

City of Cincinnati



FOR YOUR INFORMATION

Date: October 19, 2009

To: Mayor and Members of Council

From: Milton Dohoney, Jr., City Manager

RE: Energy Upgrades Underway in 39 City Buildings

On June 29, 2009 the City entered into its first Energy Services Performance Contracts with Ameresco and Honeywell. The contracts provide for the installation of nearly \$5.6 million worth of energy efficiency upgrades in 39 City Buildings, including: City Hall, the Convention Center, Centennial 2, and most of the City's police and fire stations. The City has contractual guarantees from the vendors that these projects will save at least as much money as they cost in each and every year of the multi-year agreement. If not, the vendors must write a check to make the City whole.

Work under the contracts is proceeding rapidly, with many projects already completed and others underway. The lighting, heating, air conditioning, building automation, renewable energy, and building envelope upgrades will reduce the City's energy use by 3,290,539 kWh, generate 45,817 kWh of renewable energy, and reduce greenhouse gas emissions by 3,413 metric tonnes each year.

One component of the contract that has attracted significant attention is the City Hall window project. There has been a great deal of inaccurate information in the press about this project. City Hall windows are not being replaced. The project consists of installing storm windows inside the existing single pane aluminum frame windows, and installing tinted films on windows that receive summer sun. The total cost for the City Hall window project is \$406,500 (not the \$5 million reported in the press). This money will come partly from rebates and incentives currently available for energy efficiency projects, and partially from energy savings produced by the project. The storm windows and window films are guaranteed to generate at least \$26,000 per year in energy savings. None of the money for the windows is coming from the City's general fund, and none is coming from City taxes.

The majority of the work completed under the Performance Contracts will be self-funded with guaranteed energy savings of at least \$427,740 annually. Please see the attached fact sheet for additional information on project funding sources and energy reduction. Similar contracts covering additional City buildings are expected to follow. Should you have any questions, please do not hesitate to contact Bonnie Phillips (x5310) or Larry Falkin (x5325).

Attachment

cc: Larry Falkin, OEQ Director

City of Cincinnati Fact Sheet

Energy Services Performance Contracting

Background

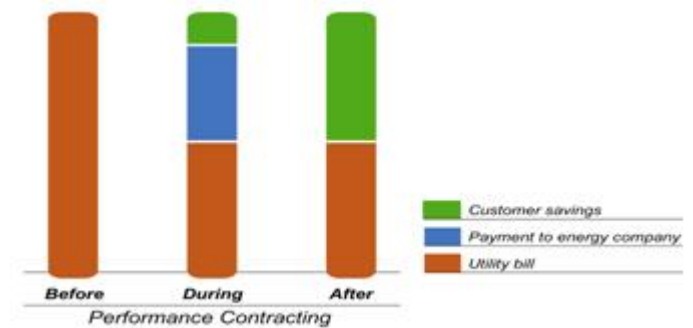
Like most cities, the City of Cincinnati is challenged by its aging facilities and limited capital funds. Most of the facilities were built at a time when energy and operational expenses were not a major factor in building design and most are now in need of technology and comfort upgrades.

What is Energy Services Performance Contracting?

State of Ohio enabling legislation introduced in 1994 (and amended in 2008) allows municipalities to fund capital improvements with energy and operational savings through a performance based contract. The installation of energy savings measures can be financed by Ohio municipalities over the average useful life of the equipment, typically 15 years, and is not included in the calculation of the municipality's net indebtedness.

How is the City of Cincinnati Currently Using Energy Services Performance Contracting?

