

# The Wisconsin Focus on Energy Program

February 12, 2007

# Current Wisconsin Energy Initiatives

- “Public Benefits” Statewide Programs (electric & gas)
  - Focus on Energy – energy efficiency and renewable energy (today’s presentation), as well as environmental research
  - Home Energy Plus – low income services
- Individual Utility Programs
  - Commitment to Community – municipals/co-ops
  - Demand Reduction Mandates – Wisconsin Public Service and We Energies
  - Other Load Management/Shared Savings/Customer Service
- Midwest Natural Gas Initiative
  - Governor Doyle’s Energy Help Initiative
  - Additional utility efforts (We Energies, Alliant)

# Context for Focus on Energy

- 1980s-1990s Wisconsin utilities fund and deliver energy efficiency programs with Public Service Commission oversight.
- Mid-1990s Early discussions about electric deregulation.
- Late 1990s Other utility issues percolating (i.e. asset cap relief, reliability) while discussions about deregulation continue.
- 1999 Legislation establishes statewide “public benefit” programs and addresses other energy issues.  
Wisconsin does not deregulate at this time.
- 2001 Focus on Energy launches.
- 2006 Act 141 modifies and strengthens Wisconsin’s Focus on Energy program, while also modifying other State energy policies (e.g., Renewable Portfolio Standard).

*More info: Legislative Fiscal Bureau’s Informational Paper #87 (January 07)*

# Public Benefits - Administrative Structure

- General Oversight – Dept of Administration (changing to Public Service Commission in July 2007)
- Program Administrator – Wisconsin Energy Conservation Corporation (WECC)  
*(Competitive bids; 3 sectors - Residential, Business, Customer-sited Renewable Energy)*
- Environmental Research – Energy Center of Wisconsin *(competitive bid)*
- Evaluation – PA Consulting, Inc. *(competitive bid)*
- Low Income Services – Dept of Admin.

# Focus on Energy Programs

- Operational since June, 2001
- Balanced approach: pursue both short-term resource acquisition and long-term market change
- Types of services:
  - Technical assistance
  - Facilitation
  - Training & Education
  - Incentives
  - Infrastructure development
  - Marketing assistance
- All about facilitating efficiency and renewable energy investments that would not occur otherwise

# Focus on Energy Partnerships

Over 3,000 private businesses in Wisconsin

- 80 Manufacturers and distributors
- 425 Builders and remodelers
- 865 Retailers (includes mom-and-pop stores as well as big box chains)
- 265 Consultants/Architects/Engineers
- 1,250 Contractors – HVAC, plumbing, electrical
- 55 Renewable energy firms (e.g., solar electric installers)

More than 45 Trade Organizations

- Home Builders Associations
- WI Restaurant Association
- Professional Dairy Producers of WI
- WI Innkeepers Association
- Midwest Hardware Association

All investor-owned electric utilities and participating municipal and cooperative electric utilities

# Program-to-date Results (5 yrs)

MW Reduction (verified gross)	160 MW
Annual Energy Savings (verified gross)	931,660 mWh 48m therms (about .7% - 1% of annual energy sales)
Annual \$ Value of Energy Savings	\$130 million
Lifetime \$ Value of Energy Savings	>\$1 billion
Average Annual Program Expenditures	\$40 million

# Focus Results in Context

- Annual energy savings over the past five years is equivalent to:
  - 4,600 cars of coal
  - More than 1 million tons of CO2
  - 45 pounds of mercury
  - Removing 191,000 cars from the road
- And these savings yield
  - \$303m in sales
  - 4,150 jobs
  - Harder-to-quantify increases in productivity, safety, morale

# Total Resource Benefit Cost Ratios (net energy impacts, program to-date)

Business Programs	1.71
Residential Programs	1.94
Renewable Energy Programs	1.31

# What's Possible? Identifying the Achievable Cost-Effective Potential

- 2005 Energy Center of Wisconsin worked with diverse stakeholders to develop an updated Achievable Potential Study
- Economically justifiable spending for energy efficiency and renewable energy (customer-sited): \$82 - \$132 million annually
- Act 141 increases Focus on Energy funding to 1.2% of utility revenues, expected to be within the potential study range

# Renewable Energy Program



Focus on Energy provides:

- Information
- Education & training
- Project facilitation
- Business development
- Financial incentives

# Targeted Renewable Markets



Gordondale farm - Amherst



- Residential and Businesses:
  - Solar Electric
  - Solar Water Heating
- Businesses:
  - Wind
  - Biogas digesters
  - Wood

EPA: Wisconsin is #1 state for biogas projects – largest # of installed projects to-date

# Business Programs

- Commercial
- Industrial
- Agriculture
- Schools & Government
- Feasibility studies
- Project facilitation
- Demonstration projects
- Education & training
- Financial incentives
- Working with market actors (e.g. lighting contractors, engineers) to influence decisions

# Working “Upstream” in the Market Channels

Old 3.0 gpm



New 1.6 gpm



- Pre-rinse sprayers (est. savings of \$600/yr)
- Installed 600 in past 2 yrs
- No distribution in WI – Focus developed network of 7 distributors offering instant incentives
- Continued efforts to drive demand

