PROJECT DESCRIPTION:

Energy Conservation

Challenge: The General Services Administration (GSA) manages properties on behalf of the Federal government. ConEdison Solutions, working with GSA staff, identified energy conservation opportunities at GSA-managed facilities across Vermont, Maine and New Hampshire. The number of facilities involved, their size, and their locations created special challenges which ConEdison Solutions staff was able to overcome through careful project planning. The types of facilities include border stations, courthouses, and federal office buildings.

PROJECT SCOPE

Solution: ConEdison Solutions conducted comprehensive energy audits which focused on sources of energy consumption, patterns of consumption, savings calculations, life-cycle cost analyses, and consumption history. These energy audits were followed by detailed engineering and economic analyses. ConEdison Solutions managed the mechanical and electrical system design, metering and verification, hiring subcontractors, coordinating schedules with, and training of facility personnel, disposing of debris, and recycling materials.

Contact:
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Boston, MA 01801  
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Email: sarah.wenninger@gsa.gov

ENERGY CONSERVATION MEASURES

Lighting Upgrade
• Installed T8 lamps and electronic ballasts in buildings as needed

Energy Management System (EMS)
• Installed demand controlled ventilation
• Installed special occupancy-based controls for low-occupancy spaces
• Improved zone control of air handling units

Heating Ventilation Air Conditioning (HVAC) Upgrades
• Reduced energy consumption through innovative control of multi-zone and dual duct HVAC systems

Water Conservation
• Installed low-flow water saving fixtures
• Installed separate meters for cooling towers makeup water to receive a sewer credit for water evaporated from the cooling towers
• Saves 2,245,807 gallons of water annually*

PROJECT HIGHLIGHTS

Environmental Benefits
1,707 tons of harmful greenhouse gas emissions reduced annually*  
Equivalent to:
• Preserving 11 acres of forest from deforestation* or
• Conserving 3,268 barrels of oil*

Capital Costs
$2,411,074

Annual Energy Savings
$372,055

* Sources:
  • Leonardo Academy’s Cleaner & Greener 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
FEDERAL
Federal Aviation Administration
New England Region,
Burlington, MA

General Services Administration (GSA),
New York, NY

GSA Department of Justice,
Dallas, TX

GSA Federal Court House Building,
Fort Lauderdale, FL

GSA Internal Revenue Service,
Farmers Branch, TX

GSA Northeast Region,
Burlington, MA

GSA R.L. Timberlake, Jr. Federal Building,
Tampa, FL

National Archives & Records Administration
Boston, MA

Veterans Administration (VA)
VA, Bronx, NY
VA, Queens, NY
VA, Westchester, NY

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
Buchanan County, MO
City of Boca Raton, FL
City of Charlottesville, VA
City of Ft. Myers, FL
City of Hialeah, FL
City of Pittsburgh, KS
City of Tallahassee, FL
City of Temple Terrace, FL
City of Winter Haven, FL
City of Ybor, FL
Essex and Union Counties, NJ
FL Dept. of Environmental Protection,
Tallahassee, FL

FL Department of Management Services,
Miami, FL
Hernando County Government,
Brooksville, FL
Kansas Insurance Department,
Topeka, KS
Loudoun County, VA
Miami-Dade County, FL
Middlesex Water Company, NJ
Missouri State Fairgrounds,
Sedalia, MO
New York Power Authority, NY
Plant City Public Works, PA
Polk County Government,
Barrow, FL
Southbridge Water Department,
Southbridge, MA
St. Lucie County,
Fort Pierce, FL

Florida Division of Fruits & Vegetables,
Winter Haven, FL
Suwannee County,
Live Oak, FL
Trenton Water Works, NJ

U.S. POSTAL SERVICE
Atlanta Bulk Mail Center, GA
Barrigada Main Post Office (MPO), Guam
Billings Processing & Distribution Center
(P&D), MT
Central Florida District, FL
Chattanooga P&DC, TN
Cheyenne P&DC, WY
Denver, P&DC, CO
Dominic V. Daniels P&DC, Kearny, NJ
Eugene P&DC, OR

Grand Central Station MPO, New York, NY
Honolulu P&DC, HI

JFK Air Mail Facility, New York, NY
Kilmer P&DC, Edison, NJ
Los Angeles, P&DC, CA
Manasota P&DC, Sarasota, FL
Miami, P&DC, FL

Morgan P&DC, New York, NY
Phoenix General Mail Facility, AZ
Reno P&DC, NV
San Francisco, P&DC, CA
San Juan P&DC, Puerto Rico
Spokane P&DC, WA
Springfield P&DC and National
Distribution Center, MA

Suncoast District, FL
Teterboro P&DC, Teterboro, NJ

Trenton P&DC, NJ
Westchester P&DC, White Plains, NY
Whippany P&DC, Kearny, NJ

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

U.S. MILITARY
Florida Department of Military Affairs,
St. Augustine, FL

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

Museum of Science and Industry,
Tampa, FL

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

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