Energy Conservation Initiative (ECI) Project Summary
Blue Light Service

**What We Did:** We replaced Blue Light security lights all across the campus in 120 locations with LED fixtures that use 13 watts, one tenth the energy usage of the metal halide lamps they replaced. The existing fixtures were a wide variety of ages and types, making maintenance difficult. The new fixtures utilize blue LED’s with blue lenses to maximize efficiency.

**What It Cost:** $31,000

**How Long It Took:** 1 month. Completed June 2013.

**What We Saved:** $6,200 and 40 tons/per year carbon equivalent annually.

**Benefits:** The new lamps are expected to last 3 to 5 times longer than the existing fixtures. The decrease in maintenance and energy costs quickly repay the project, and the campus now has uniform performance in this critical security application.

We were extremely happy that Energy and Sustainability was able to cost effectively upgrade the Blue Lights to provide higher reliability in this critical need for campus. Our Facilities Services partners work hard to increase energy efficiencies without compromising the safety of our campus.

Kathy Zoner  
Chief, Cornell Police

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**Utilities Costs and Use**

**Blue Light Service**

Total Energy Use
Pre & Post ECI

**Blue Light Service**

Total Energy Use
Pre & Post ECI

**Utilities Costs and Use**

Historical

*Est. FY 2012

* based on energy study

**Energy and Sustainability**

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**Blue Light Service: ECI Savings Table**

<table>
<thead>
<tr>
<th>Utility</th>
<th>Historical Energy Use (MMBtu)</th>
<th>2012 Energy Use (MMBtu)</th>
<th>Energy Savings (MMBtu)</th>
<th>% REDUCTION</th>
<th>Historical Cost (billed rates)</th>
<th>Est. FY 2012 Cost (billed)</th>
<th>Annual Savings $</th>
<th>Equivalent # Homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>350</td>
<td>45</td>
<td>305</td>
<td>90%</td>
<td>$7,100</td>
<td>$900</td>
<td>$6,200</td>
<td>8</td>
</tr>
<tr>
<td>Steam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Chilled Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>350</td>
<td>45</td>
<td>305</td>
<td>90%</td>
<td>$7,100</td>
<td>$900</td>
<td>$6,200</td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

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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11/2013