



Giles County Schools LED Lighting Upgrade

All LED Lighting for Giles Schools

In 2017, Giles County Schools choose Excel Energy Group as the lighting contractor to update their existing lighting system with new LED technology. The projects involved replacing or upgrading over 9,000 total fixtures and sensors, reducing those facilities' lighting and maintenance costs by over **65%**—an

annual savings of over **\$217,000**.

Excel Energy Group assisted the District in obtaining project incentive money through TVA which helped pay for the project. The incentive money allowed for easy, affordable financing of the project.

Giles County Schools had mostly existing T8 fluorescent lighting. With over 7,500 fixtures being T8, Excel was still able to save the District an additional \$217,000 annually by switching all of the lighting to LED technology.

The lighting project chosen by Giles County was a Premium Design, which means it includes cosmetic upgrades in addition to energy efficiency.

Areas were noted during the audit as fixtures that could use to be replaced. Some of these fixtures were replaced with similar items that kept the same look. Other areas had surface mounted fixtures that were in a recessed ceiling. Per the design of Excel, these fixtures were replaced with recessed troffers that



added a cleaner look to the classrooms and offices where they were installed.

Excel Energy Group not only provides retrofit and replacement of interior lighting but exterior lighting as well. Fixtures like wall packs, canopies and flood lights are replaced with LED lighting. Also less common items like pole lighting and flag pole floods can be replaced with LED lighting.



GILES COUNTY SCHOOLS

Project Quick Facts:

Total Facilities:	13
Total Light Fixtures:	9,000
Total Sensors:	700
Total Cost:	\$999,300
Total Incentive:	\$74,600
Annual Savings:	\$217,800
Payback:	4.2 years

THE BOTTOM LINE:

Excel was able to reduce the District's electricity and gas usage by **1,455,300** kwh annually. That means Giles Co. will eliminate over **2,387,689 pounds** of carbon dioxide from the atmosphere every year—the equivalent of removing the emissions from burning **121,868** gallons of gasoline or **1,184,942** pounds of coal annually.

Decreased light
wattage by an
Average of
60% in
each area!

