## FROM SUGAR TO SOLAR: QLD COUNCIL TO BUILD 10MW SOLAR FARM

By Sophie Vorrath on 18 July 2013

The Sunshine Coast council is set to become the first in Australia to build a utility-scale solar farm, transforming 20 hectares of a former sugar cane plantation near Coolum in Queensland into a solar PV power plant that would generate enough energy to meet half the council's electricity needs for the next 30 years.

The proposed Valdora Solar Farm would be one Australia's largest – the site, which was identified as an ideal location back in 2011, has planning approval for a 10MW facility, which would make it the same size as Australia's current largest operating solar power plant, the Greenough River Solar Farm in WA.

The project will begin construction in 2014. It could become the first utility-scale solar farm to be built on Australia's eastern seaboard, if it is complete before the <u>20MW</u> project to be built in the ACT under the territory's solar auction program.

Sunshine Coast Mayor Mark Jamieson says the council hoped to get the \$24-\$30 million project under way within the next few weeks, adding that once the solar farm was operational, it would feed electricity back into the grid, save money on energy bills, and shrink the region's carbon footprint.

"If our market-sounding exercises stack up, we would be the first council to build a solar farm at utility scale in Australia, and it will be potentially the largest in the nation," Jamieson said. "This would save money, reduce our carbon footprint and take the Sunshine Coast one step closer to becoming the most sustainable region in Australia."

The council will, this Saturday, issue a call for Expressions of Interest to design and build the solar farm – the project is expected to generate around 40 jobs during construction. This will be used to confirm the cost and benefit estimates.

The council will finance the project itself, because it can access reasonably cheap funds through Queensland Treasury. It will not need a power purchase agreement, because it is the major customer. Many in the solar industry believe this could be a model for the development of solar in this country, given the reluctance of most major utilities to contract to build solar installations.

And while the council is yet to finalise due diligence on the project, the Mayor is confident it will go ahead without a hitch. Jamieson says the scheme is expected to provide a net saving to ratepayers of \$10 million over 30 years, while also generating \$10 million for the local economy over the next 10 years.

Sunshine Coast Councillor for New and Emerging Industries Stephen Robinson says even more money would be saved if the project life and output were greater than the initial conservative estimates.

"Council would also be well placed to leverage investment in the solar farm project by continuing to develop the 'clean-tech' industry hub on the Sunshine Coast," Robinson said. "The region would be able to export the skills developed during construction to similar projects within and outside Queensland – further diversifying our economy. "The environmental benefits would be substantial as council's greenhouse gas emissions from our electricity usage would be expected to drop by about 50%."

The seed for the council's ambitious solar plans was planted back in 2010, with the endorsement of its Energy Transition Plan, which set a goal for the Sunshine Coast to become a low-carbon economy, generating 40MW of power from sustainable sources by 2015 and 100MW by 2020.

Back then, Energy Parks Australia worked with the council on plans to build a utility-scale solar farm, identifying the 50 hectares of unused cane land at Valdora as an ideal site and winning planning approval for a 10MW plant to be built there. At the time, the EPA mooted plans to build a \$40 million 50,000-panel solar plant covering about 20 hectares of the site, with the balance to be used for agriculture or bio-fuel production.

Two years later, the estimated upper cost for the project has dropped by \$10 million; which goes some way to explaining why the council has now decided to proceed with the project. The council says that falling solar panel prices have helped make this the right time to invest, along with the lure of "first mover advantage," and the fact that energy contract re-negotiation with current retailers is due in 2014.

The council says it has had the full support of Energex for the project so far, with the state government-owned utility's staff and technical experts involved in discussions on the project for some time now, and set to continue working with the council during the phases ahead.

"The Valdora project represents another step in the ongoing collaboration between the Sunshine Coast Council and Energex regarding local electricity supplies and peak demand management," Energex CEO Terry Effeny said.

As part of the council's 2010 Energy Transition Plan, it sought to establish an Energy Demand Management Region of 6,000 dwellings which would allow Energex to control 6MW load during peak demand periods by 2015, and then expand that to 10,000 dwellings (control of 10MW) by 2020. Two years ahead of time, Energex already has 7,000 homes in its peak program. It is believed that the success of this initiative has encouraged Energex to embrace the solar park plan.

And that's not the only energy target the Sunshine Coast is way ahead on. The region has 30,000 houses with solar PV on them – close to 90MW in total – bringing it close to meeting its 2020 renewables goal of 100MW more than six years early.

The council says the size and scale of the Valdora solar project will help leverage investment in this and other such projects, by continuing to develop a "cleantech industry hub" on the Sunshine Coast, making the region an exponent and exporter of skills for similar projects within and outside Queensland – and thus further diversifying the local economy.

Australian Solar Energy Council John Grimes agrees, describing the project as a "fantastic initiative."

"What they've figured out is that by building their own solar power plant in southeastern Queensland, which has some of the best solar resource in the world, they can slash their pollution, they can slash their power bills, they can create employment and a new industry in the region and they can save money on their electricity bills all at the same time," he said.

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