

Increasing Central's Energy Efficiency: an ESCO Partnership with Trane

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University of Central Missouri and Trane U.S., Inc.

University of Central Missouri (UCM) solicited proposals for a performance-based energy savings program that furthers Central's transformation to a nationally recognized, comprehensive institution delivering a world-class university education. The program guarantees energy and operating cost savings as allowed by RSMO 8.231 & 640.651. The guaranteed savings must meet or exceed the costs of facility improvements designed to reduce energy consumption or operating costs for a 15-year period. Trane U.S., Inc. was the Energy Service Company selected for the project.

The Trane–UCM partnership developed a comprehensive list of facility improvement opportunities that is expected to:

- improve energy and operational efficiency through utility (water, gas, electricity) infrastructure upgrades based on an analysis of energy efficiency measures,
- optimize building operations by addressing deferred and on-going building maintenance issues,
- provide students, staff, and faculty with a high-performance educational environment on a green, sustainable campus in which the buildings and green-spaces become learning tools,
- and build a foundation for scholarly research in sustainability across many disciplines.

The energy service contract specifies a \$36 million investment by 2010, which saves UCM over \$20 million in energy, operations, and maintenance costs and over \$26 million in future capital costs. An investment grade audit specifies a 30% reduction in green house gas emissions (21.5 million lbs CO₂, 74,000 lbs SO_x, and 33,000 lbs NO_x annually) and 5 million gallons of water is expected annually.