

## Bendemere Solar Farm

Application Number: SSD-36651552

Due: 23/8/2023

I was asked by Efficacy Advisors if I would provide a supportive response to the EIS. I have read a number of parts of the documentation of the EIS and I am familiar with the range of issues around renewables, energy security, fossil fuels and carbon emissions. In this response I provide my justification for supporting this project with transparency and honesty and of my own accord, without influence of the original request.

Since 2020 I have been the managing director of Geni.Energy which seeks to create new jobs and investment from renewables in northwest NSW.

NSW must transition from majority coal fired power, to majority renewables and storage, based electricity supply. This is not only a climate imperative, it is a financial imperative and, in my view there is also a social imperative.

### New Renewables Cheaper Than Fossil Fuels

The CSIRO has recently reconfirmed that solar PV and onshore wind are the cheapest form of new build electricity generation<sup>1</sup> as demonstrated by this table of Levelized Cost of Energy:

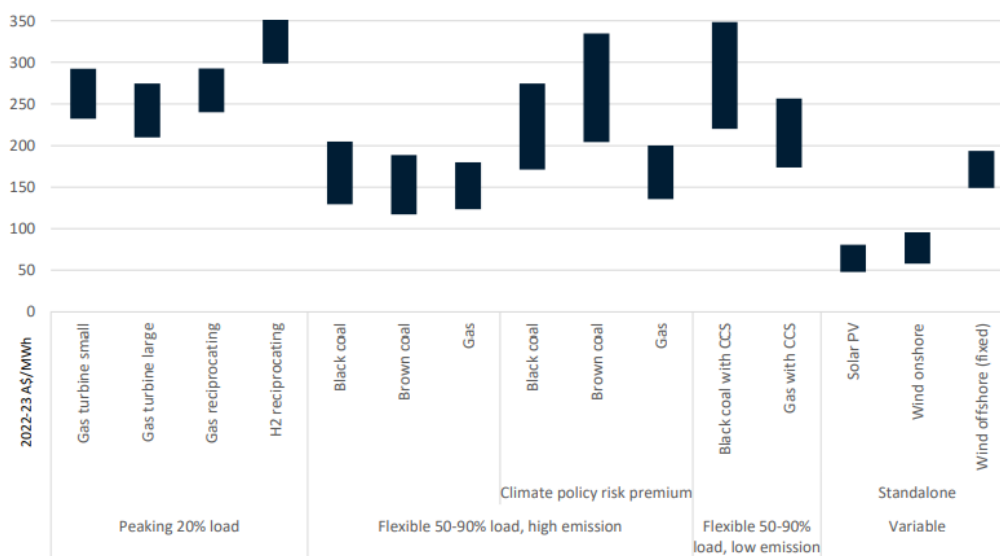


Figure 5-3 Calculated LCOE by technology and category for 2022

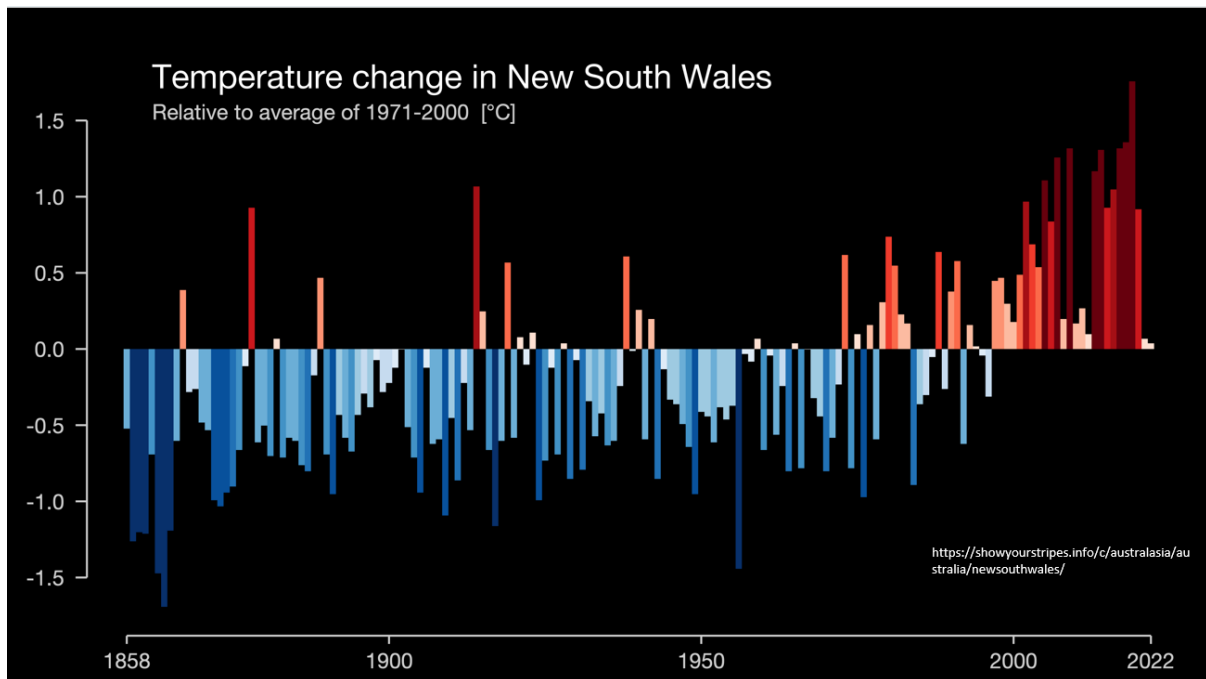
Solar PV projects need to be installed quickly as our coal fired power stations are ageing and have planned retirement timeframes. It is now financially unviable to replace them with more coal or gas fired power stations.

