

## **ACEEE's Fourth National Conference on "Energy Efficiency as a Resource"**

### **Track: Natural Gas Energy Efficiency as a Utility System Resource**

*Wisconsin's  
Focus on Energy - Overview*

*October 1, 2007  
Ed Carroll*

### **Talking Points:**

1. The premise: A resource?
2. A resource for Wisconsin?
3. Where are we currently?
4. How to secure the balance?

# 1. The Resource Premise

- A 1% per year reduction in total gas demand could result in wholesale natural gas price reductions of 10 to 20% wholesale price decrease in 5 years.
- 5 year plan, 1% per year, per Midwestern state

Source:

Kushler, M., York, D., and P. Witte. 2005 Natural Gas Crisis in the Midwest. ACEEE, Washington D.C.

## Some Context:

Q: How much  
natural gas does  
a 150 MW  
Cogeneration  
Facility Use?



# Approximately How much gas does the Plant Use?

- A. 1,000,000 therms / year
- B. 5,000,000 therms / year
- C. 300,000 therms / day
- D. None of the above

**Answer: C. 300,000 therms / day**

## 2. To achieve this resource, what is Wisconsin's target?

### Wisconsin

#### 2005 Estimated Statewide Natural Gas Sales

Therms: 3,550,000,000

Target Savings: 35,500,000

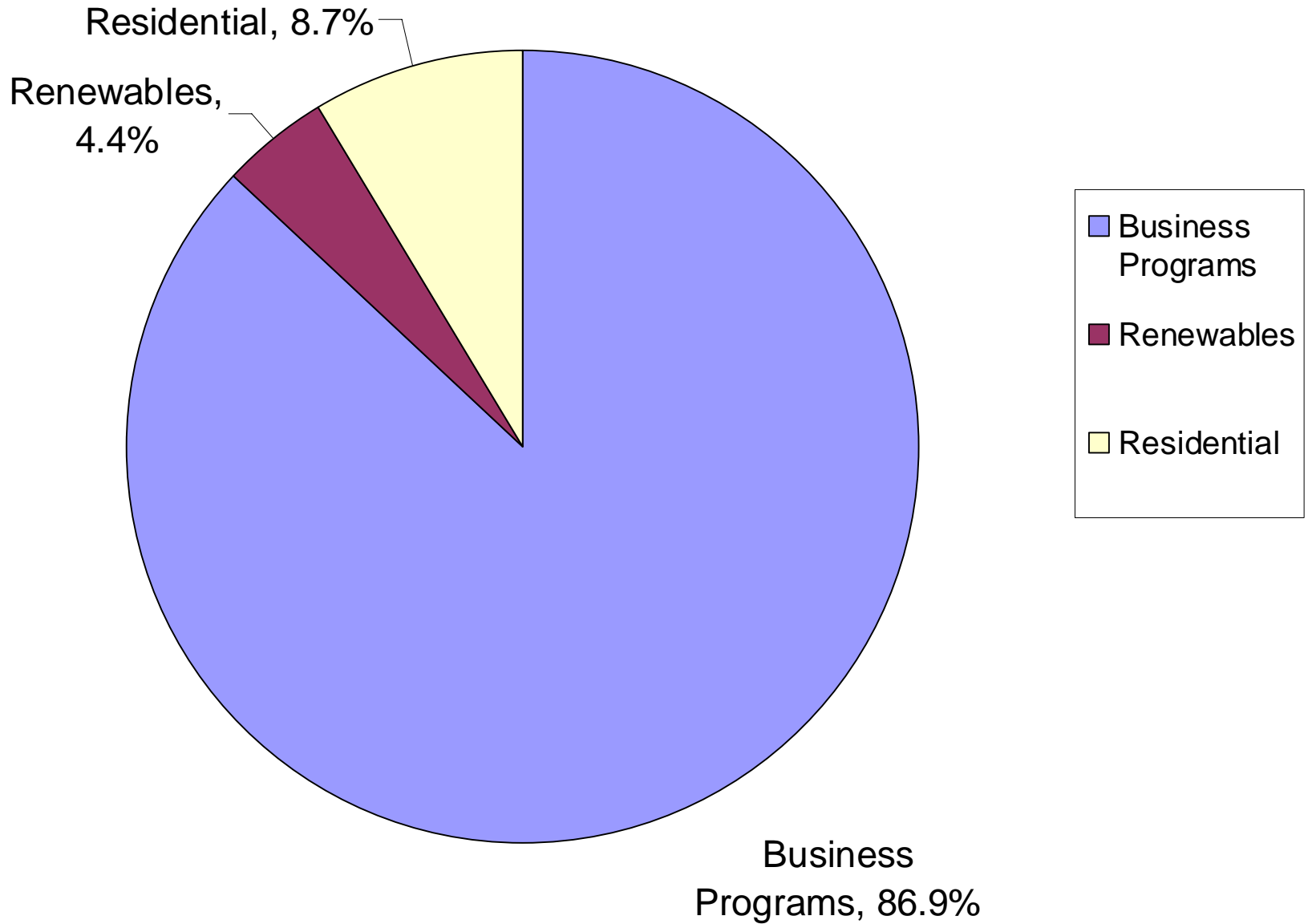
Target Savings as a % of Annual Sales: 1.00%

