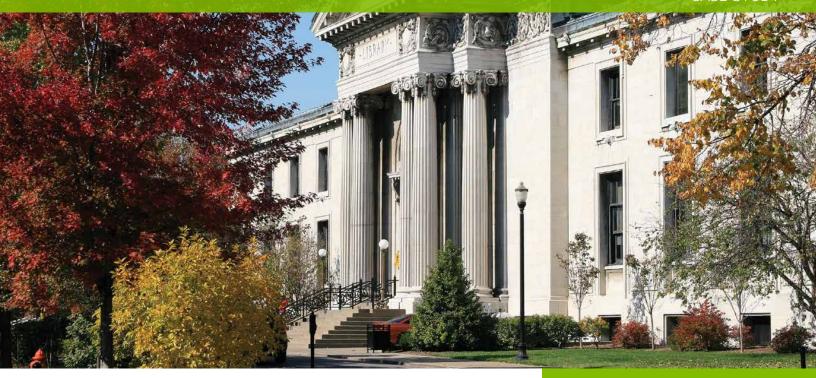
City of Louisville CASE STUDY



Creating a City of Choice Without Creating a Deficit

From the city zoo to the city hall, Louisville is improving the quality of life for all residents and making good on its promise to decrease the city's per capita energy use 25 percent by 2025.

The energy-savings initiative is part of the community's first comprehensive sustainability plan, designed to move Louisville toward becoming one of the greenest cities in the country. The plan, Sustain Louisville, was launched in 2013 to "protect the environment, reduce the metro area's carbon footprint, ensure the health, wellness and property of all citizens and create a culture of sustainability."

To achieve its sustainability goals, planners knew they would need to make critical upgrades to inefficient, high-maintenance building equipment that was – in many cases – decades past its life expectancy. Yet, Louisville Metro had limited available capital to make the improvements. So Mayor Greg Fischer and others began the search for a solutions provider that would offer a creative way to finance the effort. "A lot of people said, 'If you buy our products, they'll pay for themselves,'" said Fischer. "But we wanted assurances. Johnson Controls stepped up big time for us."

No-Risk Funding: Energy Savings Performance Contract

The Johnson Controls team designed a plan that would include nearly \$27 million in energy-efficient upgrades and repairs in municipal-owned buildings, without the need for Louisville Metro to provide capital or assume financial risk. Under an energy savings performance contract, facility improvements would be paid for up front by Johnson Controls and guaranteed to generate enough savings to pay for themselves over time. And if the

Project Financials AT-A-GLANCE:

Location: Louisville, KY Population: 750,000

Project Scope:

 \$27 million in energy efficient upgrades across nearly 200 buildings

Projected Savings:

• \$56 million over 25 years

Capital Outlay:

 \$0 (Project funded through guaranteed energy and operational savings)









savings were to fall short, Johnson Controls would assume financial liability. "When you have limited resources it's important that you get results, and that you're only paying for success," said the city's Chief Financial Officer Steve Rowland. "This approach with Johnson Controls allows us to meet that objective, and without us having to put up the capital." And, as an added bonus, because the funding mechanism doesn't affect Louisville Metro's bond capacity, it frees up capacity for other critical projects.

With funding in place, energy and infrastructure improvements got underway in late 2013 and will eventually encompass nearly 200 buildings across the metro area. The project includes water conservation efforts, lighting upgrades, HVAC upgrades, solar panels, and building management system controls to improve energy, efficiency, and sustainability in the city's buildings, libraries, parks and pools.

Combined, the improvements are expected to result in:

- Reduced energy use: The performance contract guarantees \$2.7 million in annual energy savings.
- Reduced water use: In less than a year, the Louisville Metro buildings used 395,000 fewer gallons of water.
- Reduced CO₂ emissions: The improvements are expected to reduce CO₂ emissions by 19,900 metric tons CO₂ annually, which is equal to removing 4,100 vehicles from the road.

In addition to the results guaranteed in the energy savings performance contract, the project is expected to have a positive impact on the Louisville Metro economy, by:

- Creating jobs: The project has created 400 jobs with 90% remaining in the community. The program is using local contractors and engineering partners and is also expected to exceed Louisville Metro's targets for participation from minority- and women-owned businesses.
- Attracting new business: As Louisville moves closer to becoming one of the greenest cities in the country, the city's Director of Sustainability Maria Koetter hopes the efforts will help to foster economic development. "We want potential new businesses to understand we are committed to clean air and clean water and sustainability - today, and for the future."
- Encouraging residents to join the effort: As the city's energy and water conservation efforts begin to take shape, leaders hope the success of those projects will encourage individuals to become greater stewards of the environment, too. Through citizen engagement and education initiatives, planners are creating a culture of sustainability they hope will ultimately make Louisville a healthier and more desirable city.

For the city of Louisville, energy savings performance contracting makes it possible to create an environmentally sound, vibrant and prosperous future for the metro area and its citizens.

> To learn more about the City of Louisville's comprehensive sustainability plan, visit www.johnsoncontrols.com/louisville.

Photos courtesy of Louisville Metro Government.

Printed on recycled paper.

Johnson Controls and the Johnson Controls logo are registered trademarks of Johnson Controls, Inc., or its affiliates, in the United States of America and/or other countries.

