NEWCASTLE SMART BUILDINGS SMART WORKFORCE

No. 2 Sportsground Solar PV System

Quick Facts

System size	20.16 kW
Location	Newcastle West
Total project cost	$36,000
Date system switched on	2015
Payback	2.2 years
Internal rate of return	45%
Solar generated electricity	30,000 kWh pa
Grid consumption reduction	35% pa *
Energy and peak capacity savings	$16,400 pa

** At the time that the system was completed*

Technology

Solar panel type	Monocrystalline
No. of panels	64
Panel efficiency	≥ 19.2%
Panel wattage	315W

Key Benefits

- Increase Council-owned electricity generation.
- Reduce 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.

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

www.newcastle.nsw.gov.au/environment

No.2 Sportsground Solar Photovoltaic System

Newcastle City Council furthered its commitment to supporting clean energy renewable generation with the installation of a 20.16 kW solar photovoltaic (PV) system at the No.2 Sportsground, Newcastle West.

The system, which brings the total amount of solar PV installed on Council-owned buildings to 350kW, is estimated to generate 30,000 kWh of energy per year. This energy will be used to offset grid-generated electricity used by the building and during sporting events.

The 64-panel system was installed after it was identified as a priority site to reduce peak capacity charges. The system is anticipated to save Council over $16,000 annually in electricity and peak capacity charges. The system was 'switched on' on 14 November 2015.

To further reduce costs a 10.98 kWh battery storage system was installed in May 2016.

The battery storage will help capture excess solar generation during the day to power some of the stadium lighting into the evening. It was installed through a collaboration with local businesses Solar Power Australia, Batrium Technologies and SwitchDin.

The City of Newcastle