NEW YORK STATE OF OPPORTUNITY. Climate Smart Communities

PE3 Action: Outdoor Lighting Reduction

1 Points | 3 Points | 4 Points

A. Why is this action important?

Local governments may have the opportunity to reduce outdoor lighting to conserve energy, save on utility costs, and reduce greenhouse gas (GHG) emissions. This Climate Smart Communities (CSC) action involves either optimizing the lighting schedule and/or reducing the number of outdoor lighting fixtures in use, to easily reduce total energy use. However, local governments should ensure public safety is a top priority whenever any changes to lighting are considered and implemented.

B. How to implement this action

Local governments can implement this action by identifying opportunities to reduce the number of outdoor lighting fixtures or reduce the time in which the fixtures are in use. Outdoor lighting can be essential for safety and security, particularly in commercial or industrial areas; however, residents often prefer reduced outdoor lighting to decrease light pollution. The following steps outline the process for identifying opportunities to reduce outdoor lighting energy use.

1. Identify possible areas or fixtures to reduce outdoor lighting.

- Consult with a NYSERDA Clean Energy Coordinator. These coordinators are available to provide guidance to local governments on evaluating outdoor lighting as part of technical assistance with LED street lights; they can be reached at cec@nyserda.ny.gov.
- Conduct a comprehensive inventory of all outdoor lighting that covers street lights (including those owned by the local utility), traffic signals, and off-street light fixtures (in parking lots and public parks, for example). Such a comprehensive inventory will create a foundation for earning points under all the CSC actions that are focused on outdoor lighting: *PE3 Action: LED Street Lights*, *PE3 Action: LED Traffic Signals*, *PE3 Action: Outdoor Lighting Reduction*, and *PE3 Action: Outdoor Lighting Upgrades*. The inventory should describe the location, type, and condition of each light. If a comprehensive inventory is not feasible, a more focused inventory of just the outdoor light fixtures owned by the local government is still valuable and eligible for CSC points under this action as part of the strategy to reduce lighting.
- Determine if the outdoor lighting schedule can be optimized, to reduce unnecessary outdoor lighting during daylight hours.
- Identify any areas in which light pollution has been a concern. Conduct a survey or review the results of any recent resident and business surveys to identify opportunities.
- Review street lighting design specifications. If any minimum standards are exceeded in terms of lighting spacing or output, opportunities may exist to decommission fixtures.

2. Review any proposed changes with affected residents and/or businesses.

- Gather input from residents and/or businesses to confirm that the proposed changes will not adversely affect business opportunities or a sense of safety and security.

3. Implement proposed changes.

- Implemented reduced outdoor lighting plans, ensure that all minimum lighting specifications are met or exceeded.
- Monitor and report on energy savings.

- Monitor resident and business feedback to ensure changes have no negative impacts. Where possible, incorporate a question regarding lighting into annual surveys to monitor satisfaction of the levels of outdoor lighting.

C. Time frame, project costs, and resource needs

This type of effort will typically take between two to four months to implement, but the time to implement depends on the scope of the effort and the available information to develop a plan. The level of effort to reduce the lighting fixtures in use, the output of lighting fixtures, or the lighting schedule also depends on the systems and lighting technology. The costs will depend on whether the changes can be performed centrally, or if a technician must be deployed to the field to make the change to the fixture directly.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government, whether it operates its own street lights or contracts them out to a local utility. The departments of public works or transportation are most likely to lead this effort for local governments that manage their own lighting. The department responsible for managing the outdoor lighting contract will lead the effort for local governments whose outdoor lighting is provided by a local utility.

E. How to obtain points for this action

Local governments can earn points for this action by developing and implementing a strategy to reduce outdoor lighting energy use.

	POSSIBLE POINTS
Develop a strategy for reducing outdoor lighting use	1
Implement outdoor lighting reduction strategy	3

F. What to submit

For one point, local governments must submit a copy of their outdoor lighting reduction strategy (or similar engineering planning document). The strategy document should include the total number of outdoor light fixtures owned by the local government, identification of opportunities to reduce outdoor lighting, a review of minimum design standards, and feedback from affected residents or businesses. For full points, also provide documentation of the number of fixtures reduced or modifications made to the lighting schedule because of implementing the strategy. Implementation must have taken place within five years prior to the application date.

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

G. Links to additional resources or best practices

- NYSERDA Clean Energy Communities Program LED Street Lights Toolkit
- Mid-Hudson Street Light Consortium: This website has guidance documents and tools applicable to for municipalities outside of New York's Mid-Hudson region.

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.