

Appendix A: Additional Resources for Municipalities

LED Street Light Conversion Assessments

New York State Energy Research and Development Authority, *Street Lighting in New York State: Opportunities and Challenges*, December 2014 (Revised January 2015), Report Number 14-42.

Northeast Energy Efficiency Partnerships, *LED Street Lighting Assessment and Strategies for the Northeast and Mid-Atlantic*, January 2015:

http://www.neep.org/sites/default/files/resources/DOE_LED%20Street%20Lighting%20Assessment%20and%20Strategies%20for%20the%20Northeast%20and%20Mid-Atlantic_1-27-15.pdf.

Office of the New York State Comptroller, *Street Lighting Cost Containment*, 2007-MR-4, January, 2008.

Utility Tariffs

Central Hudson Gas & Electric Corporation, PSC No. 15 (Electricity), Service Classification No. 8, Public Street and Highway Lighting, Tariff Leaves: 215-224, (Leaf dates vary):

<https://www2.dps.ny.gov/ETS/jobs/display/download/5910214.pdf>

Central Hudson Gas & Electric Corporation, PSC No. 15 (Electricity), Service Classification No. 8, *Statement of Light Emitting Diode (LED) Fixture Delivery Rates*: Statement No. 4 (effective date January 20, 2016): <https://www2.dps.ny.gov/ETS/jobs/display/download/3135867.pdf>

New York Electric and Gas Company, PSC No. 121 (Electricity), Service Classification No. 3 (**Standard Street Lighting Service**), Leaves 39-61 (effective date varies):

<https://www2.dps.ny.gov/ETS/jobs/display/download/5930854.pdf>

New York Electric and Gas Company, PSC No. 121 (Electricity), Service Classification No. 4 (**Street Lighting Service – Energy Only**), Leaves 62-67 (effective dates vary):

<https://www2.dps.ny.gov/ETS/jobs/display/download/5930854.pdf>

Orange and Rockland Utilities, Inc., PSC No. 3 (Electricity), Service Classification No. 4 (**Public Street Lighting – Company-Owned**), Leaves 281-288 (effective dates vary):

<https://www.oru.com/documents/tariffsandregulatorydocuments/ny/electrictariff/electricSC04.pdf>

Orange and Rockland Utilities, Inc., PSC No. 3 (Electricity), Service Classification No. 6 (**Public Street Lighting – Customer-Owned**), Leaves 293-305 (effective dates vary):

<http://www.oru.com/documents/tariffsandregulatorydocuments/ny/electrictariff/electricSC06.pdf>

Conversion Guides for Municipalities

Anne Kimber, et al., LED Street Lighting: A Handbook for Small Communities: Iowa Association of Municipal Utilities, 2012:

<http://archive.iamu.org/services/electric/efficiency/Street%20Lighting/StreetLightingHandbook.pdf>

The Bay Area Climate Collaborative et al., *Next Generation Streetlights: LED Technology and Strategies for Action*, (DATE??): http://baclimate.org/wp-content/uploads/2014/01/nextgen_streetlight_guide.pdf

Efficiency Vermont, *Improving Efficiency in Municipal Street and Public Space Lighting*, 2010:

http://www.vecan.net/wp-content/uploads/EVT_MunicipalStreetLightingGuide_Rev040111.pdf

U.S. Department of Energy, “Energy Savings Performance Contracting,”

<http://energy.gov/eere/slsc/energy-savings-performance-contracting>

LED Technology

American National Standards Institute, ANSI/IESNA RP-8, “American National Standard Practice for Roadway Lighting” (this publication must be purchased).

International Dark Sky Association, *LED Practical Guide*: <http://darksky.org/lighting/led-practical-guide/>

***U.S. Department of Energy, Municipal Solid-State Lighting Consortium, <http://energy.gov/eere/ssl/outdoor-lighting-resources>. This Consortium shares technical information and experiences related to LED street and area lighting demonstrations, and is one of the best technical resources available to municipalities.**

***U.S. Department of Energy, *Model Specification for LED Roadway Luminaires*, <http://energy.gov/eere/ssl/model-specification-led-roadway-luminaires>.**

U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, “LED Basics”:

<http://www.energy.gov/eere/ssl/led-basics>

VHB Engineering, Surveying and Landscape Architecture, “Energy Performance Contracts for Local Governments: Industry Standards and Best Practices Guide,” prepared for the NYS Department of Environmental Conservation Climate Smart Communities Program, June 2013:

http://www.dec.ny.gov/docs/administration_pdf/epcguide.pdf

Case Studies

Ed Ebrahimian, Director, Bureau of Street Lighting for the City of Los Angeles, “City of Lost Angeles: Changing Our Glow for Efficiency,” Municipal Solid State Lighting Consortium – LED Workshop, April 2012: http://www1.eere.energy.gov/buildings/publications/pdfs/ssl/msslc_la2012_ebrahimian.pdf.

U.S. Department of Energy, “Chronicle of a City’s LED Street Lighting Conversion,” *SSL Postings*, October 6, 2015: http://energy.gov/sites/prod/files/2015/10/f27/postings_10-06-15.pdf

U.S. Department of Energy, *Maintenance Practices for LED Street Lights*, slide presentation on the experiences of the Cities of Boston, Seattle, and Los Vegas, April 14, 2014: <http://energy.gov/eere/ssl/maintenance-practices-led-streetlights>.

VHB Engineering, Surveying and Landscape Architecture, “The City of Yonkers LED Streetlight Installation: Climate Smart Communities Anchor Project 2014,” prepared for the NYS Department of Environmental Conservation Climate Smart Communities Program (n.d.).

Appendix B

Jennifer Metzger, PhD, of the Mid-Hudson Street Light Consortium has created three guides for municipalities seeking to purchase their streetlights:

<http://courtneystrong.com/services/mid-hudson-streetlight-consortium/quickstartguide/>