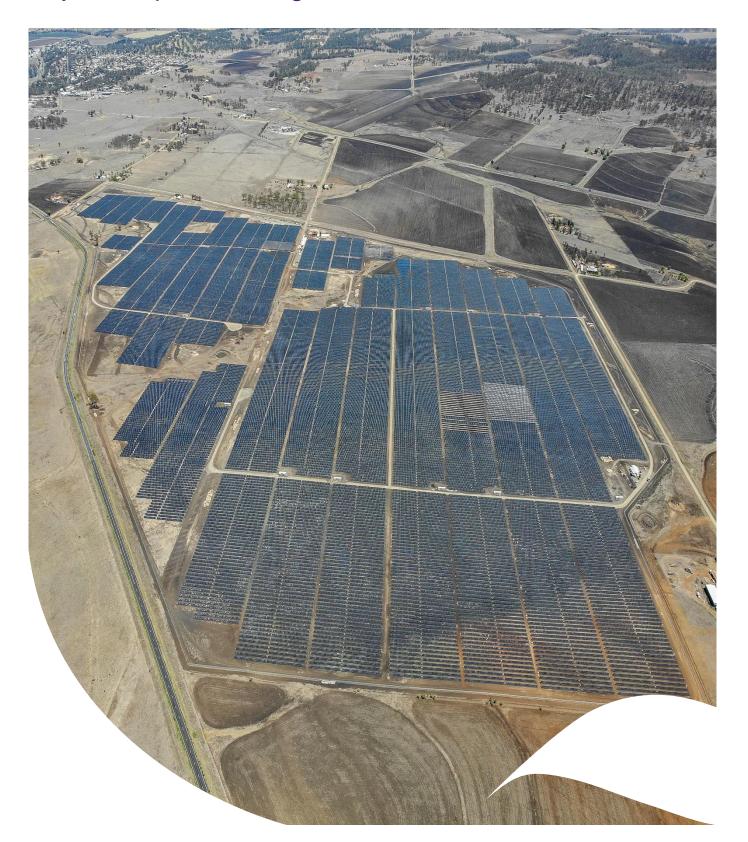


Warwick Solar Farm project

Project snap shot – August to October 2019





UQ is committed to sustainability leadership, and will be the first university in the world to generate 100 per cent of its electricity from its own renewable energy asset.

The UQ Warwick Solar Farm will enable UQ to be 100% renewable by 2020. This means the solar farm will generate as much or more electricity each year than the University needs.

The project will provide the groundwork for a wide range of new teaching, research and engagement opportunities, in addition to its environmental and financial benefits.

Lendlease has been appointed to design and construct the 154 hectare solar farm which is located at Sladevale, about 5km north of the Warwick town centre.

Lendlease have been on site since mid-February 2019 with construction work beginning in April 2019. Completion is expected in early 2020.

Read more about this project in:

- Project information
- General and technical information is available on the Sustainability website.
- Newsletters & Project Documents
- 18 April 2019 UQ News article Solar start energises Darling Downs economy
- 30 November 2018 UQ News article UQ makes 25-year solar farm commitment to Southern Downs
- 7 June 2018 UQ News article UQ to set world standard with 100 per cent renewable energy



Concept image - Warwick Solar Farm

Contact

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Aerial shots of the site



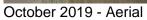
20 August 2019 - Aerial



20 September 2019 - Aerial









October 2019 – storm rolling in



25 October - installation of the last of the solar panels



Installation of the last solar panel by Andrew Wilson (Manager Energy & Sustainability) and Sarah Haskmann (Project Officer Energy Management)



Installation of the second last solar panel by Steve Dickson (P&F Director) and Bill Boyd-Law (Associate Director Project Delivery)





Steve Dickson mechanically installing one of the last solar panels



Sarah Haskmann (Project Officer Energy Management), Bill Boyd-Law (Associate Director Project Delivery), Steve Dickson (P&F Director) and Andrew Wilson (Manager Energy & Sustainability).



August to October - site works



October 2019 - UQ and Aurecon undertaking construction monitoring



October 2019 – Sarah Haskmann (Project Officer Energy Management) conducting checks on the completed assets for design and installation compliance.





