
The Sydney Morning Herald

News and Features - Local Government

Advanced lamps light the path to savings

Harvey Grennan.

31 May 2011

AUSTRALIAN councils could save more than \$50 million a year and 337,000 tonnes of greenhouse gas emissions by converting to **the** latest lighting technology.

The City of Sydney council plans to replace 9000 street lights and expects to save about 40 per cent in energy costs. A multimillion-dollar tender for **the** work closed on May 3.

Councils pay a tariff to **the** energy authority towards capital costs, maintenance and network charges and they pay **the** energy costs to a retailer of their choice. They spend an estimated \$50 million a year on energy and another \$100 million on maintaining **the** 2 million arc-tube discharge **lamps** in use. And that's before **the** expected sharp rise in power costs and a carbon tax take effect.

However, there is a problem. **The** cost of converting to LED **lamps** for pedestrian street lights and environ discharge or plasma **lamps** for road lights is nearly \$600 million. It's not just a matter of replacing **the lamps**; **the** housings must also be changed.

The good news is new-generation lights would pay for themselves in four years. There would be a 60 per cent reduction in energy use for pedestrian street lights and 30 to 40 per cent for road lights. **Lamps** would need changing less often.

The way around **the** problem, says **the** executive general manager of Sylvania Lighting Australasia, Mark West, is to replace each housing as **the lamps** need replacing every three to five years.

"This leaves only **the** material costs," he says.

But who would pay? **The** housings have an economic lifespan of 20 years and many would have to be written off early. "One way forward would be for **the** replacement to be funded by **the** government or some other financial instrument and gifted to **the** asset owner," West says.

He says **the** savings could be more than \$50 million a year, with power costs predicted to soar by up to 100 per cent.

"A carbon tax could increase power costs to councils by another 20 to 30 per cent," he says. Also, **the** number of street lights is increasing because of new housing and commercial development.

The City of Sydney has trialled LED street lighting at Alexandria Park, Kings Cross, Martin Place and Circular Quay.

The new lights use less energy and have "smart" controls that allow **light** levels to be adjusted remotely to suit local conditions. Conventional street lights are preset or use clock timers.

"**The** trial produced high-quality **light** using about half as much energy as conventional lights - in a wider rollout, this could translate to million-dollar savings," says **the** lord mayor, Clover Moore.

The City of Sydney has 22,000 street and park lights - 13,500 maintained by Energy Australia and 8500 by **the** city. In 2008-09, **the** city spent \$3.5 million on electricity for public lighting and \$2 million on maintenance.