

Objection to SSD-10346

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I object to the application by Oxley Solar Development Pty Ltd to develop a 300MW solar farm, battery facility and associated infrastructure at 914 Gara Road Metz, 1352 Grafton Road, Metz and Grafton Road, Hillgrove.

I strongly believe that Australia needs to move to a low-carbon energy supply based as much as possible on renewable resources. The Oxley Solar Farm development undermines the potential for a rapid move to renewable energy sources by proposing an industrial solar facility in a totally unsuitable location, causing major loss of amenity value, damaging the environment and ecosystems, damaging rural lifestyles, solely for the enrichment of a very few individuals. If consent is granted, the damage to the reputation and support for renewable development will be large. The proposal should be rejected for a variety of reasons but not least because, by allowing this development to proceed, a precedent will be created that will open the door for many other developments that will severely degrade the local environment and ruin our region's ability to attract new businesses, residents and tourists. There are a huge number of sites for solar farms that will have almost no negative impacts and there are many other companies exploring and willing to develop such sites. So, rejection of Oxley Solar Development's application to develop the Oxley Solar Farm will have no negative impact on the rate of growth of renewable energy sources. Rejection will also enhance the Armidale economy.

The NSW Government Regional Plan for New England and the North West to 2036 identifies 4 primary goals:

1. *A strong and dynamic regional economy*
2. *Healthy environment with pristine waterways*
3. *Strong infrastructure and transport networks for a connected future*
4. *Attractive and thriving communities*

The Oxley Solar proposal will damage Goals 1, 2 and 4 and will contribute nothing to Goal 3. My objection centres on the damage caused to Goals 1, 2 and 4.

Addressing Regional Goal 4: *Attractive and thriving communities*

- *Direction 18: Provide great places to live 51*
- *Direction 21: Deliver well planned rural residential housing 55*

In addition to addressing Regional Goal 4 and its Directions in the following paragraphs, the Armidale Dumaresq Council Rural Residential Study of 2004, which has guided rural

residential practice since then, points out that “rural” is not just about land use but also about character, and that the Castledoyle area (along with others) was developed for rural residences in a more rural outlook. That policy obviously does not intend that rural properties should be looking onto large scale industrial developments.

The State planning guidelines for solar farms state that the following are two key criteria for assessing whether a solar farm should be granted consent:

- *(d) any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality*
- *(o) any cumulative environmental effect with other existing or likely future activities*

On the boundary of Oxley Solar Farm is the Stringybark Solar Farm which was granted a DA to proceed in late 2019. The Stringybark proposal stated their development would cost less than 65% of the lowest cost achieved by any previous solar facility in Australia, thereby claiming that the development cost was just under the \$30m development threshold to be considered a State Significant Development. This deception meant that it avoided State Significant Development assessment, thereby avoiding the assessment criterion (o) (cumulative effects) given that Oxley Solar had already registered their project with the State. The proposed Oxley Solar Farm borders the Stringybark Solar Farm. The two combined will form a contiguous industrial solar development spanning nearly 6km facing the Castledoyle Road and the Blue Hole Road, running all the way to the boundary of the National Park at the Gara Gorge entrance. All of Stringybark and much of Oxley will be built on south or west-facing slopes, dominating the northern views for substantial sections of the last 7 km of the Castledoyle Road and its extension as Blue Hole Road to the entrance of the National Park. National Parks estimates that there are approximately 45,000 visitors to the National Park at Gara Gorge every year. It is one of the two National Park recreation areas adjacent to Armidale which are the major natural environment amenities for local residents and a major tourist attraction to our area. It is appalling that companies believe that there is even the faintest chance that they would be granted permission to despoil the natural beauty and major tourist attraction of our landscape and the local National Parks.

Addressing Goal 1: A strong and dynamic regional economy

- *Direction 2: Build agricultural productivity 19*
- *Direction 3: Protect and enhance productive agricultural lands 20*
- *Direction 5: Grow New England North West as the renewable energy hub of NSW 25*
- *Direction 8: Expand tourism and visitor opportunities 28*

The proposal undermines Directions 2, 3 and 8 of Goal 1. It contributes positively to Direction 5 but as shown later in my objection, Direction 5 can also be met by building solar farms in the huge number of alternative sites that will not have the wide range of negative impacts of the Oxley Solar site (see section “There is no excuse for industrial solar in the proposed location”).

