



Background: Lighting Retrofit

As part of Austin Energy's Small Business program, St. Andrew's Episcopal School decided to pilot a lighting retrofit to LEDs, while collecting data to calculate their return on investment. Since the LED installation in August 2015, the school has avoided over 25 tons of greenhouse gas emissions and saved 27,000 kilowatt hours of energy. These initial efforts were focused on the Upper School campus, but next year St. Andrew's plans to expand to other campuses.



The LED retrofit was a collaboration between teachers, students and the facilities manager at the school. Students raised money for the project through the sale of Candy Grams on Valentine's Day. The planning process began in the spring of 2015, and the lights were installed that fall.



Monitor Usage - Teachers and students tracked electricity usage from the school's utility bills to determine the energy consumption cost per kilowatt hour. To calculate the return on investment, comparisons were made between the 2014-2015 and 2015-2016 school years. To date, LED lighting has reduced energy use at St. Andrew's by 27,000 kilowatt hours.



Research - St. Andrew's staff and students consulted with Austin Energy to gain a better understanding of the best options for a lighting retrofit. It was determined that LEDs would provide the greatest energy efficiency for the cost.



Engagement - The retrofit team worked with the school board and maintenance staff to approve the project and install the appropriate lighting. Once completed, Upper School students will present their findings to Lower and Middle School students to instill the benefits of sustainability as part of St. Andrew's curriculum.



Data & Payback - St. Andrew's had estimated that the payback time would take 21 months, but usage data confirms that it actually occurred in just nine! Over two years, the school saved close to \$3,000 on energy costs. These savings are projected to continue into the future.



Key Impact: Energy

AGBL Status: Gold Member | 2016

Liaison: Dina M. Tucker Sustainability Coordinator

St. Andrew's Episcopal School seeks students of character and intelligence from diverse ethnic, racial, and socioeconomic backgrounds. The school strives to help young people achieve their potential not only in intellectual understanding, but also in aesthetic sensitivity, physical well-being, athletic prowess, and moral decisiveness, so that they may lead productive, responsible lives, not only for themselves, but also for their community.



