



Media Release

11 June 2021

City moves to replace outmoded Western Power streetlights with Smart Enabled LEDs to cut CO2 emissions and energy costs

Cockburn Council has taken a vital step towards embarking on the single greatest energy reduction project the City has ever implemented.

The goal is to replace Western Power's (WP) 13,850 outmoded streetlight luminaires in Cockburn with Smart Enabled LED lamps that use 80 per cent less energy.

Following replacement, the annual cost of street lighting – which equates to 60 per cent of the City's annual electricity year for 2020/2021 – will fall from \$2.7m to \$1.56m.

The City's annual streetlight CO2 emissions would also fall by 49 per cent from 5,588 to 2,781 tonnes.

At its Ordinary Meeting on Thursday 10 June, the Council conditionally approved the \$10.64m program which would replace the streetlights with Smart Enabled LEDs.

The move follows a successful trial of 169 LED lights along portions of 55 Spearwood and Atwell streets in late 2020 using a \$94,107 Commonwealth Government Local Roads and Community Infrastructure (LRCI) grant (Round 1).

The City recently received an additional \$3.7m LRCI grant (Round 2) towards the streetlight upgrade and has also applied for a State Government Clean Energy Future Fund (CEFF) grant of up to \$2.47m which would further reduce the net cost.

The program's net cost of \$6.92m would be funded by borrowing from the City's Land Development and Investment Fund Reserve which will be repaid as a result of savings achieved by the project.

The payback is estimated at just over six years, or just over three years if the City receives the full \$2.47m CEF grant.

City of Cockburn Chief Financial Officer Stuart Downing said if the City did not embark

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on the program, street lighting costs over the next 20 years would be \$68.2m.

“If the City changes to LEDs it will reduce to \$39.8m, maybe less if the City can control the consumption of power.

“If the City does not proceed with a Council-funded proactive light replacement and instead relies on WP’s ad-hoc program over the next 40-50 years, the City will incur decades of high electricity costs.

“Western Power has assured the City it could implement the light replacement program within 12 months.”

The City has also joined the Albany, Armadale, Canning and Melville local governments to propose a super-trial that would replace 47,000 streetlights across the WP South West Interconnected System (SWIS).

“This council group believes there could be additional savings of up to 10 per cent on purchasing bulk luminaires to replace 14,000 for Cockburn or 47,000 for all five councils, when compared to the cost of WP’s ad hoc replacement of 2,000-3,000 per annum,” Mr Downing said.

“Currently WP streetlight energy use is unmetered but the Smart Enabled hardware can accurately measure consumption and councils will be negotiating for the streetlight network supply to become contestable, as are other sites like Cockburn ARC. This will help us reduce streetlight power consumption.”

City of Cockburn Sustainability Officer Jennifer Harrison said LEDs had a life expectancy of 20 years which would reduce waste to landfill compared to conventional lamps that needed more frequent replacement.

“The future replacement of the current mercury vapour lights will become problematic due to the Minamata Convention, a global treaty to protect human health and the environment from the adverse effects of mercury.”

Ms Harrison said if all 275,000 streetlights in the 113 SWIS councils were replaced with LEDs greenhouse gas emissions would be reduced by 54,000 tonnes pa.



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The City's private road lighting LED upgrade is nearing completion and Port Coogee is well underway, with 239 conversions completed to date.

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For more information contact:
Media and Communications Officer
City of Cockburn
T: 08 9411 3551
E: media@cockburn.wa.gov.au