### 3. Where are we presently?

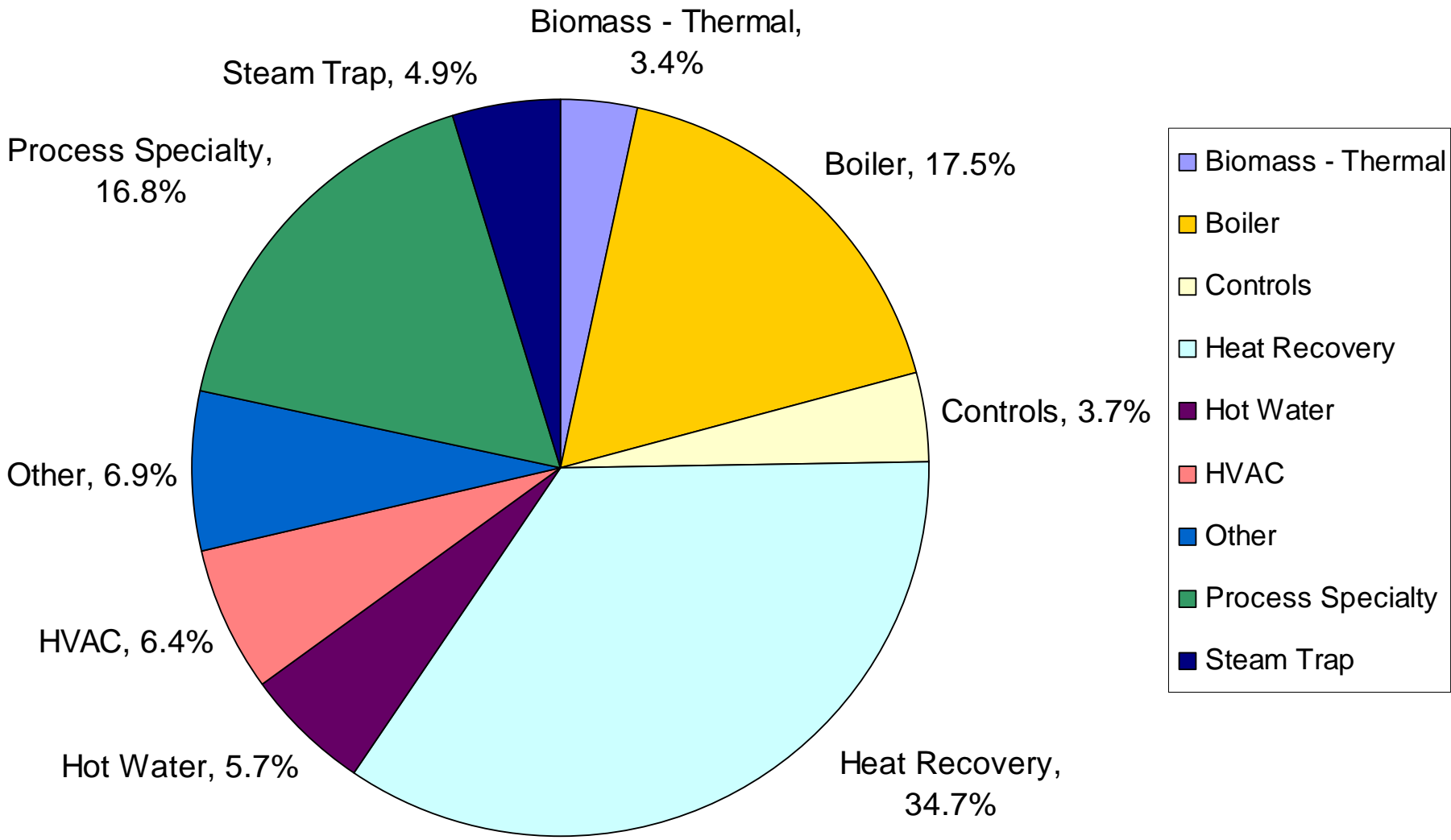
Focus on Energy Statewide Program Savings/Goals:

