

Energy Conservation Initiative (ECI) Project Summary

Cornell Store, Facility 2088

What We Did: Installation of new control system, including variable speed drives, digital air handling unit (AHU) and hydronic heating/cooling controllers, control valves, space temperature and carbon dioxide sensors, outside air flow temperature and humidity sensors. Perform system commissioning.

What It Cost: \$227,000

How Long It Took: About 5 months, August 2010 to December 2010. Commissioning of system from December 2010 to March 2011.

What We Saved: Cost savings for fiscal year 2011 is approximately \$67,000 (based on billed utility rates) and reflect the impact of just ½ year with the

upgraded system. Total energy savings for FY 2011 is 3,100 MMBtu, a reduction of over 35%. Savings based on comparing the average energy consumption for fiscal years 2006-2010 with FY 2011. Annual savings for FY 2012, with a full 12 month after completion should exceed \$100,000. See energy savings table for details.

The energy conservation project has reduced our energy usage dramatically while maintaining and improving indoor environmental conditions. We are very excited about the results.

Kevin Drake, Cornell Store, Assistant Director

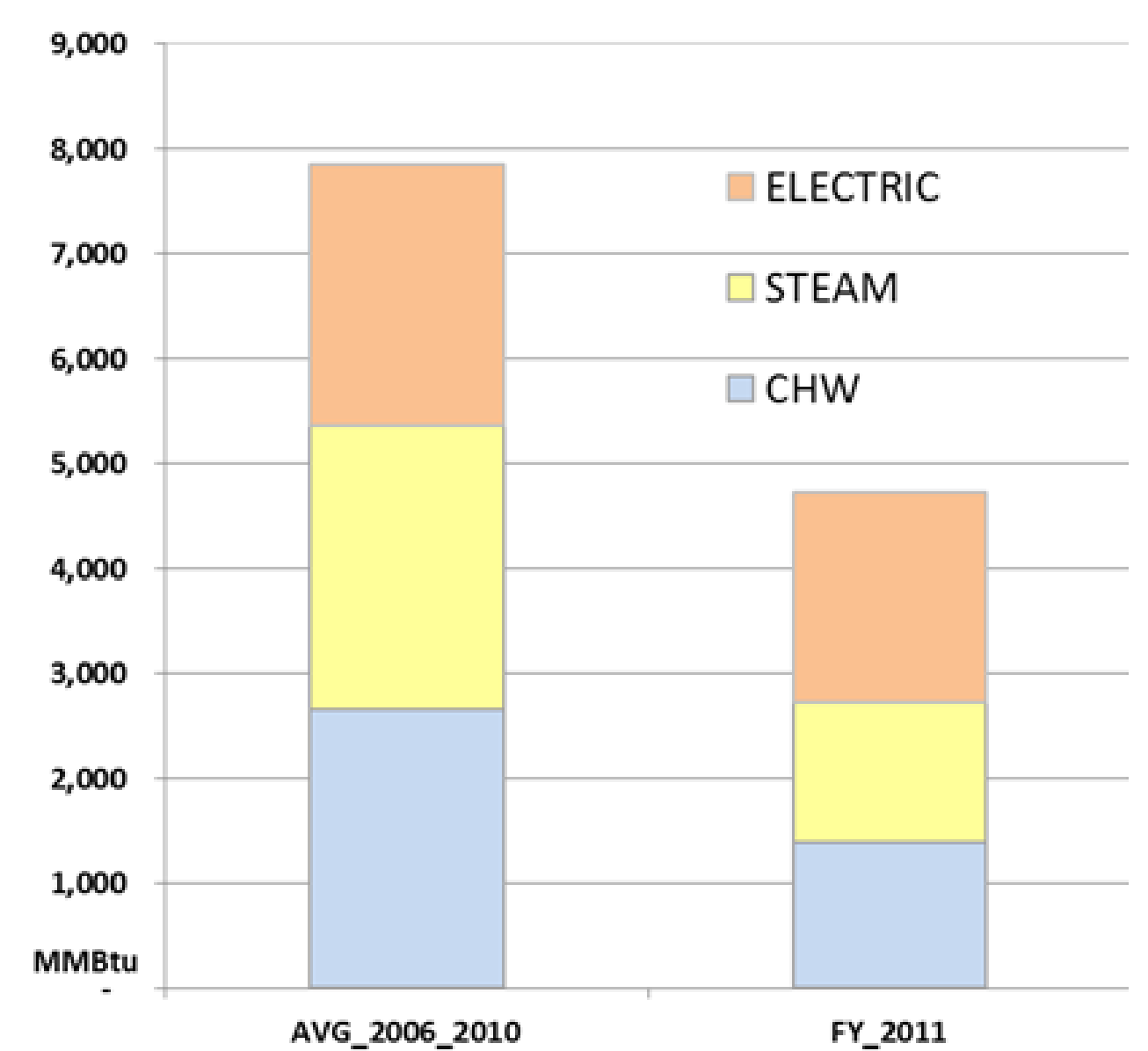
Cornell Store



[Map](#)

[Cornell Store Utilities Costs and Use](#)

Cornell Store: Total Energy Use Pre & Post ECI



Cornell Store: ECI Savings Table

Utility	Historical Energy Use (MMBtu)	FY 2011 Energy Use (MMBtu)	Energy Savings (MMBtu)	% REDUCTION	Historical Cost (billed rates)	FY 2011 Cost (billed)	Savings \$	Equivalent # Homes
Electric	2480	2000	480	19%	\$51,000	\$41,000	\$10,000	23
Steam	2760	1320	1440	52%	\$70,000	\$34,000	\$36,000	23
Chilled Water	2650	1390	1260	48%	\$44,000	\$23,000	\$21,000	N/A
Totals	7890	4710	3180	40%	\$165,000	\$98,000	\$67,000	46

