

Contract Details

Contract Type:

Energy Performance Contract;
Guaranteed Energy Savings;
Renewable Energy

Facility Size:

13 developments, including elderly and family housing, encompassing over 4,300 units, 3 million square feet

Energy Project Size:

\$63 million

Energy Savings:

\$4.8 million in first year energy and water savings
37% reduction of water use
36% reduction of natural gas use
4% reduction of electrical use

Summary

The Boston Housing Authority is the largest landlord in Boston and the largest public housing authority in New England. As such, the BHA houses approximately 10 percent of the city's residents through its programs.



The Authority wanted to work closely with residents to train them in effective conservation measures and to gain their support for the project.



The Boston Housing Authority manages thirteen sites in the metropolitan area. The partnership with Ameresco will bring much needed systems upgrades to the units and includes a strenuous resident education program.

Customer Benefits

Ameresco was selected to develop and implement a comprehensive energy and water performance contract for the Boston Housing Authority (BHA). The project includes infrastructure measures at 13 developments encompassing over 4,300 housing units. Many of these structures are over 60 years old and are all in need of infrastructure improvements. This project will implement a mix of 17 energy efficiency and renewable energy measures that should result in significant energy and water savings for the Boston Housing Authority.

Ameresco assisted in the securing of financing, and will engineer, construct, commission, and train both residents and staff, measure and verify savings, and perform site inspections over the term of the 20-year contract.

Accolades

"Projects like this prove that low-income housing can also be energy-efficient housing. We're excited to be moving forward with green technology and upgrading our residents' homes at the same time."

*- Bill McGonagle, Administrator
Boston Housing Authority*

Environmental Benefits

Through its partnership with Ameresco, the Authority is projected to have the following annual carbon reduction equivalents:

- ▶ the removal of 2,181 cars from the road

- ▶ the planting of 2,706 acres of trees
- ▶ the reduction of 26 million pounds of CO₂ annually
- ▶ the powering of 1,652 average-size homes

The project helps reduce the need for energy from traditional power plants fueled by fossil fuels.

Services Provided

Energy conservation measures will include water, natural gas and electrical improvements. Water conservation measures will be installed in almost every development and will include the wholesale replacement of showerheads and aerators, including tamper-proof kitchen aerators. Additionally, Ameresco will install water efficient toilets.

Not only should the BHA see a 36% reduction of water consumption, but it will also standardize equipment. Electrical improvement measures are primarily of two types: application of the latest generation T-8 fluorescent technology; and the replacement of incandescent lamps. The result is a set of lighting improvements that will simultaneously enhance living and working conditions.

Ameresco will install a 60 kW packaged cogeneration system at Torre Unidad. The system will replace all of the domestic hot water for the development and provide all of the electrical output to be used at the development. At each of the twelve apartment buildings at Lenox Street, Ameresco will install 10 kW solar photovoltaic systems. Output will feed through inverters to the grid via the newly renovated electric distribution system in each building.

About Boston Housing Authority

The BHA was established in October 1935 by the Mayor and City Council and receives federal and state assistance to provide subsidized housing to low and moderate income individuals and families throughout the City of Boston. The BHA's mission is to provide stable, quality affordable housing and to create living environments that will help residents achieve self-sufficiency.

Learn more at

www.bostonhousing.org.

About Ameresco

Ameresco, Inc. (NYSE:AMRC) is one of the leading energy efficiency and renewable energy services providers. Our energy experts deliver long-term customer value, environmental stewardship, and sustainability through energy efficiency services, alternative energy, supply management, and innovative facility renewal all with practical financial solutions. Ameresco and its predecessors have constructed billions in projects throughout North America.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please visit www.ameresco.com.



The window units will be replaced at the Authority's administrative building.

Services Provided (cont.)

Achieving an expected 36% reduction in consumption, natural gas improvements include boiler plant decentralizations with steam-to-hydronic conversion, new boiler and apartment temperature controls, new risers and distribution repair, thermostatic radiator valve or thermostat controls, and steam trap replacement.

Heat and hot water improvements include the replacement of steam space heat and domestic hot water plants with hydronic space heat boilers, control upgrades and new hot water systems.

The resident education program is a key component of the effort. It is also our primary opportunity to employ residents. To gain resident

acceptance of the capital improvements program, to inform residents of the proposed measures, their operation, and their schedule for installation, and to maintain and even increase the level of savings, a comprehensive education program is critical. Resident understanding of the proper use of new equipment and resident willingness to adopt efficiency practices can increase realized savings.

Ameresco will work in conjunction with ongoing BHA programs to offer resident training and employment opportunities during the construction period, and in the post-construction repayment period. Each development will receive an education and training program customized for the measures and construction schedule at that development.



Top and center, the Authority's Lenox Street steam plant and steam controls. Above, the boiler room at Holgate.