

# Energy Conservation Initiative (ECI) Project Summary

## Upson Hall, Facility 2045

**What We Did:** Upson Hall's space temperature controls were mostly pneumatic, some heat only, some heating and cooling. The project installed wireless digital thermostats that directly retrofit on top of existing pneumatic thermostat tubing. The cost of the retrofit is significantly less than a full digital conversion which was not economic for this space type. 110 digital thermostats were installed.

**What It Cost:** \$90,000

**How Long It Took:** 12 months. Completed September 2012.

**What We Saved:** \$27,000 and 46 tons/year carbon equivalent annually.

**Benefits:** The new space controls are accurate and allow a 7 day schedule to save energy, and reduce maintenance issues related to "hot/cold" trouble calls. The new controls are fully visible through the Building Automation and Control System (BACnet). All trend data is available for maintenance trouble shooting.

The new thermostats have reduced maintenance costs and increased occupant comfort.

Mark Howe ,  
Program Manager Energy Conservation Initiative,  
Energy & Sustainability Dept.

### Upson Hall

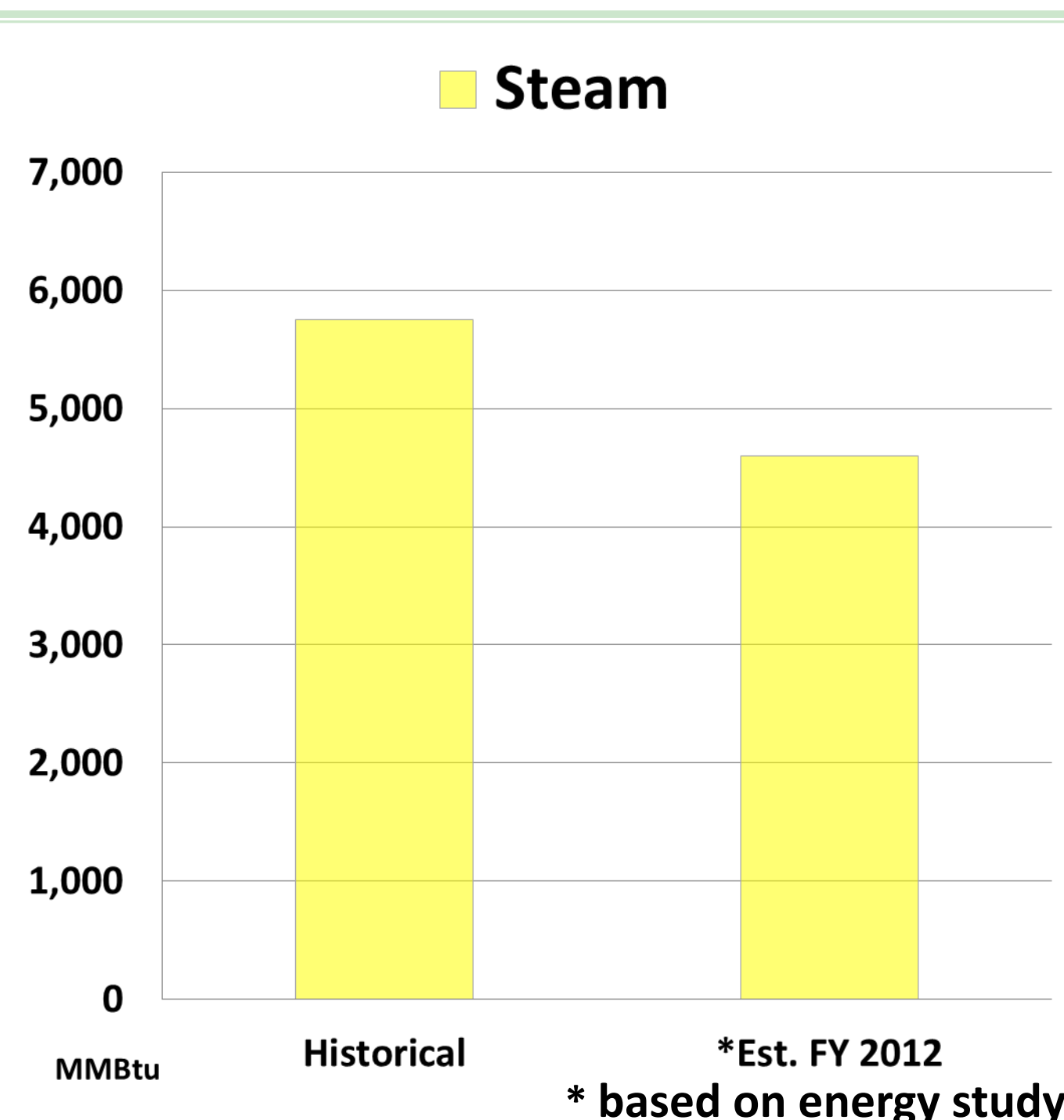


[Map](#)

[Upson Hall Utilities Costs and Use](#)

### Upson Hall :

Total Energy Use Pre & Post ECI



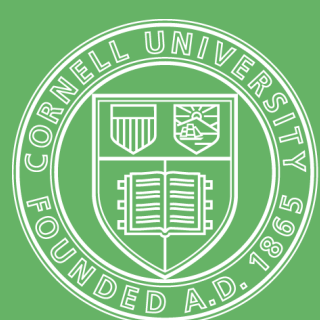
## Upson Hall : ECI Savings Table

| Utility       | Historical Energy Use (MMBtu) | Est. FY 2012 Energy Use (MMBtu) | Energy Savings (MMBtu) | % REDUCTION | Historical Cost (billed rates) | Est. FY 2012 Cost (billed) | Annual Savings \$ | Equivalent # Homes |
|---------------|-------------------------------|---------------------------------|------------------------|-------------|--------------------------------|----------------------------|-------------------|--------------------|
| Electric      |                               |                                 |                        |             |                                |                            |                   | N/A                |
| Steam         | 5,750                         | 4,600                           | 1,150                  | 20%         | \$132,000                      | \$105,000                  | \$27,000          | 12.8               |
| Chilled Water |                               |                                 |                        |             |                                |                            |                   | N/A                |
| <b>Totals</b> | 5,750                         | 4,600                           | 1,150                  | <b>20%</b>  | \$132,000                      | \$105,000                  | \$27,000          | <b>12.8</b>        |

Energy use based on project scope



Equivalent # Homes Savings based on average home use: 40 MMBtu Electric ■ 90 MMBtu Heat ■ 50 MMBtu Cooling



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