University of Kentucky

Kentucky's Flagship University in Lexington; 11 Colleges and 112 degree programs; 27,000+ Students / 12,000+ Full-time employees; 500+ Buildings over 800+ acres, 3 hospitals

Project encompassed 61 buildings over 300 acres

Major Issues

(E)SC

Upgrade & Modernize Aging Facilities; Funding Mechanism; Speed and Risk Mitigation; Reduce Carbon Footprint, Energy Consumption & Utility Costs



Solution

- Guaranteed Energy Savings Performance Contract
- ESCO: Ameresco, Inc.
- \$24.7 million contract / 12 year guarantee term
- Annual Savings energy and operational \$2.4 million annual energy savings guarantee



Project Scope

- Lighting retrofits and controls
- Water retrofits
- UV Tubes in AHU's to enhance air quality
- Process Water Recovery
- Steam Sterilizers
- HVAC System Replacements
- Steam Traps Replacements
- Fume Hood Controls/Upgrades
- Underground Steam Condensate
- Solar Domestic Hot Water Heating System

- Variable Flow Chilled Water Pumping/Building Controls
- Air Handler VFDs
- Air Handler Replacements
- Electric Substation & Capacitor Bank System
- Solar Domestic Hot Water Heating
- Building Chilled Water, Steam
 & Electric Sub-Meters
 Installation
- Energy Education and Behavior Change Program



Environmental Overview

Reduced Greenhouse Gas Emissions

23,490 metric tons per year

Equivalent Annual Reductions:

- Removing approximately 46,234 typical passenger cars from the road a year
- Removing the electrical usage of over 5,305 typical homes a year
- Reducing the equivalent of planting 62,908 trees

