



Rutherford County School District LED Lighting Upgrade

A Bright Future for Rutherford County

In 2006, 2010 and 2012, the Rutherford County Schools partnered with Excel Energy Group on three separate projects—one to update their lighting, one to add occupancy sensors and another to update their water system district-wide. The projects involved replacing or upgrading over 62,000

total fixtures and sensors, reducing those facilities' lighting, water and maintenance costs by over **60%**—an annual savings of over **\$1,301,000**. Before this project, RCSD spent over **\$2,186,000** a year on lighting, water and maintenance costs—now, they spend approximately **\$912,000** annually.



RUTHERFORD COUNTY SCHOOL DISTRICT

Project Quick Facts:

Total Facilities:	44
Total Light Fixtures:	53,500
Total Sensors:	8,800
Total Water Fixtures:	4,200
Total Cost:	\$8,565,000
Annual Savings:	\$1,301,000
Payback:	6.6 years

Excel retrofitted some fixtures (right) and replaced old and dilapidated fixtures (below). The light is much brighter, whiter, and more natural looking. This reduces eye-fatigue and increases student attentiveness. Excel was able to raise light levels throughout the District while simultaneously reducing total lighting cost. Furthermore, RCSD

Improved Coloring



Improved Lighting Levels (+800%)



chose to finance the entire project with Excel such that the District paid nothing upfront. The annual savings outweigh the annual costs, meaning the District is required to spend no capital improvement or operating funds to underwrite the project.

THE BOTTOM LINE:

Excel was able to reduce the District's electricity and gas usage by **11,890,000** kwh and **5,290** MMBtu annually. That means RCSD will eliminate over **20.5 million pounds** of carbon dioxide from the atmosphere **every year**—the equivalent of removing the emissions from burning **951,000** gallons of gasoline annually.

Decreased light
wattage by an
Average of
47% in
each area!