### Climate Change is Forcing a Change

The impacts of climate change are well documented in a range of ways. But for me, the climate stripes specifically relevant to NSW temperature fluctuation either side of the annual average, are the most confronting. These demonstrate the hotter and hotter conditions that are being seen in

<sup>1</sup> <https://www.csiro.au/en/research/technology-space/energy/Energy-data-modelling/GenCost>

our region, resulting in more difficult conditions for agriculture to continue under and harder conditions for people, vegetation and animals to live under.



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The burning of fossil fuels pumps incredible loads of carbon emissions into the atmosphere, this is well known. However, the act of mining those fossil fuels is also highly polluting in terms of the amount of carbon being pushed into the atmosphere each year.

This is very apparent when I have been analysing the NSW Government Emissions Dashboard Data, at a local government level. Due to the high level of coal mining in the Narrabri LGA the level of Scope 1 and 2 emissions are extremely high at 1.5M tonnes per annum<sup>3</sup>, or 120 tonnes per person, compared with 22 tonnes per person across NSW. Around one third of the emissions from Narrabri LGA are from fugitive emissions from coal mines and one third is from stationary emissions from the diesel burnt in largely, non-registered mine vehicles.

In Tamworth LGA, 25% of the total of Scope 1 and 2 emissions are from electricity use (344,854 tonnes CO<sub>2</sub>e p.a.).<sup>4</sup> Transitioning our electricity grid to renewables will have a large and direct impact on the LGA level emissions of Tamworth.

### Maximising Local Benefits

Geni.Energy is a not-for-profit company with a mission to create more local benefits from renewables in the northwest.

We believe that the proponent of the Bendemeer Solar Farm has put in place some effective strategies for maximising local benefits and minimising negative impacts. It is appreciated that the

<sup>2</sup> <https://showyourstripes.info/c/australasia/australia/newsouthwales/>

<sup>3</sup> Note the Emissions Dashboard data is currently from 2019

<sup>4</sup> <https://www.seed.nsw.gov.au/net-zero-emissions-dashboard>

footprint has been reduced and the impacts to Box Gassy Woodlands has been reduced with a vegetation corridor developed to help protect the riverine environment.

Given Athena is an Australian company, and it is wholly owned by Metis who already owns and operates similar projects, this bodes well for the project. Negative social impacts can occur when there is a change of ownership between development and operation and when an international corporation is the owner.

The establishment of the Bendemeer Community Benefit Fund, with decisions made locally will help bolster local events and organisations and it is beneficial that this is separate to the Voluntary Planning Agreement (VPA) negotiated with Tamworth Regional Council.

This solar farm has reduced its directly impacted footprint to 476ha, housing 210MW of solar panels. Our preference is for a model of a larger number of smaller solar farms to reduce the industrialisation of an area and the visual impacts, however the integration of sheep grazing with the solar panels at the Bendemeer Solar Farm means some agricultural production can continue.

The creation of 15 new FTE local jobs and a further 100 flow-on jobs across the state, to operate the solar farm is a benefit to the region as we shift our coal workers to new careers.

The increased demand for labour due to new renewable energy projects is a valid concern. There are already a number of groups considering this problem and possible solutions, as it is not unique to the Bendemeer Solar Farm. Nor is the lack of labour and the oversupply of jobs caused by the renewables industry. For the last ten years I have been part of government approvals processes for fossil fuel projects that have leant heavily on the justification of the mine project due to the employment outcomes. At some point, this became a key problem of new developments and it is now non-sensical to resist renewables projects on this basis. With a finite lifespan the fossil fuel industry workers will be seeking to change employment options and the renewables sector can offer this change.

According to the Northwest Baseline Report the Narrabri LGA has 1.17 jobs to every resident worker compared to 0.89 jobs in Gunnedah and 0.87 in Liverpool Plains LGA. For mining specific jobs, there are 3.16 for every 1 mine worker in the Narrabri LGA. This indicates that there is spare working capacity in these two LGAs that could be deployed in renewables projects such as the Bendemeer Solar Farm, not far away. The majority of mine workers in the Narrabri, Gunnedah and Liverpool Plains LGAs are aged between 25 and 44 so will need to be able to continue to work and will be looking at other sectors. Currently 427 mine workers come into the mining impacted region (Narrabri, Gunnedah and Liverpool Plains LGAs) from other regions, including 259 from the New England Northwest. These migrating workers are the ideal target to fulfill the 15 FTE operational jobs created by the Bendemeer Solar Farm. They can stay to work locally, without impacting on the local labour market and without an end date.

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