



NYSERDA

LED Street Lights

A High-Impact Action for the Clean Energy Communities Program

Communities and Local Government Team at NYSERDA

Clean Energy Communities Program

Provides **rewards and recognition** to city, town, village, and county governments that demonstrate clean energy leadership

STEP 1: Earn the **Clean Energy Communities** designation by completing **4 out of 10 high-impact actions**

STEP 2: Access **grant funding**, up to \$250K with no local cost share, to support additional clean energy projects

Dedicated and knowledgeable local coordinators are available to assist communities as they implement high-impact actions i.e. free on-demand technical support, decision support, step-by-step guidance, case studies, model ordinances, RFPs, etc.

10 High-Impact Actions

1. Benchmarking
2. Clean Energy Upgrades
3. LED Street Lights
4. Clean Fleets
5. Solarize
6. Unified Solar Permit
7. Energy Code Enforcement Training
8. Climate Smart Communities Certification
9. Community Choice Aggregation
10. Energize NY Finance



LED Street Lights

- By replacing conventional street lights with energy efficient LED technology, communities can reduce street light energy use by as much as 65 percent, generating cost savings and emission reductions.
- In addition, street light projects can contribute to creating a well-lit, safer, and more attractive community.
- LED street lights last up to 100,000 hours and require much less maintenance than conventional street lights.
- The opportunity to incorporate smart, connected technology such as dimming functions or parking management offers a world of almost unlimited possibilities.
- Even those communities that do not own their own streetlights have options for converting street lights in their jurisdiction to LED.

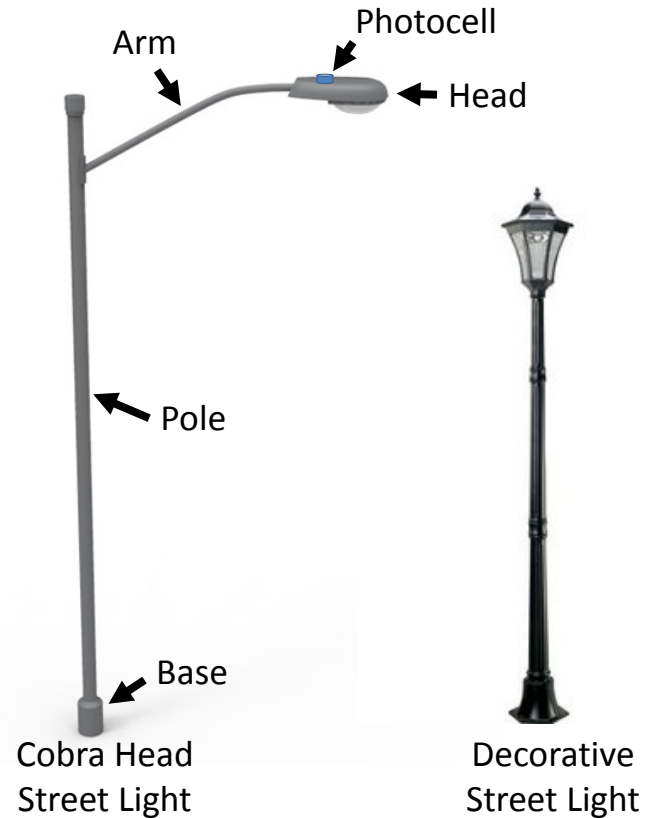
Requirements

Demonstrate completion of the LED Street Lights action by submitting the following documentation:

- Submit a completed LED Street Light Certification Form (accessed in the LED Street Lights toolkit at www.nyserra.ny.gov/cec) or comparable information demonstrating that a minimum of 50 percent of all municipal and utility-owned cobra-head-style street lights have been converted to LED within the geographic jurisdiction. This documentation should include the number of street lights converted, including the proportion of converted cobra-head street lights to total cobra-head street lights.
- A minimum of 10 fixtures must be converted to LED to qualify per jurisdiction.

Municipal Street Lights

- Today, there are ~1.1 million municipal street lights in NYS
- Costs are typically a municipal expense, borne by local taxpayers
- The most common existing technology is High Pressure Sodium
- Street lights are typically unmetered



LED Street Lights

- LEDs are energy-efficient – 60% to 70% energy savings
- Last up to 100,000 hours or over 20 years
- Low-maintenance, high-reliability
- Improved lighting, color rendering, and safety
- Platform for smart, connected technology
 - Dimming, shot-spotters, intelligent parking systems, etc.



Examples of LED Street Lights



Photo credit: LED Street Light Conversions by Lumen Light Solutions

LEDs in foreground, HPS in background

Utility Owned Street Lights - Options

For municipalities that do not own their own street lights, there are two possible pathways to LED streetlight conversion:

1. Upgrade to utility-owned LEDs, where available.
2. Purchase existing streetlights from the utility, and replace with municipally-owned LEDs.

Purchase of the Street Light System

In October 2015, Governor Cuomo signed into law the Streetlight Replacement & Savings Act (PSL § 70-a) which establishes procedures for the transfer of street light system ownership from a utility to a municipality.

- Public Service Commission is requiring all utilities to establish a process to facilitate the transfer of ownership
- Price is negotiated between the municipality and the utility
- Municipality may file an application with the Public Service Commission
- Application requirements:
 - Inventory form w/ pole numbers, location and lighting type
 - Statement explaining the need for change in ownership, including anticipated financial impacts and plans to retrofit the fixtures with energy efficient lighting

Municipal Owned Street Lights - Options

For municipalities that own their own street lights, there are a few possible pathways to LED streetlight conversion:

1. Issue an RFP for an Energy Performance Contract
2. Piggyback on a contract from another municipality
3. Participate in the New York Power Authority (NYPA) LED Street Light Program
4. Use in-house resources to procure and install LED Street Lights

Energy Performance Contract

A common tool used by municipalities for financing and implementing energy efficiency improvements

Projects can typically be accomplished with no upfront costs in a way that will generate positive cash flow to the bottom line

The Energy Performance Contract will typically include:

- Comprehensive street light system audit
- Installation of LED street lights
- Financing
- Savings guarantee

Provisions that allow other municipalities to piggyback on the contract

Tools and Resources

LED Street Light Certification Form

This certification form must be completed and submitted to earn credit for this action.

Case Study – City of Yonkers LED Street Light Project

Prepared for the Climate Smart Communities Program, this 12-page case study describes each step taken as Yonkers undertook a project to replace 11,300 street lights with LEDs.

Technical Support

Dedicated and knowledgeable local Clean Energy Coordinators are available to help municipal officials implement Benchmarking. To access this support, please send an email to cec@nyserda.ny.gov

The Bottom Line

Local government officials that implement LED Street Lights can expect to:

- ✓ Cut costs by up to \$1 million per year
- ✓ Create a well-lit, safer, and more attractive community
- ✓ Reduce the carbon footprint

Contact

Communities and Local Government

New York State Energy Research and Development Authority (NYSERDA)

Email: cec@nyserda.ny.gov

www.nyserda.ny.gov/cec