

Case Study

City of Charlottesville

Charlottesville, VA



PROJECT HIGHLIGHTS

Environmental Benefits

1,996 tons of harmful greenhouse gas emission reduced annually

Equivalent to:

- Preserving 12.6 acres of forest from deforestation* or
- Conserving 4,210 barrels of oil*

Capital Costs

\$1,835,893

Annual Savings

\$198,059

Annual Utility Cost Reduction

10%

*Sources:

- Leonardo Academy's Cleaner & GreenerSM Emissions Reduction Calculator
http://www.cleanerandgreener.org/resources/emission_reductions.htm
- U.S. Environmental Protection Agency, Greenhouse Gas Equivalencies Calculator
<http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

PROJECT DESCRIPTION Energy Savings Performance Contract

Challenge: The City of Charlottesville's utility costs increased 35% in a single year. With the rising cost of energy, the city faced a potentially significant impact on budgets now and into the future. This project involved 32 buildings, which included all the major municipal buildings (city hall, courthouse, detention center, fire station, library, parks and recreation, etc.) and nine schools, totaling 1,478,499 square feet.

PROJECT SCOPE

Solution: ConEdison Solutions, through its subsidiary, Custom Energy Services, was able to help the city decrease energy consumption and save taxpayer dollars by implementing lighting upgrades and water conservation measures.

In addition to those measures, a solar water heating system was installed in the city's fire station. Since the fire station is occupied twenty-four hours a day, seven days a week, there is a large demand for hot water. The water heaters in the facility use natural gas to heat the water. The solar hot water system uses the energy from the sun to preheat the water. This allowed the city to reduce the amount of natural gas needed to heat the water to the appropriate temperature.

Contact:

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Facilities Maintenance Manager
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Charlottesville, VA 22902
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Construction start date:

May 2008

Construction end date:

October 2008

ENERGY CONSERVATION MEASURES

Lighting system upgrade

Solar water heater installed

Water conservation

"...Custom Energy (A ConEdison Solutions Company) performed a Technical Energy and Water Savings Audit of eleven major buildings in the City of Charlottesville, VA. ...We have initiated approximately \$1 million in capital improvements, and will soon execute an energy performance contract with Custom Energy for an additional \$1.3 million of recommended improvements.

...I have been extremely impressed with the team assigned by Custom Energy. They have proven to be knowledgeable, flexible, detail-oriented professionals, whose first concern is always my first concern."

Lance Stewart
Facilities Maintenance Manager
City of Charlottesville, VA

Clients: Government & Non Profit Groups



FEDERAL

Federal Aviation Administration
New England Region,
Burlington, MA

General Services Administration,
New York, NY

General Services Administration
Department of Justice,
Dallas, TX

General Services Administration
Federal Court House Building,
Fort Lauderdale, FL

General Services Administration
Internal Revenue Service,
Farmers Branch, TX; Kansas City, MO

General Services Administration
Northeast Region,
Boston, MA

General Services Administration
R.L. Timberlake, Jr. Federal Building,
Tampa, FL

National Archives and Records
Administration,
Boston, MA

Veterans Administration
VISN #3, New York City Medical Center
New York, NY

STATE AND MUNICIPAL

Alexandria Sanitation Authority, VA

Arlington County, VA

Bergen County Utility Authority,
Little Ferry, NJ

City of Baltimore, MD

City of Baltimore, Fire Department, MD

City of Boca Raton, FL

City of Charlottesville, VA

City of Ft. Myers, FL

City of Hialeah, FL

City of Parsons, KS

City of Pittsburg, KS

City of Tallahassee, FL

City of Temple Terrace, FL

City of Winter Haven, FL

City of Ybor, FL

Essex and Union Counties, NJ

Florida Department of Environmental Protection,
Tallahassee, FL

Florida Department of Management Services,
Miami, FL

Hernando County Government,
Brooksville, FL

Kansas Insurance Department,
Topeka, KS

Miami-Dade County,
Miami, FL

Middlesex Water Company,
Middlesex, NJ

Missouri State Fairgrounds,
Sedalia, MO

New York Power Authority
(various locations),
New York, NY

Pittsburgh Housing Authority,
Pittsburgh, PA

Plant City Public Works,
Plant City, PA

Polk County Government,
Bartow, FL

Southbridge Water Department,
Southbridge, MA

St. Lucie County,
Fort Pierce, FL

State FL-Division of Fruits & Vegetables,
Winter Haven, FL

Suwannee County,
Live Oak, FL

Trenton Water Works,
Trenton, NJ

CORRECTIONAL FACILITIES

El Dorado Correctional Facility, KS

Hutchinson Correctional Facility, KS

Lansing Correctional Facility, KS

Norton Correctional Facility, KS

Winfield Correctional Facility, KS

U.S. POSTAL SERVICE

Atlanta Bulk Mail Center, GA

Atlanta Georgia Facilities, Group 1 and 2,
Crown Road Facility,
Hapeville, GA

Kilmer Processing and Distribution,
Edison, NJ

Morgan Processing and Distribution Center,
New York, NY

USPS-Central Florida District, FL

USPS-Suncoast District, FL

Whippany Processing and Distribution Center,
Kearney, NJ

SES Contracts awarded for: CA, AZ, NV, HI, Guam, CO, WY, UT, ID, OR, WA and AK

U.S. MILITARY

Florida Department of Military Affairs

Hanscom Air Force Base,
Bedford, MA

MacDill Air Force Base,
Tampa, FL

National Naval Medical Center,
Bethesda, MD

Naval Air Station,
Jacksonville, FL

Tyndall Air Force Base,
Panama City, FL

U.S. Army Garrison at Fort Hamilton,
Brooklyn, NY

U.S. Army Reserves,
New York, NY

U.S. Coast Guard,
Boston, MA

U.S. Navy, District of Washington

Anacostia Annex,
Washington, D.C.

U.S. Navy, Washington Navy Yard,
Washington, D.C.

MUSEUMS

John F. Kennedy Presidential Library and Museum,
Boston, MA

U.S. Naval Museum,
Washington, D.C.

Museum of Science and Industry,
Tampa, FL

USS Intrepid Sea, Air and Space Museum,
New York, NY