



# Saving Money with a Triple Bottom Line Strategy



**Energy Assessments Identify 20% Energy and Water Savings for One of the Largest Cities in America**

## Asset Facts

Asset Type	Various
Date Built	Various; up to 100 years old
Geographic Area	874 sq mi

## Project Facts

Annual Energy Savings	30 million kWh
Total Annual Building Energy Savings	>20%
Annual Savings	\$2.7 million
Gross Investment	\$0 with ESPC
Funding	Performance Contract
Rebates	n/a
Rebates as % of Total Project Cost	n/a
Net Investment	\$0
Net Payback	6.0 years

## How can we help you?

Please contact Green Generation Solutions at [info@greengenerationsolutions.com](mailto:info@greengenerationsolutions.com) or 301.202.2930

## Challenge

Newly elected mayor wanted to identify opportunities to lower electricity and water costs while improving the city’s operational efficiency. Due to the vast geographic area that contained the city-owned buildings, special consideration was given to the proposed implementation strategy for the recommended energy conservation measures.

## Our Solution

GreenGen utilized a multi-faceted assessment approach to identify energy savings opportunities throughout the portfolio of buildings consisting of the following measures:

- Conducted desktop review of nearly 500 assets
- Conducted on-site Level I Audits of ten buildings, including the eight largest energy users, as well as representative libraries and fire stations
- Engineered site-specific solutions and developed energy models
- Included O&M considerations to reduce travel costs and vehicle emissions for city employees
- Developed energy data portal and messaging concepts

GreenGen’s solution had six principal elements that focused on utilizing controls and training, as well as equipment upgrades to reduce operating costs:

- LED fixture replacements
- Enhanced controls for lighting and HVAC systems
- Building envelope enhancements, including solar film, windows, and roofs
- Retro-commissioning of systems and controls
- Low flow fixtures and faucets
- Enhanced PM program integrated in city IT infrastructure

## Energy Savings – >20% in Energy Reductions Represented

kWh SAVINGS SUMMARY		
Before	After	Savings
152,524,242	122,019,393	30,504,849

ENVIRONMENTAL IMPACT SUMMARY			
<b>kWh Savings Equivalents</b>	<b>25,025 Tons</b> of greenhouse gas reductions	<b>4,861 Cars</b> removed from the road	<b>5,084</b> homes powered