28 August – installation of operations and maintenance shed (to be use for solar farm spare parts storage and maintenance workshop)

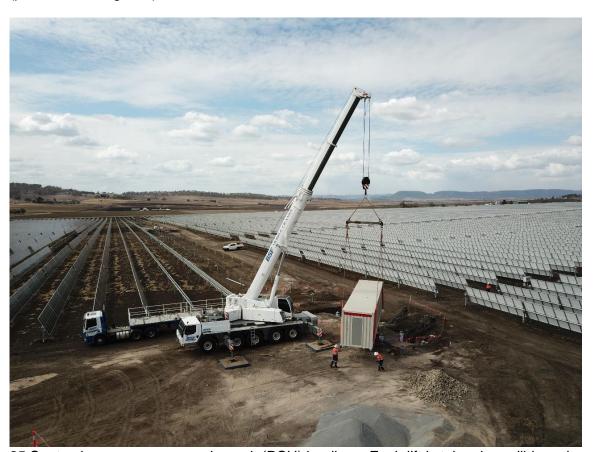


2 September - first Power Conversion Units (PCU) arrive from Spain. Weighing 26t each, the 16 PCU's are 40ft long. They are the most important items in terms of in-the-field infrastructure. Each unit houses 3 inverters which convert the power from DC (from the solar arrays) to AC, a 600v to 33,000v step-up transformer (weighing 10t alone), high voltage switchgear, and communications equipment. The PCU then sends the power to the switchyard and into the local grid.





2 September – combiner box installation. This takes all the local solar panel DC 'strings' (usually between 6-8 tracker rows worth) and 'combines' them to a single set of much larger DC cables (positive and negative) that connect to the PCU.



25 September - power conversion unit (PCU) landings. Each lift is taken incredibly seriously, using a 130t slew crane. The crane takes 1 hour to set up all outriggers and load the counterweights etc., but the lift itself only takes about 90 seconds.





25 September - PCU landings.



4 October – road building proof rolling tests. This helps test the road layers to ensure their strength and suitability before the next layer is added. A fully loaded water truck is used as a weight load, and drives along whilst observers look for ground surface movement under the wheels.





9 October – PCU installed and awaiting the cable terminations to be completed by electricians, and final soil backfilling to be completed underneath the unit.



11 October – road building – subgrade.





11 October – road building - geo-fabric to help stabilise the soil between layers.



11 October – road building - roadbase preparation.



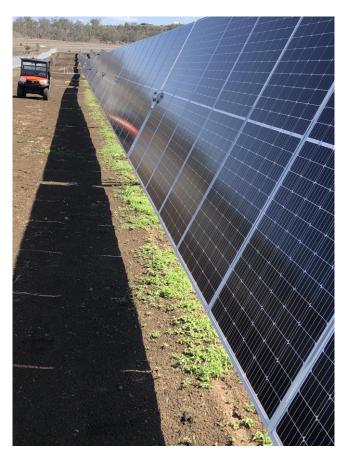


11 October – road building - roadbase preparation.



15 October – road building - finished grade.







16 October - PV condensation effect – revegetation under the tracker rows.

The last of the 204,540 PV modules and the last 4 PCUs will be installed by the end of October.



19 September 2019 - Official EV Charger Launch

Launch of state-of-the-art Electric Vehicle (EV) charging station in Warwick The two stations are equipped with three bays for simultaneous charging of three vehicles at a time, with Brisbane-made Veefil 50kW fast charger and 22kW twin charger.



Andrew Wilson (Manager Energy & Sustainability) and Deputy Mayor Jo McNally, plug in the UQ Tesla at the new charging station







Sarah Haskmann (Project Officer Energy Management) at the fast charge station.

19 August 2019 - UQ hosted site wide BBQ







9 August 2019 - Freestone State School Visit

Fifteen grade 4, 5 and 6 students from Freestone State School, visited the UQ Warwick Solar Farm with their teacher and Principal on Friday 9 August. The students are beginning a module in their Science class, looking at power and electricity. The visit allowed them to see some of these concepts in the real world and on a large scale! More information in <u>P&F News</u>







