

ELS CASE STUDY

CITY SQUARE SOLAR CENTER

QUICK FACTS

- **Project Name:** City Square Solar Center LED Retrofit
- **Location:** West Main Street, Hendersonville, TN
- **Gross Square Footage:** ~160,000



PROJECT DESCRIPTION

City Square Solar Center boasts one of the State of Tennessee's largest PV solar energy installations. They were the first in the area to promote energy efficient lighting, energy auditing, programmable thermostats, and 24/7 electricity timers. Their PV solar energy system generates more than 100,000 kWh per year. In addition to powering the commercial space, their system also feeds the city's electrical grid with clean power.

In keeping with their commitment to energy conservation, they hired Energy Lighting Services in 2012 to conduct a thorough lighting energy audit. Their recommendation included retrofitting 100% of their linear fluorescent lighting as well as all of their metal halide and sodium exterior wall packs. Since they produce most of their own power, they actually made money on this project. How? Because now they can sell even more energy back to the city's electrical grid. Now that is smart energy and smart money!

Energy Lighting Services.

ENVIRONMENTAL IMPACT

This energy efficiency project created a very favorable environmental impact. Not only did they save \$22,891 per year, they reduced their carbon footprint as well. The comparable metrics are as follows:



4,169 tree seedlings grown for 10 years



34 passenger vehicles driven for 1 year



161 tons of carbon dioxide gas

KEY PROJECT RESULTS					
Total Cost w/o Incentives	Financial Incentives	Net Cost of Project	Projected Annual Savings	Simple Payback Period	Return on Investment
\$42,074	\$26,062	\$16,012	\$22,891	7 months	121%
Annual Energy Use			Annual Energy Reduction		
Before Project: 393,392 kWh After Project: 164,480 kWh			58%		