The application claims to generate a large economic benefit to the community. In practice significant economic benefit only occurs in the very short term, during the construction phase of little more than one year, and much of the employment generated will inevitably involve fly-in, fly-out workers. The longer-term benefits are small, with just a handful of positions required to operate the solar farm.

Negative impacts on the local economy will outweigh any benefits. Firstly, the location of an industrial solar farm on the boundary of our most popular National Park will inevitably reduce the value of our region as a tourist destination. It will create a major negative perception of the Armidale region, calling the lie to claims to be a region of outstanding natural environments which the region actively protects.

Secondly, a delight of our rural communities is the diversity of people from all walks of life who live in and enjoy the rural lifestyle that rural residential zoning affords. This includes a number of people who have created substantial employment in Armidale, who made active decisions to locate in Armidale because of the lifestyle. If just one of these people decides to relocate out of Armidale because Oxley Solar (or any other industrial solar farm) destroys what they came to enjoy, many jobs in Armidale will disappear, swamping any minimal extra employment that Oxley Solar will create. The risk is high because the people that create employment are those who also have the greatest opportunity to relocate because they can most afford to absorb the loss of value of their properties to obtain the lifestyle they seek elsewhere.

Thirdly, there will be significant loss of property values in the Castledoyle area, where the higher than average property values compared to many other rural residential locations around Armidale are clearly linked to the outstanding rural landscapes the Castledoyle area enjoys. Falling land values will infect all surrounding areas of Armidale as it becomes clear that a large-scale industrial could appear in any location around Armidale, creating high risk for any rural property purchaser. Falling property values will have a large negative impact on the local economy.

Fourthly, there is a broader knock-on effect if Oxley Solar is approved. Approval will create a precedent to site in inappropriate locations the many more proposals for solar farms that are being, and will be developed in the region. Allowing the Oxley Solar Farm to proceed will call the lie to all the marketing and promotion that Armidale has ever put out. In this age of social media, any future attempt to sell Armidale as a desirable place to live or to visit as a tourist will be swamped by the reality checks of our socially connected world. The message will be, “move to Armidale at your own risk. An industrial development may be placed in your front yard next year”. Or, “come and visit our National Parks and witness the travesty of industrial development on its boundary”. Businesses will not chose to locate to a town that cannot be trusted to safeguard the cornerstone to its ability to attract residents to our rural location.

Addressing regional Goal 2: Healthy environment with pristine waterways

The proposed development sits across the confluence of the two most significant permanent rivers in the Armidale region, the Gara River and Commissioners Waters. The confluence of rivers are always hotspots of ecological diversity and biological diversity. This is hugely amplified in the current case because this junction sits just outside the boundary of the National Park, such that the two rivers form the major wildlife corridors in and out of the park. The environmental sensitivity of the site is further amplified because the combined Gara River flows almost immediately into the National Park, such that any pollution entering the rivers from the Solar Farm will immediately flow into the pristine river systems of the World Heritage Listed Oxley Wild Rivers park system, which feeds into the Macleay River. As such, the Oxley Solar site sits on one of the most environmentally sensitive and ecologically and biologically diverse sites of the New England. There are many concerns about the pollution potential from solar farms, including toxic heavy metal pollution resulting from hail or fire damage, and impacts of erosion (see below). The exact level of risk of toxic pollution remains to be determined for this still very young industry. But the precautionary principle of risk assessment strongly argues against allowing the Oxley Solar development to proceed because of its location on an environmentally very sensitive and diverse site, coupled with the fact that the Armidale region is officially identified by the Bureau of Meteorology as subject to catastrophic hail storms, plus the site sits in an area subject to large uncontrolled grass fires. The fire danger of this site adds an additional risk because firefighters will usually not enter solar farms to fight fires because of the danger of becoming trapped by the rows of solar panels (see later for more detail). This inability to control a fire in the solar farm creates significant risk that a fire will spread into the National Park against which the Solar Farm sits.

