


St. Raphael School

SCHOOL BUILDINGS | LIGHTING



The Rev. Michael Salah and Principal Teri Dwyer oversaw lighting upgrades at the St. Raphael School in Rockville, Maryland.

St. Raphael School's lesson in lighting

St. Raphael Catholic Church offers worship services and educational programs in Rockville, Maryland. The community includes St. Raphael School—a nursery school, kindergarten, and primary school with more than 250 students ages 3 to 14, as well as 70 employees. After a recent renovation and new addition to the school, administrators looked for ways to lower energy and maintenance costs and provide a more comfortable learning environment for students and staff.

The opportunity

The existing fluorescent lighting was old and costly, and it did not provide enough light. School administrators wanted to improve visibility for SMART boards, flexibility for classroom lighting, and security on campus.

After hearing about the lighting incentives offered by the Pepco Energy Savings for Business Program, the church pastor, the Reverend Michael Salah, contacted Smart Energy Solutions, a participating Service Provider, to learn more.

St. Raphael School Principal Teri Dwyer recalls, “We discovered that converting to LED lighting would offer us significant energy savings, and that incentives from Pepco would make the upgrades affordable.”

The upgrades

A Smart Energy Solutions representative visited the school to assess lighting needs and opportunities to save. Teachers offered insights the company could use to craft a custom plan and to provide technical support that was critical to the overall success of the project.

A distributor helped administrators select lighting products and supplied the new bulbs and fixtures. Smart Energy Solutions later coordinated installation of the upgrades and the incentive application paperwork and processing—a great convenience for St. Raphael School. “Working with a turnkey Service Provider made the entire process simple, from start to finish,” says Dwyer.

Savings at a glance

Pepco Energy Savings for Business Program

(PRESCRIPTIVE LIGHTING)

St. Raphael School used incentives to upgrade the lighting at its campus in Rockville, Maryland.

Estimated annual savings

159,000

kWh per year

\$22,000

per year

Project costs

\$117,600

total project cost

– \$62,600

incentive

\$55,000

net project cost

Estimated payback

2.5

years

Workers replaced the school's interior and exterior lights with new LED fixtures, including:

- 680 LED flat panel ceiling troffer lights
- 180 LED circular recessed ceiling canister lights
- 4-foot LED strip lights
- 30 100-watt adjustable LED parking lot pole lights
- 20 flood and wall-pack LED lights

Workers fitted classroom lights with dimmers to help teachers control lighting as needed, which also helps manage energy usage.

The benefits

Today, the exterior campus has plenty of LED bulbs to safely light the way for students, staff, and the community. Staff have enjoyed the quality, control, and flexibility of the new interior lights, which have improved the educational and work experience. Other benefits include:

- More than 50% less energy wattage per fixture
- Estimated energy savings of approximately 159,000 kilowatt-hours annually
- Estimated energy costs lowered by approximately \$22,000 annually

Dwyer says the St. Raphael School community has also become more mindful of energy-saving behavior. She notes, "We are proud to be making a difference for the environment by lowering our energy use, and we look forward to future projects to continue that effort."

The school is now looking into HVAC and exterior barrier upgrades, and the church may upgrade its lighting, as well. "The energy cost savings we're getting from the new school lighting will help subsidize future projects," Dwyer says. "We have a fabulous facility, and the lighting changes have made it even better."

The Pepco Energy Savings for Business Program provides financial incentives and technical assistance to help businesses maximize energy efficiency and reduce energy costs. Financial incentives can cover up to 70% of project costs.

Get started now

For more information, visit pepco.com/Business or call 866-353-5798.



"Without Pepco incentives, we would not have had the budget to make this project possible. Plus, the improved lighting quality has made a big impact on our learning and working environment."

– Teri Dwyer | Principal
St. Raphael School