# Promoting Best Practices in Process Energy Use



- Target Key Industries (32% of all electricity, 58% of all gas energy, used by businesses)
  - Pulp & Paper
  - Metalcasting
  - Plastics
  - Food & Dairy
- Partner with
  - Industry associations
  - Senior management
- Over 50 best practices case studies

# Promoting Best Practices



- Mercury Marine – installed state-of-the-art compressed air system
- Saves 9,000,000 kwh/yr
- Serves as showcase and training facility for other industries
- Saves enough energy to power 100 homes, waste heat recovery saves enough to heat 150 homes

# Building Relationships to “Sell” Energy Efficiency to Schools



- Positive change in school districts’ approach to energy management
- Baseline study of energy use in schools
- Types of projects:
  - Computer management systems
  - Pool covers
  - Lighting in gyms
  - Adjustable speed drives on pumps and air handlers
  - Adjusted operating schedules

# Selling Non-Energy Benefits



- Waupun dairy farmer
  - Efficient gas water heater
  - Variable speed drive vacuum pump for milking operation
  - Heat recovery from compressor
- Benefits
  - Trims \$10,000/yr off energy bill
  - Improves milk quality
  - Brings additional \$.10/hundred lbs of milk

# Residential Programs



- Strong partnership with the market channels
- Helping businesses “sell” the benefits of energy efficiency
- Education & training to build infrastructure in the private market
- Information and marketing to drive a customer demand
- Financial incentives

# Building on National Promotions

*"We stepped out of energy geek land and into the marketplace."*

Janet Brandt, executive director of the Wisconsin Energy Conservation Corp.



James Reynolds stocks compact fluorescent light bulbs Thursday at National Ace Hardware, 1303 N. 4th St. National Ace is a leader in sales of the bulbs under a rebate program.

## Green light special

Wisconsin stays a step ahead of the rest with its progressive campaign to conserve energy

By THOMAS COYNE  
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How many light bulbs does it take to make Wisconsin a national leader in brightening rooms while saving on energy bills?

Try 1.3 million.

That's how many compact fluorescent light bulbs state retailers sold in 2003 as part of a partnership between hardware stores, home centers and a state energy initiative that's funded in part by a charge on utility bills.

Dave Rotter, co-owner of Na-

tional Ace Hardware in Milwaukee, shakes his head in wonder at the popularity of the light bulbs, which put Milwaukee on the map for hardware-chain buyers and bulb-manufacturer sales representatives.

The first time he was approached to sell compact fluorescent bulbs, Rotter was skeptical. He recalled that until recent years, the bulbs were expensive and unreliable.

But representatives at Focus on Energy, the program in charge of boosting energy efficiency initiatives around the state, said they thought Rotter

could sell 5,000 bulbs during a one-day promotion in Milwaukee's Reuss Federal Plaza.

Visions of unsold bulbs flickered in his head.

"I thought, if they're right, that's great," Rotter said. "If they're not right, that's 15 to 20 years' supply."

But with his main store's sales sagging because of the demolition of the Park East Freeway, Rotter took a chance. When the bulb sale came, he was shocked to see lines form.

Office workers in the federal

### BENEFITS OF GOING FLUORESCENT

If every Wisconsin household replaced just one incandescent light bulb with a compact fluorescent bulb that carries the Energy Star label:



**It would reduce** Wisconsin's energy bills by more than \$62.5 million over the lifetime of the bulbs.

**It would save** more than 137 million kilowatt-hours of energy each year — enough to power 13,758 Wisconsin homes.

**The annual environmental impact** would be the equivalent of removing 22,219 cars from the road.

In addition, the program projects that customers could save \$60 a year on their electricity bills if they replace bulbs in the five most-used lights in their homes with fluorescent bulbs.

Source: Focus on Energy

Please see BULBS, 20

- Change-a-Light, Change-the-World
- 1.3 million CFLs sold annually through almost 300 storefronts
- Negotiated \$500,000 in matching incentives

# Increasing Market Share and ENERGY STAR Awareness



- Doubled the market share for furnaces with ECM motors – 15% in 2003 to 30% in 2006
- Unprompted awareness and understanding of ENERGY STAR label increased to 46% in Wisconsin between 2004 and 2006 (up 50%)



# Increasing Business for Retailers Who Sell Efficient Products



- Appliance Store –Madison
- Commitment to making majority of products sold ENERGY STAR qualified
- Uses Focus reward program, training, labeling, and materials
- Increased market share dramatically
- Increased sales force by 30%; opened 3<sup>rd</sup> location

# Increased Sales for Contractors Promoting Energy Efficiency



- Balts Construction – Chippewa Falls
- Small 4-person home improvement company
- Attended general building science training sponsored by Focus on Energy and made commitment to “Home Performance”
- Grown to 15 field technicians
- Provides service throughout Northwest WI; weekly radio call-in show; promotes ENERGY STAR brand

# 4 Most Important Lessons Learned

- Substantial, cost effective energy savings are available
- Statewide approach can reduce key barriers
- Building strong relationships with market channels is essential
- Long-term commitment and consistency increases program effectiveness

Additional program information:

**[www.focusonenergy.com](http://www.focusonenergy.com)**

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