Objection to Oxley Solar Farm-SSD No 10346

I am writing to lodge **my strong objections** to <u>Oxley Solar Farm-SSD No 10346</u> on many grounds. I am objecting on behalf of all those who have been, or will be placed in this awful position! We are subjected to an unwanted monstrosity placed in an environmentally, inappropriate area until regional plans and policy are put in place that clearly outline acceptable, and welcomed areas in which to place industrial solar plants in the New England region.

I am supportive of solar energy, have solar panels installed on our property and understand the important part it will play in the future of renewable energy for generations to come. I also fully endorse the group objection put forward by Castledoyle Solar Farm Action Group.

Firstly, may I begin by saying that you, as the Approving Authority, are placed in an extremely difficult position as the expectation on you to be Industrial Solar Plant experts to evaluate this proposal accurately, is enormous. The technical breadth needed to analyse the impacts of an industrial solar plant proposal encompass a wide range of well-regarded professions and is perhaps more suited to independent experts. Our first impression was that the Oxley Solar Farm DA was well presented and looked to be thorough, but upon reading more closely and then more widely of other similar DA's, it became obvious that large parts of the DA are misleading, understated, overstated or missing altogether, it is simply a desktop, tick-the-box development application.

Two documents that will provide you with great insight and information & be very useful to cross reference with the Oxley Solar Development are:

Victorian Civil and Administrative Tribunal (VCAT) – **BOOKAR** Renewables Pty Ltd (Infinergy Pacific) vs Corangamite Shire Council - 15th August 2019

https://www.vcat.vic.gov.au/resources/bookaar-renewables-pty-ltd-v-corrangamite-shire-council

NSW Farmers Renewable Energy Landholder Guide (RELG) has been produced by the NSW Farmers' Association (NSWFA) with funding from the NSW Department of Planning, Industry and Environment – 09/19 to be of assistance to both landholders and solar farm proponents:

http://www.nswfarmers.org.au/NSWFA/Content/IndustryPolicy/Resource/Renewable Energy Landholde r Guide.aspx

Objections based on the Consultation Process

"The community engagement principles that should inform a plan are:

- mutual benefit
- mutual respect
- relationship-building
- authenticity
- appropriateness
- ongoing engagement
- transparency and responsiveness"

(A Guide for Renewable Energy Developers p7

https://www.energy.vic.gov.au/ data/assets/pdf file/0027/91377/Community-Engagement-and-Benefit-Sharing-in-Renewable-Energy-Development.pdf)

and on all these principles, Oxley Solar Development's approach would be deemed a complete failure.

The whole planning process is strongly weighted in favour of the solar proponent having had a very long lead time. The proponent's planning process is secretive and divisive in rural communities where neighbours and the locals rely on each other for physical and emotional support, particularly in very trying times of drought and other natural disasters. Solar proponents sneak around rural communities speaking to Councils and scoping favourable sites from which they can make the most money. No regard is given to the local community – it is simply a money grab to find places closest to power lines that they can tap into to save themselves masses of money. Individual landholders are quietly approached and then sign confidentiality agreements as part of their contracts that prevent them from talking to their families or neighbours.

Years later, with no forewarning, letters appear in some mailboxes in the surrounding area, and I mean only some! This is the first step of the solar companies' consultation process. RELG 0919 states "At a minimum, neighbours and their community should be informed about the project once the project enters the planning stage." Oxley Solar Developing Pty Ltd's attempts at engaging with the local community were laughable. Whilst they 'tick the boxes' for community consultation, it is disingenuous and selective. None of what they have done could be seen as a professional and genuine attempt at community engagement.

Following this initial consultation period, it then becomes incumbent on those few people in the local community who were informed, to inform the very large number who weren't. Were this not to happen, the process would play beautifully into the proponents hands as Oxley Solar Developing Pty Ltd's DA would have very few objectors and would sail through the Approval process unopposed. Again, **a weak attempt** by Oxley Solar Developing Pty Ltd to inform locals honestly and openly, is an underhand attempt to get through the Approval process easily and I object to this strongly.

With Oxley Solar Developing Pty Ltd having had a few years in which to gather all the information necessary for their DA, and it also being their field of expertise, once it is lodged, the local community on which the DA will have the greatest impact, has only very limited time in which to respond. Responding involves lodging a submission and not everyone is comfortable with this procedure. To add credence and value to an Objection, involves reading and understanding many large legal and jargon-loaded documents, searching for appropriate Government regulatory authorities and documents, personnel and information to gain an understanding of all that is involved. This is an enormous undertaking and again is strongly weighted in favour of the solar proponent, and I adamantly object to this process. With no National, State, regional or local policy that prescibes guidelines for the location of solar energy facilities, individuals are placed in this horribly difficult position we are experiencing. It is hugely unfair!