FY07 <u>Net</u> Savings:	7,654,615 therms
FY08 <u>Net</u> Savings Goal:	10,016,000 therms (.28%)
One Year 1% Goal:	35,550,000 therms

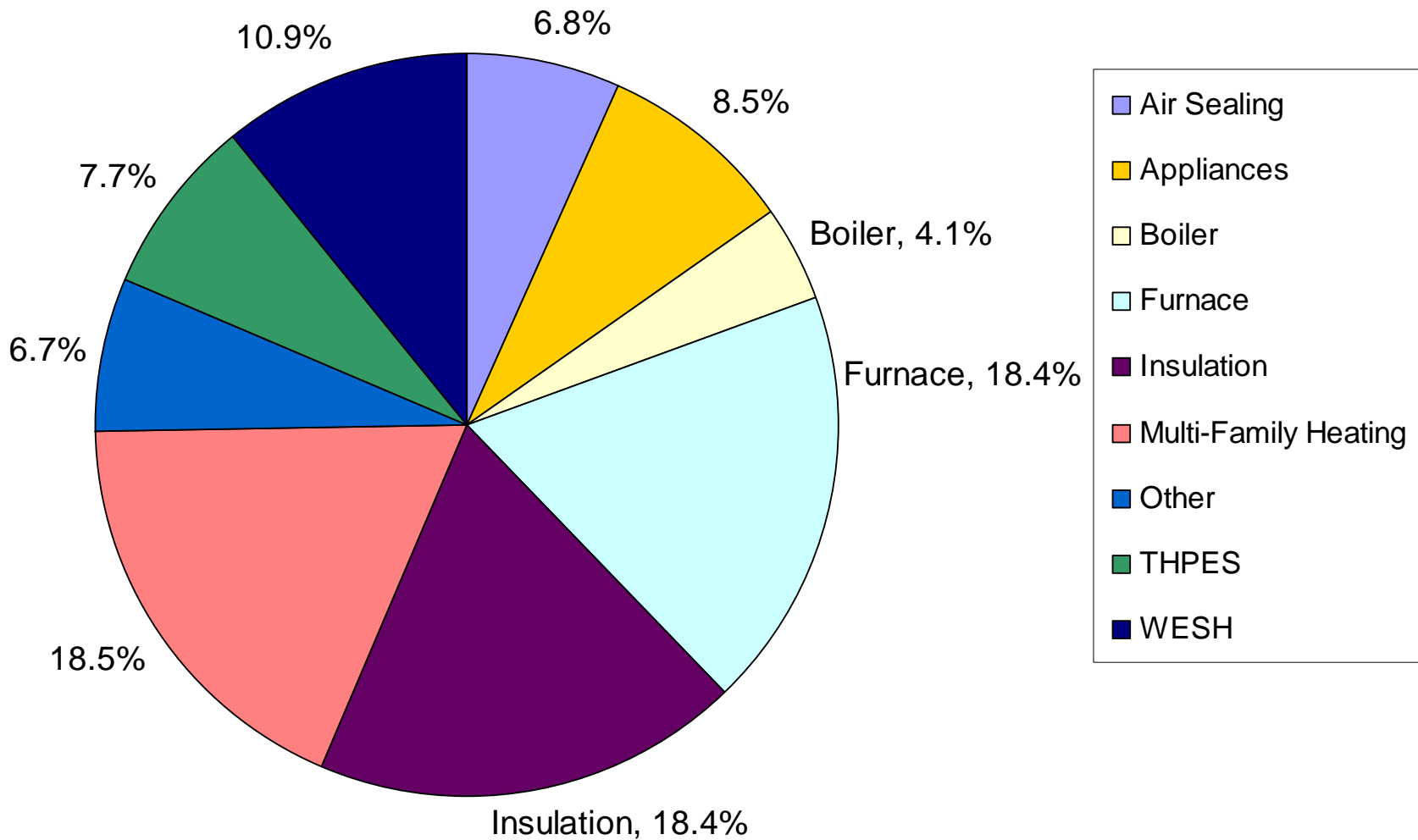
# FY07 Therm Savings by Portfolio



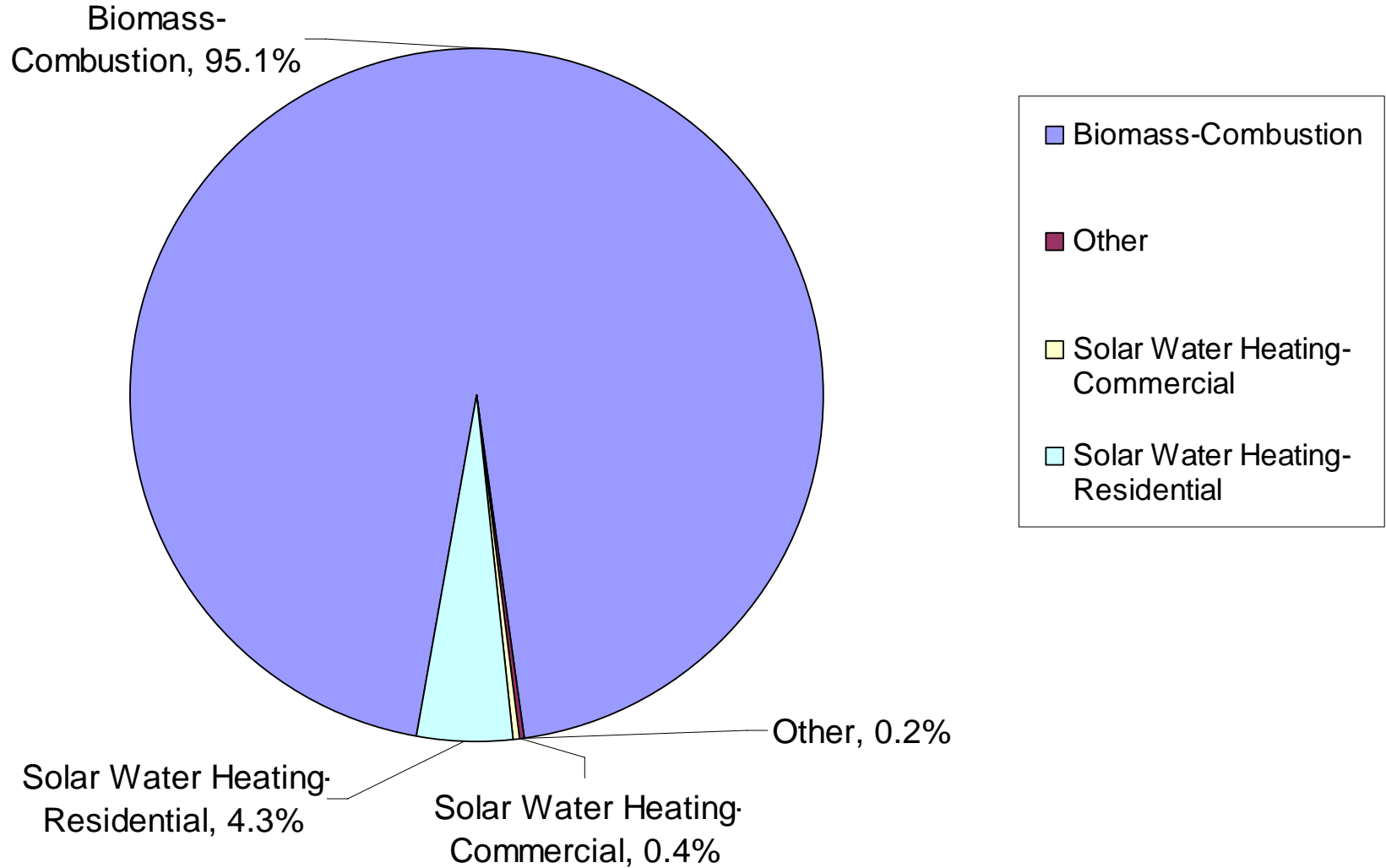
# FY07 Business Programs Therm Savings - by Technology/End Use



# FY07 Residential Therm Savings - by Technology/End Use



# FY07 Renewable Energy Therm Savings - by Technology/End Use



## 4. To get the remainder?

Lessons from our recent program past:

- By program
- By technology
- Large projects that are looming out there
- Motivation – tech and financial assistance

# Mega / Big Potential Projects?

- Renewable – Biogas (e.g. waste water, digestors)
- Flue gas heat recovery
- Gas to wood boilers/wood gasification
- Combined Heat and Power of varying size

# Motivation: Technical and Financial Assistance Provided

- Focus on projects that won't happen, move to implement or implement sooner
- Custom incentives: \$.40 - .60/therm
- \$250,000 cap per project / \$500,000 per customer/year
- Not less than a 1.5 year payback using last 12 month gas rate average
- How we are trying to impact largest – Study Incentives

# Questions or Follow Up?

## **Ed Carroll**

Director – Strategic Planning and Development

Wisconsin Energy Conservation Corporation

431 Charmany Drive

Madison, WI 53719

(608) 249-9322 x 331

[ecarroll@weccusa.org](mailto:ecarroll@weccusa.org)

[www.weccusa.org](http://www.weccusa.org)