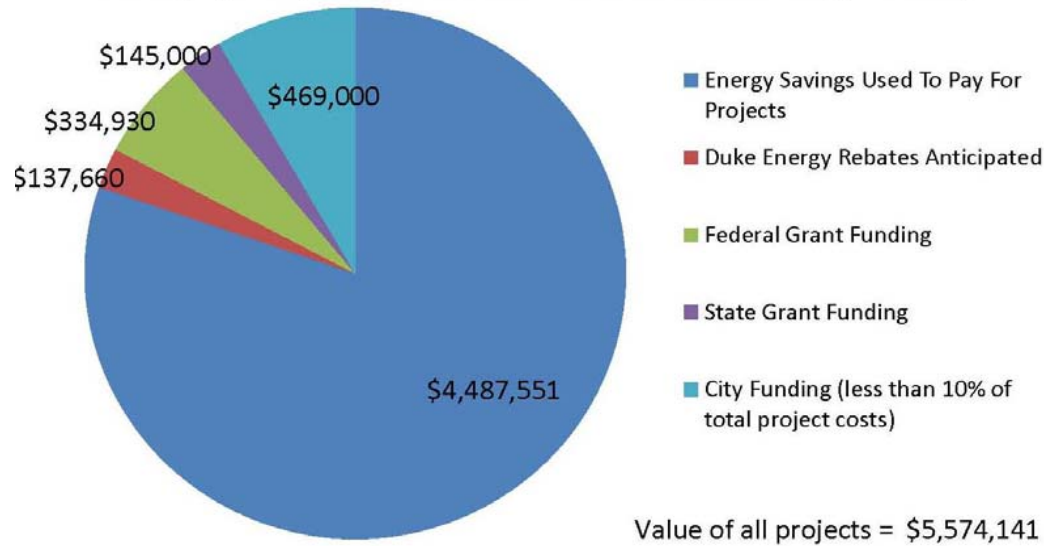
The City owns/operates nearly 400 buildings. Energy audits of key buildings have been conducted at 39 buildings to date, including City Hall and the Convention Center. With a very small amount of City capital investment, contracts to complete nearly \$5.6 million worth of energy efficiency upgrades for this first round of buildings have been signed. When the lighting, heating and air conditioning, building automation, and building envelope upgrade work is implemented, energy use will be reduced by more than 3.2 million kWh. The work will also generate 45,817 kWh of renewable energy and reduce greenhouse gas emissions by 3,413 metric tonnes (the equivalent of removing 614 cars from the road for a year or planting more than 87,000 trees).



How did the City Fund the Current Performance Contracts and what are the expected Environmental Benefits?

Total Project Costs	City Financed w/ Energy Savings	City Financed	Duke Energy Rebates Anticipated	Federal Grant Funding	State Grant Funding	Energy Reduction	Energy Generation	Greenhouse Gas Emissions Reduction
\$5,574,141	\$4,487,551	\$469,000	\$137,660	\$334,930	\$145,000	3.3M kWh/11,621 mcf	45,817 kWh	3,413 metric tonnes

Leveraging of City Dollars to Reduce Costs and Increase Energy Efficiency



What City Buildings will Receive First Round of Energy Efficiency Retrofits?

City Hall	Various Police Facilities	Various Garages	Centennial 2
Duke Energy Convention Center	Various Fire Stations	Permit Center	Radcliff 911 Response Center

What are Examples of Energy Efficiency Work Currently Being Performed in City Facilities?

- Storm windows and window tinting installation in City Hall.
- HVAC upgrades including replacement of inefficient boiler heat with energy-efficient infrared radiant heat in apparatus bays at three fire stations.
- Lighting upgrades to all facilities, including replacement of 45-1000 watt light fixtures at the Impound Lot with 49-750 watt fixtures.
- Building automation upgrades that enable facility managers to make remote efficiency/comfort adjustments to several facilities.
- Building envelope sealing, including commercial grade weather stripping at roof/wall seams, windows, and door seals.
- Solar photovoltaic system installation at the Convention Center.

What Benefits Does the City Expect as a Result of Implementing the Performance Contracts?

- A total guaranteed minimum annual City energy savings of \$427,740.
- Upgraded facilities that reduce energy use and require less maintenance.
- More comfortable conditioned air spaces.
- Reduction of greenhouse gas (GHG) emissions at City facilities.