

New Lambton Library Solar PV System



Quick Facts

System size	9.9 kW
Location	New Lambton, NSW
Total project cost	\$18,000
Date system switched on	21 December 2015
Payback	4.41 years
Internal rate of return	21%
Solar generated electricity	14,300 kWh pa
Grid consumption reduction	38.75% pa *
Energy & peak capacity savings	\$4,000 pa

* At the time that the system was completed

Technology

Solar panel type	Polycrystalline
No. of panels	39
Panel efficiency	≥ 15.21%
Panel wattage	255W

Key Benefits

- Increase Council-owned electricity generation.
- Reduce the carbon emissions associated with the purchase of grid generated electricity.
- Reduce Council's exposure to electricity prices.
- Assist Council to attain its goal to have 30% of its electricity generated from low-carbon sources by 2020.

New Lambton Library Solar Photovoltaic System

Newcastle City Council continues its commitment to supporting clean energy renewable generation with the installation of a 9.9 kW solar photovoltaic (PV) system at the New Lambton Library, Regent Street, New Lambton.

The system, which brings the total amount of solar PV installed on Council-owned buildings to 350 kW, is estimated to generate 14,300 kWh of energy per year.

This energy will be used to offset nearly 40% of grid-generated electricity used by the Library for lighting, air-conditioning, computers and other equipment

The 39-panel system was installed after it was determined that there was the potential to save Council over \$4,000 annually in electricity charges and stop the site being placed on a demand charge tariff.

The system utilises Enphase micro-inverters and can be monitored remotely to track system performance.

The system was 'switched on' on 21 December 2015.

To find out more contact Energy & Resource Management on 02 4974 2000 or visit:

www.newcastle.nsw.gov.au/environment