

Case Study – UNSW enters tripartite agreement with Maoneng and Origin to achieve carbon neutrality on energy use by 2020.

UNSW

Background

The University of New South Wales Sydney (UNSW) has set a goal to achieve carbon neutrality on energy use by 2020. As a key contributor to R&D in solar and PV panels, UNSW is already heavily invested in rooftop solar projects at their Kensington campus. UNSW was therefore seeking a new solar solution to offset their total campus load.

In addition, UNSW wanted a favourable solution to tackle the volatile electricity market and protect themselves from market price swings.



UNSW Campus Building

Opportunity

UNSW established a consortium with Energy Action (EA) (energy market advisor) and Norton Rose Fulbright

(NRF) (legal advisor) to establish a Corporate Power Purchase Agreement (PPA). Through a tailored RFP and negotiation process, the consortium worked to identify a coordinated arrangement between a reputable renewable generator (Maoneng Australia) and a retailer (Origin Energy).

Professor Ian Jacobs, President & Vice Chancellor UNSW.

“This landmark initiative is an exciting step towards realising UNSW’s goal of carbon neutrality on energy use by 2020 and reflects our commitment to making a positive global impact.”

Services Provided

Energy Action provided a range of services during the project including:

- Assisted in formulating the UNSW electricity contracting strategy
- Assisted in drafting the Request For Proposal
- Managed retailer engagement

- Provided regular advice on NEM market developments and wholesale price trends
- Modelled contractual cash flows
- Analysed multiple offers
- Scenario tested contract cost outcomes under various spot price trends
- Evaluated bridging and firming contract costs
- Worked with UNSW and NRF as part of a collaborative team to agree the retailer and PPA project goals

Outcome

On December 14, 2017, UNSW, Origin Energy and Maoneng Australia entered into a Power Purchase Agreement.



UNSW President and Vice-Chancellor, Professor Ian Jacobs. The 142kW array is part of the 692kW of solar PV arrays currently installed across rooftops at the UNSW Kensington campus.

Under the terms of the agreement, UNSW will purchase up to approximately 124,000 MWh of renewable energy per annum for 15 years. The renewable power will be sourced from Maoneng's 200 megawatt Sunraysia solar farm located in NSW, with retail supply and firming provided by Origin Energy.



Artist impression of 200MWAC Sunraysia Solar Farm

The PPA will ensure supply of renewable energy to UNSW across a number of facilities during university operating hours in support of UNSW's objective to achieve carbon neutrality on energy use by 2020.

Professor Ian Jacobs, President & Vice Chancellor UNSW.

"The Solar PPA arrangement will allow UNSW to secure carbon emission free electricity supplies at a cost which is economically and environmentally attractive when compared to fossil fuel sourced supplies."

Ivan Slavich, Chief Executive Officer, Energy Action.

"This ground-breaking agreement provides UNSW with a direct line of sight over the source of renewables supply, reduced emissions, and greater certainty around prices over the next 15 years. We are seeing a strong trend amongst corporate energy users turning to PPAs as a way to hedge against future pricing movements and to meet their green energy objectives."