

StaplesTM

SHOWCASE PROJECT: COPPELL FULFILLMENT CENTER

SOLUTION OVERVIEW

By undertaking a comprehensive approach for identifying and implementing a host of energy & water efficiency measures, Staples was able to markedly improve the performance of its Coppell, TX Fulfillment Center through its Eco-Treasure Hunt program. Annual savings are also expected to result in an 11% water cost savings. Based on this success, Staples is implementing the program across many other fulfillment centers.

The Eco-Treasure Hunt program was designed to help Staples identify ways of saving energy & water, improve business processes, and seek ways of applying new technologies. It afforded Staples the opportunity to identify areas for energy & water efficiency improvement and be creative in its approach to conducting business. This particular project was initiated in October 2011 and was completed in June 2012. The Coppell Quill Fulfillment Center is a 245,000 square foot warehouse building that is fully air conditioned. It was built in 1990 and employs 52 Staples associates and operates 90 hours each week.

SECTOR TYPE

Commercial

LOCATION

Coppell, Texas

PROJECT SIZE

245,000 Square Feet

FINANCIAL OVERVIEW

Project Cost: \$84,000

SOLUTIONS

A team of members of the Staples energy & water reduction team, and the on-site facilities team at the Coppell Quill Fulfillment Center participated in the identification of energy & water reduction opportunities. Together, they focused on energy & water efficiency in the areas of lighting, battery chargers, conveyors, HVAC, associate bathrooms, lawn irrigation, and the energy management

system. The Eco-Treasure Hunt program was educational and an inspiring experience for all participants.

Staples incorporated the following energy & water efficiency measures:

- Starting in November 2010, introduced an energy awareness program which had an immediate 3% energy reduction.
- The lighting team identified upgrades in the warehouse ceiling, office area and exterior parking lot areas. Work included new high bay T5 lamps, new office lighting and LED lighting in dock areas at a cost of \$27,000.
- The HVAC team identified upgrades to include a new energy management system, variable frequency drives on roof top units and occupancy sensors on warehouse fans at a cost of \$45,000.
- The material handling team identified a need for a new battery management system and vending machine sensors at a cost of \$12,000.
- The water team identified upgrades in the associate bathrooms with touch faucets-toilets and new irrigation system controls at a cost of \$7,000. Water reduction over 2012 & 2013 was 11% compared to 2011 base year.

OTHER BENEFITS

The Staples energy management team will continue to support the Coppell Quill energy reduction team in implementing capital projects and finding new and continued ways of saving energy & water. In addition, the energy & water management team has supplied Coppell staff with associate communications to help engage the associates in energy & water efficiency efforts. Finally, Staples expects the Coppell Fulfillment Center's ENERGY STAR[®] performance rating will move from 78 to 85.

Annual Energy Use

(Source EUI)

Baseline(2010)



Actual(2013)



Energy Savings

26%

Annual Energy Cost

Baseline(2010)



Actual(2013)



Cost Savings

32%



The Coppell Fulfillment Center



Inside the facility