

HUD - Headquarters Showcase Energy Project

Background - Overview: HUD – Headquarters (HQ) staff and Honeywell International have worked together to develop a comprehensive energy project for HUD –HQ that; provides self - funding / budget neutral major facility improvements, benefits the agency and employees, meets HUD’s environmental / energy goals, highlights the success from the Presidential Performance Contracting Challenge, creates ~400 jobs and demonstrates the collaborative efforts between HUD, GSA and DOE.

The contract vehicle is the Department of Energy (DOE) Regional Super Energy Savings Performance Contract (ESPC)–IDIQ. The initial contract was awarded in 2010 for ~\$34M with a \$5M MOD in 2014. During the first year after construction, HUD-HQ realized \$2.7M in energy savings.

Project Summary: Facility improvements to HUD-HQ, a historic building on prime DC real estate include:

- Envelope Improvements – 1,485 custom-made, high-performance energy-efficient / blast-resistant windows
- Major Mechanical Systems Replacement – Conversion of entire building to variable air volume AHUs, building of a central boiler plant, new chiller installation, VFDS pumps installation, humidification system and building-wide EMCS
- Energy-Efficient Lighting – Conversion of inefficient T12 fluorescent and incandescent lighting technology to newer, more efficient fixtures
- Water Conservation – Installation of low-flow retrofits to toilets, flush valves, sink aerators, kitchen equipment, cooling towers, and showers as water conservation retrofits
- LEED Certification of building

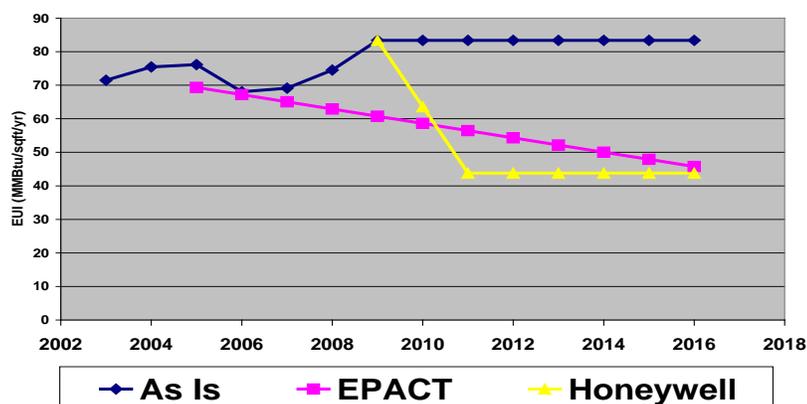


Financial Summary: The project is completely budget neutral and funded through guaranteed savings from HUD’s existing energy and operations budget. In addition to \$34M in facility improvements, \$6M in maintenance services are also included in the scope of the program. A project MOD in 2014 for \$5M added a humidification system to the entire building. The cumulative savings to HUD are in excess of \$90M over the ~ 19 year project term. Additional financial benefits that HUD realized included an avoided cost of \$4.5M by removing and not having to replace 1,585 fan coil units that have reached the end of their useful life as a result of reduced heating and cooling requirements from the new energy efficient windows. HUD also realized a reduction in on-going maintenance and repair cost from their maintenance contractor.

Benefiting HUD Employees / Agency: The project provides an improved work environment for every HUD - HQ employee from improved Indoor Air Quality (IAQ) to enhanced lighting. The Agency will benefit from; increased productivity from the employees, meeting their energy goals and increased security from blast resistant windows, energy independence and the add-on potential for sophisticated life / safety / security / surveillance and access control systems.

“Greening” HUD to meet Environmental / Energy Goals: This project allowed HUD – HQ to meet Federal EPACT -Energy Goals prior to 2016. Additional Environmental and Energy accomplishments include:

Energy Use Comparison



- Beat EPACT Energy goal
- Lower energy usage by 47%
- Reduce HUD – HQ’s carbon footprint by 50%
- Carbon reduction equal to removing 1830 cars a year from the road
- LEED Certification for HUD- HQ - potential for Silver Rating



Administration's Recovery Initiatives: The HUD – HQ Energy Project addressed the Administration's Stimulus goals by creating ~400 energy related jobs, the project was "shovel ready" and available for immediate award and turns HUD- HQ into a "High Performance Green Building".

Inter - Agency Collaborative Effort: The HUD –HQ Energy Project has involved HUD, GSA and DOE from the onset. The robust combination of Energy Conservation Measures (ECMs) with the ultimate end goal of achieving Leadership in Energy and Environmental Design (LEED) Certification under the Green Building Rating System makes this a "model" example of maximizing the results from the DOE's Energy Savings Performance Contracting vehicle. The budget neutral, comprehensive building renovation demonstrates the accomplishments of successful portfolio management between an Agency and GSA, without additional cost to Taxpayers.