



Service/Product Provider

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Balance Engineering identifies \$3 million in energy savings at Lilly facility

Project Scope

Balance Engineering conducted a facility energy assessment of the Eli Lilly Clinton Laboratories, a large multi-building pharmaceutical campus. The goals of the assessment were to determine the major uses of energy, develop energy conservation measures (ECM), and identify opportunities to reduce greenhouse gas emissions.

Project Summary

Balance Engineering applied its assessment system to identify, analyze, and track a total of 109 concept level ECMs and 62 detailed ECMs. For each ECM, the current and proposed systems were described, key assumptions were listed and potential costs and savings were provided. The combined potential savings of the 62 detailed ECMs were approximately \$2,900,000/year. Many of these measures have been or are in the process of being installed.

- **Energy Savings**
Potential savings of \$2,900,000/year, reduction of 74,500,000 kWh/year, and a reduction of 200,000,000 lbs/year of CO₂-equivalent greenhouse gas emissions.
- **Investment**
\$11,000,000 total implementation
- **Financial Return**
3.8 year payback overall; many measures had less than one year payback
- **Other Benefits**
Increased facility's energy efficiency, increased employee awareness and involvement in identification of energy conservation opportunities, developed tracking system for energy conservation measures, and reduced facility's impact on the environment.

Monitoring & Verifying Energy Savings

Energy savings were confirmed as ECMs moved from assessment level to investment level.

Distinguishing Value

Balance Engineering utilized its experience and specialty expertise in Industrial Systems Design and Energy Analysis to help Eli Lilly realize substantial energy savings and reductions in greenhouse gas emissions.