Most established Solar Farm companies are on record saying that they only build on level sites. This has multiple benefits, the primary of which are: minimising visibility and hence negative impact on the amenity value of the landscape in which it sits; minimising soil erosion which becomes a risk when positioned on sloping sites; minimising build and operating costs and hence maximising economic value of the facility. I note that various bodies, including most recently the National Farmers Federation have established guidelines that solar farms should not be located on land with more than 1% slope; a slope that is greatly exceeded across most of the Oxley Solar Farm. As far as we can determine, the owners of Oxley Solar Development Pty Ltd are a Chinese company that has little or no experience building solar farms in Australia. A reputable and experienced solar farm company would not seek to develop a solar farm in the rolling landscape proposed for the Oxley Solar Farm, for most of the reasons so far outlined in my objection. In addition, most of the soils of the area in which Oxley Solar Farm would be located are highly prone to erosion. When these soils are thinly covered with vegetation, as happens during the regular droughts, they become highly susceptible to erosion, which once initiated become essentially impossible to control because it is impossible to re-establish plant growth on the sub-soils that are exposed. Solar panels have high risk of initiating gully erosion on these soils when placed on sloping ground as proposed for Oxley Solar. The run off from the panels during heavy downpours (the largest source of rainfall in our region) is concentrated in a narrow area and is more than sufficient to trigger initiation of erosion.

There is no excuse for industrial solar in the proposed location

Solar farms need to be reasonably close to high voltage power lines in order to export the power they generate to the grid. They do not need to be adjacent to the HV lines. A cursory review of other developments in Australia reveals that they are economically viable (otherwise they would not have been proposed) when located several km from the HV grid. For example the Uriarra proposal in the ACT was located 4.3km from the grid. Sites even further from the grid would remain economically viable. A very conservative estimate based on the TansGrid map of the New England indicates over 500km of HV lines located away from high cloud areas and hence potentially suitable for solar sites. Allowing for the site being a workable distance from the grid (as above) and adding in site sizes as developed and proposed, indicates that there are at least 400,000 and perhaps more than 600,000 hectares of options in the New England. Many will be unsuitable due to topography or other conflicts. But it is clear that the opportunities for alternative locations that avoid the damage to community and environment are vast in the New England. They are even greater in the rest of NSW.

Other issues

Lack of consultation and disregard for the community. Applicants for Solar Farms are expected to consult with the local community. The company held one public information session in August 2020 which was very poorly advertised. As a property owner who will see parts of the development I only found out about the session on the same day while talking to a local council staff member about other matters. The company collected emails of interested parties at the information session but no further information was sent to people who registered. I have talked to most of the people whose properties adjoin or are otherwise most directly affected by the development and none have ever been contacted by the Company. Several made attempts to contact the company for information but were unable to get a response. The information session the company held after submitting their EIS, was only announced once in the local paper (now wholly on-line and poorly subscribed) and that was on the same day as the meeting.

Fire risk. The proposed development is in an area prone to large grassfires. The local fire service has no procedures for dealing with fires on solar farms. However, in other jurisdictions the fire service policy is that they are not to enter solar farms to fight fire because the danger is too high due to the whole farm being fenced, blocking exit, and the solar panels themselves creating obstacles to line of exit, plus dangers from toxic gasses. This policy means that fires within solar farms are left to grow, greatly increasing the risk of generating a large fire-front as it crosses the boundary of the solar farm and greatly increasing risk of toxic fumes released from solar panels. Apart from dangers of fighting fires in solar facilities, solar farms have an enhanced risk of fires starting, often when wildlife (most often birds) short-out direct current cabling. As noted earlier, the location of Oxley Solar on the boundary of the National Park creates major risk that an uncontrolled fire in the facility will spread into the Park.

Risk of abandonment. Australia is in the grips of solar gold rush for which Commonwealth, State and local area planning seem woefully ill prepared. There is severe risk that the massive expansion in solar that is underway will cause electricity prices during peak solar farm generating hours to collapse. Uneconomic and sometimes negative wholesale feed-in prices already occur during peak solar generation hours in Queensland. This will potentially lead to many sites becoming uneconomic. This appears to have happened in South Australia where at least one site has reportedly already been abandoned. Whether or not this is true (I urge the planning committee to seek expert opinion) it is very clearly a future risk. What then happens to a site that the holding company abandons because it files for bankruptcy? What assurances will be required of the future owners? Who will clean up the abandoned industrial site?

Declaration of political donations

I have not made any political donations (reportable or otherwise) in the previous two years.