



REALTERM
ENERGY



Case Study:
Village of Piermont, New York
LED Streetlight Upgrade

Increased Safety & Decreased Carbon Footprint

LED Streetlight Upgrade

Piermont is a village in Rockland County, New York and is home to approximately 2,510 residents.

OVERVIEW

- RealTerm Energy was selected for a full turnkey LED conversion
- 169 fixtures were installed
- 77% average reduction in energy consumption (kWh)
- 77% average savings in operating costs, approximately \$27,554/year
- Approximately 69 metric tons of greenhouse eliminated, equivalent to 15 cars removed from the road

BENEFITS OF AN LED UPGRADE

- 60 to 80% savings in energy consumption
- Up to 80% maintenance reduction
- Improved visual acuity
- Reduced light pollution
- Reduced greenhouse gas emissions

OPPORTUNITY

In 2019, the Village of Piermont wanted to significantly reduce its energy consumption, maintenance costs, and the environmental impact associated with its network of streetlights. The Village realized that once the LED streetlights were installed, they could not only achieve substantial energy and cost savings but also improve its overall lighting quality and roadway safety for both vehicle and pedestrian traffic.

The new LED fixtures will cut Piermont's streetlight energy consumption by approximately 77%, as LEDs require significantly less electricity than the high-pressure sodium lights that were previously in place. The upgrade will also decrease annual streetlight costs including maintenance by up to \$27,554 per year, due to LED's solid-state technology which last up to five times longer than the Village's existing streetlights. The new LED lights also include a 10-year warranty.

By converting its 169 streetlights to LED, the City will reduce its greenhouse gas emissions by approximately 69 metric tons over the lifetime of the fixtures. This is equivalent to eliminating greenhouse gas emissions from 15 passenger vehicles driven for one year - thus reducing Piermont's carbon footprint.









SOLUTION

The design team performed photometric analyses for 169 fixtures comprised mainly of cobraheads. The design plans utilized a 3000K color temperature throughout the Town, as it offers pedestrian comfort without compromising the safety and visual acuity required in higher classified roads and areas of high pedestrian activity. 3000K is a solid choice for residential and commercial area illumination, and for towns that want to ensure Dark-Sky compliancy. Additionally, it was determined that Leotek luminaires yielded the best balance of energy savings, cost efficiency and long-term performance. Preference was given to fixtures that would maximize available incentives to the Town.

The project's completion was on schedule and its organization was maintained throughout the project. Quality control and safety tests were performed, concluding that no issues were found.

Light trespass shields were additionally installed as per a few residential requests. This additional installation allows for the light to remain in a desired area, making sure it does not spill onto a surface which is not wanted and causing disruption.

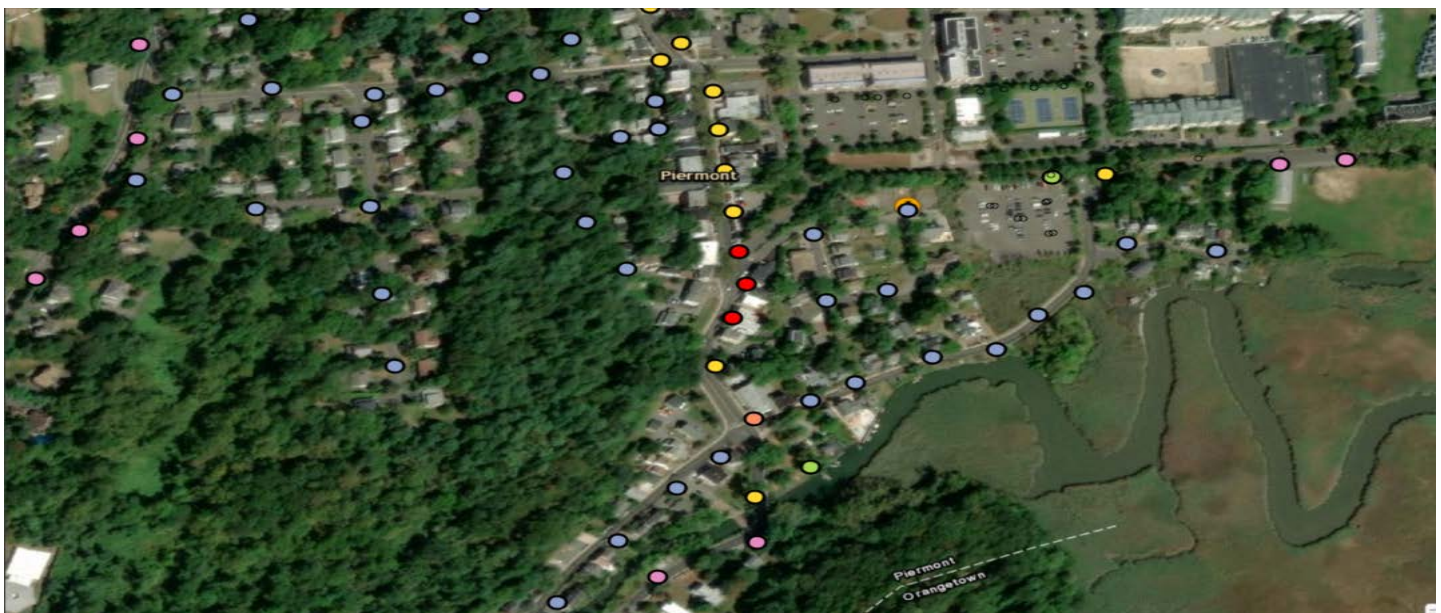
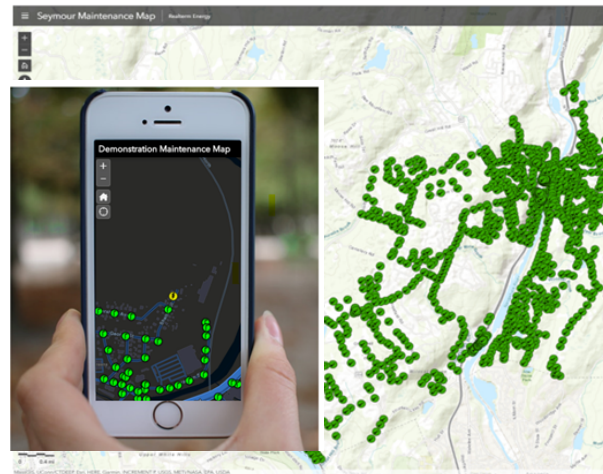
PIERMONT'S DESIGN LEGEND **LEOTEK** LITE-ON GROUP

Symbol	Wattage
	29W
	48W
	67W
	68W
	82W
	135W

MAINTENANCE SERVICES

RealTerm Energy is currently providing long-term maintenance services to the Town ensuring that these new assets continue to deliver the highest value for the municipality and protect the lighting investment.

RealTerm Energy's maintenance program is designed to reduce the burden on municipalities by streamlining outage reporting, contractor dispatching, and inventory management. This program reduces average streetlight outage time and required municipal staff time which benefits citizens, employees, and the Town.





The Energy to do Great Things

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I have nothing but positive things to say in regards to our experience with RealTerm Energy. Their team is efficient, organized and they are truly experts at what they do. From start to finish, the execution of the project was done with the up-most quality. We trusted RealTerm Energy to provide us with top value products and service, and that is exactly what we have received.

Bruce Tucker
Mayor of Piermont, NY



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