ENERGY RESOURCES FOR MUNICIPALITIES

LIGHTING RETROFITS

Street lighting constitutes a significant portion of municipal energy consumption and expenditures. By converting to LED fixtures, municipalities can achieve great energy and financial savings. The benefit of LED retrofits include:

- Decreased energy consumption and costs
- Longer product lifespan and reduced maintenance
- Improved community safety
- No mercury, lead, or other disposable hazards

REPLACE LIGHTBULBS

HVAC retrofits can immediately lower energy costs up to 40%, and eliminate repair costs for an inefficient system. Replacing multiple units in municipal facilities helps spread out fixed costs, and will also lower other costs related to equipment purchase and installation.

WATER PUMP OPERATIONS

Retrofitting water pumps and motors is crucial to maintaining municipal underground infrastructure, and keeping it problem free. The average pump/motor efficiency is in the range of 60 to 65%, where new pumps and motors can achieve efficiency up to 85%.

SWIMMING POOLS

Pool pumps are one of the largest consumers of energy in municipal facilities. Most older pumps are inexpensive to install, but expensive to operate. Replacing old, inefficient pumps will require less maintenance, last longer, and through slower water filtration rates, allow for better and more effective filtration of pool water.

POLICIES AND ORDINANCES

Office Building Benchmarking Guide: Engaging the Hard-to-Reach
Prepared by: Fourth Sector Strategies for StopWaste.org and the Cities of Berkeley, Boulder, Oakland, Salt Lake City, San Francisco,
and San Jose.
This study provides best practices to agencies seeking to design and implement a non-residential facility benchmarking program. It recommends several practical strategies for overcoming barriers to participation, including developing marketing messages that emphasize compliance requirements as well as benefits of participation, partnering with utilities and professional groups to promote the program, providing training and technical assistance, and utilizing one-on-one engagement.

Cool Roof Ordinance (City of LA; City of Pasadena)
Following the City of Los Angeles, Pasadena will become the second local municipality to institute a requirement for "cool roofs" for all new residential construction as well as

re-roofs when the square footage being replaced is 50% or greater. A cool roof is one that has been designed to reflect more sunlight and absorb less heat than a standard roof. Climate Resolve met with members of the community active with Transition Pasadena and the Citizens Climate Lobby (Pasadena Foothills chapter) in the spring of 2014 to advise them on cool roof policy. From there, they took the blueprint and met with the Mayor, members of the Pasadena City Council as well representatives of the city's utility, Pasadena Water and Power. This is a great step forward in meeting the City's energy efficiency and greenhouse gas reduction goals, all while reducing the urban heat island effect and helping Pasadena residents reduce their energy expenses at home. (From Climate Resolve email on 9/26/14)

City of Chicago Benchmarking Case Study (July 2014)

Prepared by: C40 Cities Climate Leadership Group

This presentation summarizes the City of Chicago's building energy disclosure ordinance, which was adopted in 2013. This ordinance requires buildings larger than 50,000 square feet to track energy usage annually, report that data to the City, and have it verified by a 3rd party every three years. This ordinance applies to 3,000 properties within the City of Chicago.

Energy Star Portfolio Manager Overview

Prepared by: U.S. EPA

This presentation summarizes the Energy Star Portfolio Manager program, which is a standardized national facility benchmarking tool. The tool assesses energy consumption, water consumption, and greenhouse gas emissions, and it provides an energy star score from 1-100 by comparing similar facility types. This presentation also provides information on how to utilize the program and gather the necessary data.