

# SIREN Showdown

***A Year-long Competition  
to Reduce Household  
Electricity***

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*-U.S. Average Household Use:  
11,000 kWh<sup>1</sup>  
In Bloomington:  
~73% from Coal<sup>2</sup>*

1 -Coop America Quarterly, Summer 2008, Efficiency First, page 9

2 -<http://www.epa.gov/cleanenergy/energy-and-you/how-clean.html>

# ***The Thomassen Household***

**2009 Electricity Usage: 7928 kWh**

**2010 Electricity Usage: 5787 kWh**

**Reduction: 27.0 %**

**Savings: ~ 225 dollars**

# SIREN Showdown

***Pam Chapman,  
Area Manager for Monroe Co.,  
Duke Energy Indiana***

**\*\*\***

***11.5 MW-hours Saved***

## ***The Eller Household***

**2009 Electricity Usage: 8242 kWh**

**2010 Electricity Usage: 6430 kWh**

**Reduction: 22.0 %**

**Savings: ~ 190 dollars**

# **The *Emigh/Sullivan* Household** **(greencouple.com)**

**2009 Electricity Usage: 3701 kWh**

**2010 Electricity Usage: 2434 kWh**

**Reduction: 34.2 %**

**Savings: ~ 135 dollars**

# SIREN Showdown

***Jacqui Bauer,  
Sustainability Coordinator,  
City of Bloomington***

**\*\*\***

***~11,000 lbs of coal NOT burned<sup>1</sup>***

1 - Per "Kilowatt Ours", about 1 # of coal per 1 kWh of electricity, and

Per Bruce Salisbury of The Arizona Public Service Company "Typically, Coal has a "heating value" of 8,800 to 11,000 btu's perlb... ..Well designed, modern power plants can make one kilowatt-hour (1,000 watt hours of electricity) using 9,500 btu's of energy from coal. So 1 pound of coal can generate 8,800/9,500 of a kilowatt-hour, or 926 watt-hours. (~0.93kWh/# coal).

# **The *Bessler* Household**

**2009 Electricity Usage: 9399 kWh**

**2010 Electricity Usage: 5049 kWh**

**Reduction: 46.3 %**

**Savings: ~ 450 dollars**

# **The Bessler Family**

**(2) adults, (2) 7-yr olds**

**2000 sq. ft. brick ranch, cir. 1968**

**Insulating & sealing since 2007**

**Our 2008  $\approx$  2009 = 9399kWh**

**Usual Stuff (A/C, D/W, MW)**

**Pool pump**

# **The Bessler Family**

## **GUIDELINES:**

**Shift to a new sustainable usage  
50% Goal per Green America**

1. Eliminate Waste
2. Pursue Efficiency
3. Conserve with behavior changes

# CONSERVE (BEHAVIOR CHANGES):

Already “Par” drying clothes

Nagging

Jan-Apr: Day@67-68; Night@63-64°F

Rule: Item Off When Leaving a Room

Jun-Sep: Day@85; Eve@78; Night@82

☀ **Oct-Dec: Day@65-67; Night@60**

# **ELIMINATE WASTE:**

**Clean Refrigerator Coils**

**A Clean Furnace Filter**

**Tuned Up Central A/C**

**Spray-foaming House Leaks**

**Power Strips for Phantom Loads**

**☀ Timers, Timers, Timers!!!**

# **EFFICIENCY:**

Already using CFL's ('07)

Already had Energy Star W&D ('07)

Had Energy Star Fridge (Aug. '09)

Experimenting with LED's

**Pump Timer**



**Window A/C to cut Humidity**

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***11.5 MW-hours Saved,  
~11,000 lbs of coal NOT burned<sup>1</sup>,  
~22,000 lbs of CO<sup>2</sup> Avoided,  
Savings over 30 years: ~\$36,000***

1 - Ibid