Energy Conservation Initiative (ECI) Project Summary Steam Pipe Insulation Repair and Replacement

What We Did

Surveys of mechanical rooms in buildings were completed to identity areas where insulation could be improved cost effectively. We then replaced worn or missing insulation in 64 mechanical rooms throughout the academic, research and teaching buildings and campus life facilities.

Description of Photos

One of the many steam components insulated during the steam pipe insulation project. Insulating the Steam PRV (pressure reducing valve) saves the equivalent energy that would heat a typical one family home for two months.

Infrared

BEFORE Insulation -Surface up to 260 °F



AFTER Insulation -Surface down to 98° F





What It Cost

Academic research and teaching buildings — \$345,000 *Campus Life Facilities* — \$30,000.

How Long It Took

16 months What We Saved \$290,000 per year at the billed utility rate, yielding a 1.2 year payback. The insulation project has made the mechanical rooms much more comfortable and safer to work in, while creating significant energy savings.

Rick Bishop, General Foreperson Control shop



Total Campus Heating Sales & Energy Use • Pre & Post ECI





	(MMBtu)	(MMBtu)	(MMBtu)	REDUCTION	rates)	Cost (billed)		nomes
Steam	1,084,000	1,072,500	11,500	1%	\$26,400,000	\$26,110,000	\$290,000	100
Electric								NA
Chilled Water								NA
Totals	1,084,000	1,072,500	11,500	1%	\$26,400,000	\$26,110,000	\$290,000	100



Cornell University Facilities Services Energy and Sustainability

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