

Memorandum

City of Lawrence

City Manager's Office

TO: Diane Stoddard, Interim City Manager
CC: Casey Toomay, Bryan Kidney, Chuck Soules, Mark Hecker
FROM: Eileen Horn, Sustainability Coordinator
DATE: November 17, 2015
RE: Energy Efficiency Retrofit Program

Background

Energy conservation and efficiency in city facilities saves energy and saves money. Staff in our departments currently use EnergyCAP software to track and monitor energy use, and to identify opportunities for savings in our buildings.

Improving energy efficiency in our facilities and operations is an investment that earns a return over time. Often, the energy-saving options (i.e. LED lighting) have a higher upfront cost. However, our annual budget cycle does not take into account the return on investment of these energy-saving upgrades. Therefore, we often end up making equipment decisions based upon the funding available at the time, and are not able to capture the long-term savings associated with more energy-efficient options. Many cities and counties struggle with this same challenge. However, innovative funding and financing models exist that can help the City achieve our energy saving goals (see page 2).

A comprehensive Energy Efficiency Retrofit Program in city-owned facilities would:

- ✓ Save energy,
- ✓ Address deferred maintenance,
- ✓ Reduce utility bills and maintenance costs,
- ✓ Provide important comfort and safety upgrades, and
- ✓ Provide leadership on sustainability and greenhouse gas emissions reduction goals.

An Energy Efficiency Retrofit Program would allow us to assess our buildings and facilities to determine potential energy saving upgrades, calculate the return on investment (ROI) to prioritize these projects, and then implement energy saving projects in our buildings.

The first step in this process would be to hire an energy management firm to conduct preliminary energy analyses and investment grade energy audits to identify potential projects. Staff would like to initiate this first step in early 2016, to have a report and prioritized projects list for the Commission to consider in time for the 2017 budget cycle.

Action

Authorize staff to issue a Request for Qualification (RFQ) to select an energy management company to assist city staff with energy analyses, calculation of savings, and project implementation.

Additional Background: Funding and Financing Options for Energy Upgrades

Energy efficiency upgrade projects may require different levels of investment. The following funding and financing options represent options that staff believes could be pursued to catalyze our city energy efficiency goals:

- *Setting aside Reserve Funds in the annual Capital Improvement Plan for energy efficiency projects.* Departments could list capital improvement needs that are specific to energy efficiency upgrades and include those in their annual CIP requests.
- *Creating a "revolving" loan fund within Equipment Reserve* similar to Douglas County's Sustainability and Energy Savings Reinvestment Fund. The incremental costs of energy upgrades (i.e. the cost difference between a standard copier and an EnergySTAR copier) is paid for through the Fund. The cost savings that result from these projects are then re-invested into the Fund annually. This provides a predictable and ongoing reserve of money for sustainability and energy improvement projects, eliminating the up-front budget impact to departments.
- *Contracting with a firm through an Energy Savings Performance Contract (ESPC).* ESPC offers a budget-neutral way to make energy-efficiency and deferred maintenance improvements—and then repay all project costs with the money saved on energy and O&M costs. The state of Kansas has a program called the [Facilities Conservation Improvement Program](#) that helps local governments, school districts, universities, hospitals, and others implement energy-efficiency projects-with no upfront capital expenditures through the ESPC model.
- *Self-financing energy savings projects by issuing "Green Bonds."* Green bonds are used to fund projects that have positive environmental and/or climate benefits. The majority of the green bonds issued are green "use of proceeds" or asset-linked bonds. Proceeds from these bonds are earmarked for green projects but are backed by the issuer's entire balance sheet. The City could choose to conduct their own process similar to the ESPC model. Instead of utilizing an outside company, the City could: 1) Hire building auditors to create a list of energy upgrades with the best return on investment, then 2) Issue Green Bonds to finance the projects on our own, and 3) Utilize the reduced energy and utility costs to pay off the bonds.