507	20,240,020	\$30,283,907
Programs	401	6,988,148	1,190	2,229,505	\$3,032,905
Residential Programs	200,214	180,197,195	16,606	4,146,014	\$24,104,658
FOCUS ON ENERGY					
TOTAL	217,124	591,021,365	103,183	26,623,539	\$77,421,470

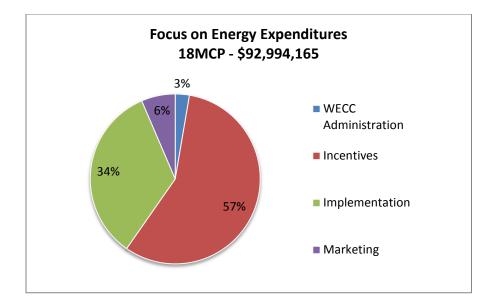
Annual Energy Savings: July 1, 2007 – December 31, 2008

* 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 7 illustrates expenditures for the Focus on Energy program as a whole. Expenditures are divided into four categories: WECC Administration, Implementation, Marketing, and Incentives. WECC Administration refers to the expenses associated with overall portfolio management and planning. This includes 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.

The 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.



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 July, 2007 – December 31, 2008, time period. That is, for every dollar spent on the program, the state received \$2.20 back in energy savings benefits. In addition to the financial benefits, the environmental benefits in the form of emissions reductions include:

- 1.3 billion pounds of carbon dioxide
- 1.6 million pounds of sulfur dioxide
- 1.9 million pounds of nitrogen oxide
- 9.8 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 (including healthcare, hospitality, food service, grocery)
- Industrial Businesses (pulp/paper, plastics, metals, wastewater, food processing)
- Schools and Government Facilities
- Apartments and Condos
- New Business Construction

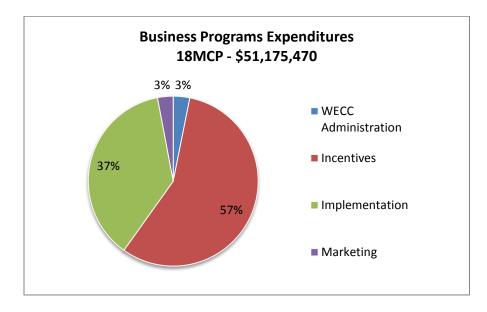
Focus on Energy helped Wisconsin businesses by:

- 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 Energy Saved
Business					
Programs	16,509	403,836,022	85,387	20,248,020	\$50,283,907

Expenditures



RESIDENTIAL PROGRAMS

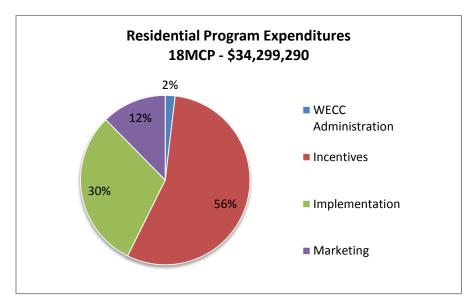
Focus on Energy continued to help residents save energy and money by providing the information and incentives necessary to prompt smart energy choices. Whether residents purchased ENERGY STAR[®] qualified compact fluorescent light bulbs, made efficiency upgrades to an existing home or built an entirely 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 18-month 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®
- Wisconsin ENERGY STAR[®] 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	200,214	180,197,195	16,606	4,146,014	\$24,104,658

Expenditures



RENEWABLE PROGRAMS

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

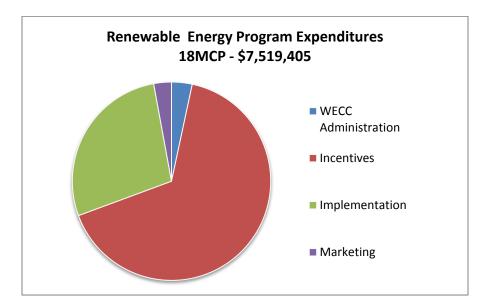
Focus on Energy offers information, technical assistance, and financial rewards to help customers select and install renewable energy solutions in their home, farm or business. The following Renewable Energy programs were offered during the 18-month contract period:

- 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	401	6,988,148	1,190	2,229,505	\$3,032,905

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 Governor's Office of Energy Independence, 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 18-month contract period, the Forum reviewed 20 research proposals, and recommended 13 for funding. Total funding recommended was \$1,276,229, 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 13 approved projects fell into the following categories:

- Renewable Siting Issues & Impacts (2)
- Impacts of Biomass and Biofuel Energy Production and Use (6)
- Impacts of Climate Change in Wisconsin (4)
- Other (1)

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 18-month contract period, 18 municipal electric utilities and 18 retail electric cooperatives reported CTC activities. The table below summarizes energy savings and expenditures for municipal electric utilities and retail electric cooperatives.

	kW (includes Load Management)	kWh (includes Load Management)	Therms	Expenditures for Energy Efficiency	Expenditures For Load Management	Admin. Costs
Electric						
Cooperatives	11,694	21,970,214		\$3,020,127	\$3,464,936	\$50,544
			136,351			
Municipal			(WPPI			
(includes WPPI)	7,693	42,898,732	only)	\$4,653,096	\$10,353	\$210,353

Municipal Utility and Retail Electric Cooperative Summary

WE ENERGIES 55 MW PROGRAM

We Energies developed the 55 MW plan in response to the Commission's *Final Decision* in dockets 05-CE-130 and 05-AE-118. We Energies committed to acquire an incremental (in addition to existing program-induced impacts) 55.8 MW of gross verified peak demand reduction through energy efficiency and load management efforts by the end of 2008. Programs started in 2005 and ended on December 31, 2008.

We Energies offered programs in three categories: non-residential, residential, and load management. In its final report to the Commission, filed on August 3, 2009, We Energies reported achieving verified gross peak demand reduction of 60.3 MW for 107 percent of the total 56.6 MW goal. Totals for each of the three categories are listed in the following table.

Program	Reported Gross MW	Verified Gross MW
Non-res Prescriptive/CEBA	23.45	22.32
Custom Incentives	7.05	6.40
Comprehensive Agriculture	4.46	3.14
Quick-Start	2.16	1.60
Request for Proposals	3.27	2.25
Non-res New Construction	5.35	5.04
TOTAL NON-RESIDENTIAL	45.74	40.75
Low-Inc/HTR CFL	0.35	0.21
Multifamily Electric	1.63	1.59
TOTAL RESIDENTIAL	1.98	1.80
Energy Partners	11.26	9.77
Int and Curt Load	31.82	31.82
TOTAL LOAD MANAGEMENT	43.08*	41.59

We Energies 55 MW Program Results

* A cap on the percent of the goal that may be met with load management prevents the entire MW of reduction from load management from being counted toward goal achievement. Therefore, the sum of the category achievements reported in the table is more than the final achievement reported by We Energies.

WISCONSIN PUBLIC SERVICE CORPORATION 10 MW PROGRAM

On October 4, 2004, in Order Point 4 of the *Final Decision* in PSCW docket 6690-CE-187, the Commission ordered Wisconsin Public Service Corporation (WPSC) to capture a minimum of 32 MW of additional cost-effective energy efficiency by the end of 2008. WPSC contracted with the Department of Administration, through the Focus on Energy Program, to achieve 10 MW of energy savings of the total 32 MW. Programs started in January 2006 and they ended on December 31, 2008. Savings for the programs are in the table below.

Program	Reported kW	Reported kWh
Focus on Energy Programs	11,081	46,212,638
Home Energy Survey CFLs (one-time		
distribution)	16	205,984
FOCUS ON ENERGY 10MW TOTAL	11,097	
Residential HELP	2,427	
Small Business HELP	0	
Contracted Direct Load Control	3,790	
Response Rewards	5,754	
Efficient Industrial Economic		
Development	2,750	
WPSC Program Total	14,721	
TOTAL ENERGY SAVINGS TO DATE -		
ALL INITIATIVES	25,818	46,418,622

WPSC 32 MW Program Results