



FOR IMMEDIATE RELEASE
Sept. 19, 2011

Contact: Rachel Laing
(619) 929-7946

MAYOR JERRY SANDERS FACT SHEET

BRIGHTER, MORE EFFICIENT STREETLIGHTS YIELD MORE THAN \$2 MILLION IN ANNUAL SAVINGS

Mayor Jerry Sanders today announced a citywide project to upgrade 80 percent of the city's street lights to energy-efficient fixtures that produce a whiter light that is more like sunlight.

"This is great for San Diego from every perspective," Sanders said. "The city will save \$2.2 million annually from reduced energy and maintenance costs, and the higher-quality light will make our neighborhoods safer."

The \$16 million retrofit is funded by a financing package that includes a \$13 million bond, \$2 million in federal grant stimulus funding, and a \$3 million low-interest state loan. In addition, San Diego Gas & Electric will provide a one-time \$1.2 million rebate for the lighting change.

More than 35,000 induction technology street light fixtures, using broad band light technology, will replace the old sodium vapor lamps. The new light fixtures will make colors easier to see at night because they produce a broader light spectrum than sodium vapors.

The city chose induction lighting over LED lamps because a 20-year life-cycle study showed broad band induction lights saved more energy, were less expensive and provided better light.

The retrofit project began Sept. 13 and, when completed in early 2013, will reduce electricity consumption by 16 million annual kilowatt-hours of each year, yielding a corresponding carbon-emission reduction of more than 12,000 tons yearly.

Installation of the new lighting will be done by San Marcos-based Southern Contracting.

For more information on the citywide street lighting retrofit program, visit www.energy-sandiego.org and go to the "Street Lighting Retrofit" link.

LIGHTING UPGRADE FACTS

Funding

- \$13 million—Qualified Energy Conservation Bonds (QECBs) are taxable tax-credit bonds limited solely to fund qualified energy conservation projects. A substantial federal interest rebate makes the effective interest rate on the bonds approximately 2.4 percent.
- \$ 2 million—Federal Energy Efficiency Conservation Block Grant (EECBG) fund from the Department of Energy, which does not need to be repaid.
- \$ 3 million—California Energy Commission low-interest loan of 3 percent to be paid back through the energy-efficiency cost savings realized through the lighting upgrade.

Annual Savings

- \$1.8–million energy
- \$331,360—maintenance
- \$2.2 million—total energy & maintenance

Payback after Grant Funding and SDG&E Incentive

- 5.75 years

Other

- 35,311—number of street lights to be converted
- 46,000—current number of street lights
- \$6.25—approximate monthly energy cost savings per street light
- \$453—conversion cost per each street light
- 2,600—street lights converted each month

Induction lamps, also known as magnetic induction lights, are a modified form of fluorescent lamp that excites the phosphors in the lamp without a direct electrical connection. This excitation is induced via electromagnetic wave, hence the name induction. They have a long lifespan, which is generally between 65,000 and 100,000 hours depending on the lamp model. The main advantage of induction is its broad spectrum light characteristic, long lamp life.

Sodium vapor lights are gas discharge lamps that uses sodium to produce light. Electricity heats a tube containing sodium, which vaporizes and generates light. Sodium vapor lights are currently in widespread use for street illumination. These lamps emit a yellowish light. Compared with LEDs and induction lighting, sodium vapor lights are less energy efficient and have shorter life spans.

LEDs don't use traditional technology utilizing a bulb. Instead, the light is generated by a light emitting diode, or a semiconductor, creating an effect known as electroluminescence. LEDs have a lifespan between 50,000 and 55,000 hours. The one area where LED technology offers an advantage over induction lamps is that light is more uniform at the edges than induction.

###