

General Services Administration Energy Savings Performance Contract (ESPC)



The General Services Administration (GSA) manages properties on behalf of the Federal government. RWE Clean Energy, 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 RWE Clean Energy staff was able to overcome through careful project planning. The types of facilities include border stations, courthouses, and federal office buildings.

RWE Clean Energy 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. RWE Clean Energy 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.

ENERGY CONSERVATION MEASURES

Lighting Upgrade

- Installed T8 lamps and electronic ballasts in buildings as needed
- Installed demand controlled ventilation
- Installed special occupancy based controls for low occupancy spaces
- Improved zone control of air handling units

HVAC Upgrades

- Reduced energy consumption through innovative control of multi-zone and dual duct HVAC systems
- Installed low-flow water saving fixtures
- Installed separate meters for cooling towers
- Saves 2,245,807 gallons of water annually*



PROJECT DATA

LOCATION

Boston, MA (New England Region)

CONSTRUCTION DATES

Completed on time

CAPITAL COSTS

\$2,241,074

ANNUAL SAVINGS

\$372,055

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*

*Sources:

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