

Anacostia Annex Naval Air Facility

Energy Savings Performance Contract (ESPC)



Challenge: The Arlington Initiative to Reduce Emissions (AIRE) has set a goal of reducing the county's emissions by 10% from 2000 to 2012. AIRE is looking for ways to reduce the county's impact on the environment while it encourages county citizens and businesses to do the same.

Solution: The Justice Center, comprising the County Courthouse and Detention Center, provided the county of Arlington with an ideal opportunity to incorporate energy performance contracting into its environmental initiatives. The two buildings measure 639,354 square feet. Con Edison Solutions, through its subsidiary, Custom Energy Services, worked collaboratively with county staff to develop a project that addressed the extremely high water use of the Detention Center, and also helped make needed system improvements. When fully implemented, these changes will create substantial emissions reductions and valuable cost and capital investment savings

ENERGY CONSERVATION MEASURES

- High Energy Lighting
- Water Conservation
- Chemical-free Cooling Tower Water Treatment
- Heat Recovery From Building Exhaust
- Energy Management System Upgrade
- Air Handling Unit Retro-commissioning and Optimization



PROJECT DATA

LOCATION

Arlington, VA

CONSTRUCTION DATES

December 2008 to December 2009

CAPITAL COSTS

\$5,390,201

ANNUAL SAVINGS

Energy: \$428,000

Non-Energy: \$29,872

Utility Cost Reduction: 31%

ENVIRONMENTAL BENEFITS

2,234 tons of harmful greenhouse gas emissions reduced annually

Equivalent to:

- Preserving 14.1 acres of forest from deforestation* or
- Conserving 4,713 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>