

ELS CASE STUDY

COMMUNITY CHURCH

QUICK FACTS

- **Project Name:** Community Church LED Retrofit
- **Location:** Johnny Cash Pkwy, Hendersonville, TN
- **Gross Square Footage:** ~90,000



PROJECT DESCRIPTION

Community Church is a non-denominational Christian church located in Hendersonville, Tennessee. In 2014, Energy Lighting Services was hired to perform an energy efficient lighting retrofit, replacing all of their lights with LEDs. The staff and church members were very pleased with the transformation from an aesthetics perspective. Their church building is safer, brighter, and fresher looking. The administration and board were thrilled with the financial benefits.

The project had a 30% return on investment (ROI). Retrofitting to LEDs cut their energy consumption by 74% on their lighting system. The reduced their kWh usage by 264,346 per year. In addition, the heat load was reduced dramatically in their main auditorium since the LEDs produce very little heat as compared to the halogen and incandescent lights they had formerly. Their maintenance staff is very happy that they do not have to replace lights and ballasts so often like they used to.

Energy Lighting Services.

ENVIRONMENTAL IMPACT

This energy efficiency project created a very favorable environmental impact. Not only did they save \$34,007 per year, they reduced their carbon footprint as well. The comparable metrics are as follows:



21,202 trees saved annually



70 fewer cars on the road annually



283 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
\$117,491	\$0	\$117,491	\$34,007	41 months	31.4%
Annual Energy Use			Annual Energy Reduction		
Before Project: 356,150 kWh After Project: 91,804 kWh			74%		