



BULLI CREEK MARKS A NEW ERA IN AUSTRALIAN SOLAR

The multi-staged 2 GW Bulli Creek Solar Farm will be almost 20 times bigger than Australia's current largest solar farm, paving the way for future investments in the Australian large-scale solar market.

"We believe that large-scale solar is on the right side of history - it's not a matter of if projects of this scale will be built in Australia, but when."

ANGUS GEMMELL

Once completed, the farm will be the largest utility-scale solar plant in the southern hemisphere. Currently, Australia's largest solar farm is the 103 MW Nyngan Solar Plant in western New South Wales.

Solar project broker and consumer comparison service Solar Choice obtained planning approval for the project in February 2015.

Construction - expected to begin mid-next year pending power purchase agreement (PPA) negotiations - will be carried out in multi MW segments, the first of which is expected to be larger than any solar farm currently operational in Australia. The project is also expected to be the world's largest planning-approved project, as many other larger projects overseas are only conceptual at this stage.

US-based solar giant SunEdison has now formally partnered with Solar Choice to co-develop the project long-term.

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Australia, but when," Solar Choice Managing Director Angus Gemmell said.

Long-term, once the full 2 GW of capacity has been built, the plant will generate enough clean electricity to power approximately 700,000 households.

LOCATION, LOCATION

The plant will be located approximately 150 km west of Toowoomba and will span roughly 13,000 acres of cleared, flat cattle grazing land. The site was selected for both its abundant sunshine and close proximity to



A and B: Looking out over the site of the Bulli Creek Solar Farm, which is on pre-cleared country with no risk of flooding and enjoys abundant sunshine.

C: The indicative footprint of the Bulli Creek Solar Farm that was submitted for the development proposal.

D: Solar Choice Managing Director Angus Gemmill with the development proposal notification sign outside the site.

the major 330 kV power substation located along the main transmission artery spanning the New South Wales-Queensland border.

Apart from the critical need to be close to infrastructure, there was also the issue of the land suitability. The solar farm had to be on pre-cleared country with no risk of flooding. The swath of land selected met both of these criteria; a collection of three adjacent family-owned cattle-grazing properties - all cleared decades ago - straddling the Bulli Creek but located at the high end of the watershed.

Mr Gemmill says it was this relatively unusual combination of factors that made the Bulli Creek site such an attractive spot for a solar farm of this magnitude.

"There are plenty of distribution substations in rural Australia, but only a surprisingly small number of transmission nodes west of the Great Divide surrounded by broad-acre, cleared and flat land.

"We did our research and located the Bulli Creek site as ticking all the right boxes, with very large grid capacity to allow development over multiple large stages."

All of the existing wildlife corridors along the location's creeks and ridges will be preserved through the construction and operation of the solar farm.

CHALLENGES

The main challenge Solar Choice faced during the 18-month planning application process was adhering to strategic cropping land legislation, previously applied indiscriminately across much of rural Queensland.

"Our site has historically been used for cattle grazing, not agriculture, and we are located 35 km to the west of the rich Darling Downs soils, so it was a frustrating issue to deal with," Mr Gemmill says.

"Thankfully, the legislation was repealed in mid-2014, allowing a more common sense approach and a smoother process."

EYE TO THE FUTURE

There are pros and cons to developing large-scale solar PV in Australia, according to Mr Gemmill.

"We are fortunate to have vast space, abundant sunshine and the longest contiguous grid on the planet with modern infrastructure.

"On the downside in Australia, renewable energy at a federal level has become a

political battleground, and policy discussion is too often mired in emotive arguments that most other developed countries matured from and left behind years ago."

That aside, Mr Gemmill expects a range of large-scale projects to mushroom in strategic locations across Australia.

"The RET is the main driver for the retailers to sign PPAs at the moment, but in the longer term we anticipate all sorts of positive scenarios presenting themselves for Australia's energy mix, as EPC costs for large-scale PV are reduced." eco



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