

# **REAL WORLD RESULTS**

Bates College is First to Implement Campus-Wide "Green Up" Project Energy Savings and Reduction of GHG Emissions are Immediate and Substantial



(July 2015) — Bates College is widely regarded as one of the finest liberal arts colleges in the U.S. Located in Lewiston, Maine, it is committed to building a sustainable community, with programs in place to reduce energy use and greenhouse gas emissions.

One recent energy-saving project was the installation of Ever Green<sup>®</sup> Cut 'n Wrap™ modular removable/ reusable insulation



on 500 hot pipe components in 18 mechanical rooms on campus, with Auburn Manufacturing Inc. (AMI) acting as contractor. The

job was completed in just two weeks by a professional insulation contractor, sub-contracted by AMI.

The two-week project, completed in late May, is estimated to save Bates approximately \$34,000 per year and reduce greenhouse gas emissions by approximately 200 tons annually. "Choosing AMI's Ever Green® Cut'nWrap™ insulation along with AMI's Green Up Project Management Services, with an estimated 15-month payback on the project was a no brainer," said John Rasmussen, energy manager for Facility Services at the college.

"We have a very old campus that we overheat, over ventilate, over cool, and over light. Our biggest source of GHG emissions is heating. If we could reduce heat loss, we could automatically reduce GHG emissions. So, it didn't take much to convince the administration that we could save a boatload of energy — and money — if we took action to remedy some of these situations. It was an easy decision, especially when the investment offered such an immediate financial payback."

### AMI Green Up Project-Based Approach Key to Quick Savings

"AMI not only had the product that could help us reduce heat loss immediately, they oversaw the campus-wide project with professional installers fabricating and installing insulation covers sized to fit on the 500 components. The speed with which the job was done was amazing. The entire job was completed in two weeks. There was instant temperature relief in all of the mechanical rooms," according to Rasmussen.

"We know that 85% of heat loss takes place through these bare components, so insulating them can quickly lower room

REAL WORLD RESULTS <sup>1</sup>			
18 Mecha Heat Loss Savings:	anical Rooms Savings in Dollars:	500 Valves   2 GHG Emissions Reduction:	Weeks Payback:
2,768 MMBtu/yr	\$34,589/yr	202 Tons/yr	15.2 Months

temperatures by up to 30°F, saving up to 8% on energy used for heating. Bates' facilities managers know that the reduction in mechanical room temperatures translates into greater student and faculty comfort in classrooms and dorms located above those hot mechanical rooms," says Kathie Leonard, President/CEO of AMI.

"We calculate energy savings after our walk-through, using standard engineering formulas. We use our own Material

Calculator app to quickly tally the components and calculate material cost," she continued. "The Green Up project management service puts us in charge of the entire project — from estimating to hiring and overseeing the work done by professional insulators. In this case, the entire campus was done by two installers in about 80 hours."

### Savings So Far

The energy savings

stated above were



### AMI's 'Green Up' Project Services:

- Estimate on turn-key basis
- Funding access assistance
- Sub-contract/oversee installation
- Final engineering report
- BTU savings
- Dollar savings
- GHG emission reductions
- Written summary of project
- Follow-up audit services as required

calculated on the Bates' heating system being in operation 65% of the year. Still, the financial payback was 15.2 months — less than a year and a half, including both labor and material cost. "I call that a win-win situation," said Rasmussen, who has in mind a number of other projects, such as steam vaults, where he already foresees using the insulation.

## Interested in Greening Up your Mechanical Rooms?

- Call Auburn Manufacturing at 800-264-6689
- Ask for Matt Lampron to discuss your potential projects.
- For quick calculations use our Cut 'n Wrap Materials Calculator at www.cutnwrap.com

<sup>1</sup> Heat loss, dollar, and GHG emissions savings were calculated using the NAIMA 3E Plus Program.

The NAIMA 3E Plus Insulation Thickness Program is embraced by the Department of Energy and can be downloaded from www.pipeinsulation.org.



Auburn Manufacturing's Ever Green<sup>®</sup> Cut 'n Wrap<sup>™</sup> insulation kits were used to fabricate on site and apply covers on a variety of hot piping components in 18 mechanical rooms servicing Bates College buildings, as shown below.



Ever Green<sup>®</sup> Cut 'n Wrap<sup>™</sup> is a patented modular design. Typical fabrication/installation time is about 15 minutes per component. Call us for fast estimates using our material calculator.



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