

darling downs solar farm.



Construction and commissioning update

Construction of APAs Darling Downs Solar Farm is nearing completion with all 423,360 solar panels having now been erected across an area exceeding 200 hectares. Commissioning and performance testing work has now commenced ahead of the facility moving into operational phase.

Once activated, the Darling Downs Solar Farm will be a solar photovoltaic generation facility with potential peak power generation capacity of up to 108.5MW, enough to power up to 36,000 homes.

The total site area of 402 hectares has been divided into six areas, each comprising arrays of solar panels connected to 44 inverter stations each rated at 2.75MW. The inverter stations convert the low voltage DC from the solar panels up to 33 kilovolt (kV) high voltage AC current.

A local network of 33kV below ground power lines transmit the power from the inverter stations to the site's main sub-station that has been designed and constructed to meet the capacity of the Solar Farm. At the sub-station the 33kV input power is converted to 275 kV for connection to the Powerlink sub-station via the existing connection point at the Darling Downs Power Station, which feeds into the State grid and beyond.

The development has been underpinned by an agreement with Origin Energy for the purchase of all of the energy and the Large-scale Renewable Generation Certifications generated by the solar farm until December 2030.

The development has also been generously backed by a \$20 million grant from the Australian Government through the Australian Renewable Energy Agency (ARENA) Advancing Renewables Program, and supported by the progressive Western Downs Regional Council.

APA is looking forward to the commencement of operations and official opening of this modern generation facility.



Solar farm fast facts:

- 56,000 posts and more than 423,000 panels have been installed
- 2500km of cable were used during construction, enough to extend from Dalby to Hobart
- If you walked every row of solar panels you would cover 208km, just short of 5 Olympic marathons
- Each solar panel measures 1.96m wide 0.99m high, fractionally bigger than a single bed.
- There are 23 km of road and 26 km of backfilled trenches on the farm.

ABC Landline visits Darling Downs Solar Farm

APA was delighted to take a call a few months ago from Pip Courtney, the popular and long-standing host of the Landline program on ABC TV. Pip was interested in doing a story about solar energy development in the Western Downs region, and she asked APA to participate. We were happy to accommodate her request, and the program titled 'Farming the sun: Queensland's solar boom' aired on Sunday 19 August. It features an interview with Sam Pearce, Group Executive Networks and Power at APA. A link to the full episode follows: www.abc.net.au/news/2018-08-19/farming-the-sun:-queenslands-solar-boom/10137858

An extract of the news story titled 'Solar boom bringing "hundreds of jobs" to rural Queensland' that accompanied the Landline story follows:

A renewable energy boom across Queensland's Darling Downs is reinvigorating the region's economy, which suffered a sharp downturn when construction associated with coal seam gas development slowed. One council alone has approved one wind and 11 solar projects worth \$6 billion.

"We've got \$1.2 billion of that under construction now, and that's the

exciting thing, this isn't just about approvals, this is about action to deliver renewable energies to this region," Western Downs Regional Council mayor Paul McVeigh said.

"And we know there are another three [solar farms] in the pipeline."

When the coal seam gas industry scaled back, hundreds of jobs were lost, rental vacancies soared, and businesses failed. But Mayor McVeigh says the signs of economic recovery are becoming increasingly visible.

"We have growth in all our towns, and one of the real estate agents in Dalby has only got two houses left to rent," he said.

"One job in our small towns is really valuable, eight jobs is fantastic. This is bringing hundreds of jobs."

The area's first big project — the \$200 million Dalby Solar Farm, owned by Australian energy infrastructure company APA — is nearing completion.

It will generate enough electricity to power 36,000 homes.

"We're looking at the Beelbee solar farm which is just nearby, and if we get all the approvals we want for



that and proceed, that will be around \$200 to 300 million as well," APA's Sam Pearce said.

Mr Pearce says the Darling Downs region has become a renewable energy investment hotspot.

"There are plenty of places in Australia which have good solar resources, there are plenty of places which have good transmission lines as well, and there are lots of places which have good support from the local community," he said.

"Darling Downs has got all three of those, so that's three big ticks in its favour."

Comment from a site tour participant

Shane Charles, Chairman of Toowoomba and Surat Basin Enterprise toured the site in September and had this to say:

"I had the pleasure of being hosted by the APA team for a site tour of the APA Darling Downs Solar Farm prior to it being fully commissioned.

I was impressed with what I saw. The team are clearly passionate about all aspects of the business, and were able to talk to me in great detail not only about the infrastructure on site, but also their commitment to safety, rehabilitation and the environment.

APA clearly have big ambitions and have a passionate and pro-active team to drive the growth strategy. I commend APA on the project but also their willingness to engage openly with the community to ensure that they maintain the ever important "social license to operate".

Well done APA."



Shane Charles, Chairman of Toowoomba and Surat Basin Enterprise.

Shane inspected the site in September as part of an APA site tour.

For more information

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