



200 George Street, near Circular Quay, Sydney, will be amongst the city most sustainable office towers.

AMP, Mirvac see the light on LED

Samantha Hutchinson

Tired of changing light bulbs? Put yourself in the shoes of a maintenance worker charged with keeping the lights running in a high-rise office tower.

But a development in LED lighting will save maintenance workers the effort, with lights that can go a decade before a single bulb needs changing.

Property giants **Mirvac** and **AMP Capital** have opted for LED lights on every single floor at their landmark office tower 200 George Street, near Sydney's Circular Quay.

LED lights, which often retail for three to five times the price of conventional fluorescent T5 Troffer lights, can run for 12 years without change, and will deliver considerable gains in energy, cost and environmental efficiency. Within five years, these lights are expected to be the industry norm, according to Lighting Council of Australia chief executive Bryan Douglas.

"They're here to stay, the costs are coming down and they're proven to have a wide range of benefits," he said.

"They give you much better control of light, you've got serious longevity which lowers maintenance costs and over time, they will supplant incandescent lights in energy efficiency."

200 George Street is the first office tower in Australia to use LED lighting for everything from its basement and plant room facilities, through to ceiling lights on every floor.

It's a first because LED lights have traditionally been difficult to use to light big areas.

"Traditionally, they've been great for

[LEDs are] here to stay, the costs are coming down and they're proven to have a wide range of benefits.

Bryan Douglas, Lighting Council of Australia

things like brake lights and traffic lights, but when you're trying to spread the light it's been more difficult," he said.

Other criticism has come for the colour of the light – it is more cost efficient to manufacture LEDs which emit a whiter, or "colder" light than a warm, yellow light, which is often more pleasing for people in the room.

They are also more expensive. The

average LED light retails for three to five times the price of a standard T5 Troffer light, which is the industry standard.

But the growing number of manufacturers worldwide (more than 10,000 in China) is bringing the cost down.

"A year ago the cost of a complete LED fit-out would have been prohibitive, however ... the costs are coming down to a point where we believe the benefit to the tenant warrants this new-generation lighting," Mirvac Group executive David Rolls said.

T5 Troffer lighting technology has plateaued and there is little potential for any further advances in energy efficiency, Mr Rolls said, whereas LED lighting could slash energy costs and consumption by up to 50 per cent.

"The current standard light tubes have a life of around two years... this has major implications for reducing maintenance costs and will lead to a significant reduction in land-fill," he added.

From the street, the FJMT-designed building looks like any other stylish development, but the lighting choice and other innovations will pit the tower amongst the city's most sustainable. A "daylight harvesting" feature means lights will dim when there is enough sunlight and other innovations include timber blinds and triple glazing.