Energy Project ID

Most Important Initiatives

- AEP
- Internal Energy Projects
- Sustainability Website
AEP Highlights

- Finances $26M for 130 energy conservation projects paid for by energy cost avoidance
- Reduces campus energy approximately 24%
- DCAMM program and oversight
- Simple payback of less than 14 years
  - DCAMM Deferred Capital Maintenance Funds Contribution of $5M
- Reduces Deferred Maintenance by $10M to $12M
- Improves academic learning environment
- Construction Management throughout
- Commissioning with third party review
- Audit & Facility Condition Assessment completed Mar 2013
- Schematic Design package completed December 2013
- Procurement of CM-Design-Build scheduled April 2014
- Design-Build Contractor on site Summer 2014 - Early 2016
# Accelerated Energy Program (AEP) UMass Lowell

<table>
<thead>
<tr>
<th>Major Initiatives</th>
<th>Savings/yr (mmbtu)</th>
<th>Reduction (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New North Plant Boilers (Jan 2013)</td>
<td>13,000 (estimated)</td>
<td>3.6</td>
</tr>
<tr>
<td>S. Campus Fuel Switch - Gas to Electric: Steam Absorption to Hi Efficiency Electric Chillers (May 2012 to May 2013)</td>
<td>19,300</td>
<td>5.4</td>
</tr>
<tr>
<td>AEP (2013)</td>
<td>89,100</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>121,350</strong></td>
<td><strong>33</strong></td>
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<table>
<thead>
<tr>
<th>Deferred ECMs</th>
<th>Savings (mmbtu)</th>
<th>Reduction (%)</th>
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</thead>
<tbody>
<tr>
<td>ECMs removed due to future capital program</td>
<td>3,900</td>
<td>1</td>
</tr>
<tr>
<td>ECM that UMass Lowell will perform</td>
<td>3,700</td>
<td>1</td>
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</tbody>
</table>
Internal Energy Projects – FY 14

• ETIC Improve Flr 1-2 Lab Efficiency Study
• ETIC Energy Efficiency–Cleanroom Study
• ETIC Study RODI water re-use
• Survey & Repair Steam Traps – Phase 4
• Weed Retro-commissioning Study
• Campus Water Meters – sewer abatement
• O’Leary variable flow and use of chiller as heat pump to heat heating hot water.
• Enernoc Demand Response to reduce grid power loads
• Enernoc UC & Riverview
• Costello Upgrade

• Campus Door Weatherstripping
• LED Parking Lot Lighting - South
• Univ. Suites Wireless Controls Pilot Project
• Wannalancit Simplify Nat Gas metering – reduce cost of gas
• LED Lighting Replacement Classroom 325, 327, 329
• North Fields Lighting Control
• ICC Energy Control Upgrades
• LEED Magauvran & Dining Conversion
• LEED Management Building
• Bourgeois-Leitch Upgrade
• LEED ETIC new Labs 3 & 4
• LEED Univ. Crossing