I continue to implore the Armidale Regional Council to become proactive, show great leadership and work with other Councils to declare areas within their region where renewable energy facilities would be welcomed by the community, set boundaries valuing the natural and agricultural assets of their region where renewable energy facilities would not be welcomed and set guidelines for renewable energy proponents to adhere to. This would then mitigate the emotional, financial and physical stress experienced by anyone placed in the reactive situation we have been, whilst trying to maintain their full time jobs and busy lives. As Armidale is a designated hotspot for renewable energy, the sooner this is done the better.

The total lack of professional consultation with the local aboriginal community is reprehensible.

Objections based on Site selection

As mentioned earlier, I am not against solar energy production but I am against the inappropriate placement of industrial solar plants, and the location of the industrial Oxley Solar development is totally inappropriate for the following reasons:

Section 4.6 Solar site selection (RELG) states that

"When searching for potential locations for hosting a solar farm, developers will typically consider the following key factors:

- Distance from existing transmission lines (preferably less than 25km) and available network capacity;
- Topography (preferably less than 1 per cent slope)"

With Oxley Solar factory being proposed on a topographic slope of 5% and greater, and completely at odds with other successful proposals where they are well hidden, sited appropriately and built on relatively flat land. The placement of the Oxley Solar development in the Castledoyle area is a demonstrably inappropriate one.

"The introduction of an industrial sized solar power station will not sit well in this 'inappropriate' setting. Its introduction will change this landscape from a rural 'grass' vista to an unnatural 'glass' vista. It will introduce a massive industrial feature into the pleasant rural landscape." VCAT Finding p 39

The photographs of the Castledoyle area, used by Oxley Solar Development Pty Ltd in their documentation, are staged to support their development but totally misrepresent the 'real' picture of the landscape. Any professional photographer given a brief to photograph this potential solar development would be aghast at what has been submitted. It is highly insulting to the local community, totalling misleading to anyone making a judgement on this DA and an opportunistic, dishonourable attempt to 'sell' a proposal. Zoom lenses are used and photographs, taken at inappropriate vantage points, are stitched together to hide the real impact this solar development will have on the local community and our world recognised tourist attraction. This is a wilful attempt to mislead those vested with the decision on this DA.

It is a gross overstatement that solar factories must be located close to transmission lines for the financial viability of the development. This belief just exemplifies the true nature of their DA – purely financial gain for their own benefit with little regard for anything else. The planned Uriarra proposal near the ACT was relocated 60kms away from the initial site based on informed community objections. A quote from a very current document **Section 4.6 Solar site selection (RELG)** quotes solar factories can be located at "a distance of preferably less than 25kms."

The site selection criteria of minimal environmental constraints and minimal impact & proximity to residential settlement considered by Oxley Solar Development Pty Ltd are almost laughable as they fly in complete contradiction to where the site is proposed, the environment it affects and the community surrounding it.

Objections based on Tourism

Contrary to the NSW Government Regional Plan to 2036, (New England and North West) Primary Goal 1, Direction 8 - Expand tourism and visitor opportunities "The proposal will do nothing to enhance tourism. There is no indication that solar energy facilities offer tourism benefits." (VCAT – BOOKAR p 67) Armidale Regional Council, and previously named representative Council bodies, have for many years, in fact forever, extolled the natural beauty of the Armidale and New England Region and used this extensively in their tourism advertising campaigns. To now place industrial solar plants around the scenic rim of Armidale flies in the face of all the hard work done in the past. Again, solar farms are NOT a tourism attraction! There is a well proven reason why all the industrial solar plants, in big solar generating countries overseas, are located in remote desert areas on flat land!

Objections based on Recycling

I also object to this proposal on the grounds that little mention is made in the DA regarding the procedure for the removal and recycling of faulty or broken solar panels. "Currently 85% to 95% of a panel can be reclaimed and recycled. It is important to note that each photovoltaic panel is also a future item of waste. Panels may be retired before the 25 years is up. Leaps in technology may lead to systems being upgraded early and a significant number of panels (roughly 10%) fail early due to damage during manufacture, transport or handling." https://renew.org.au/renew-magazine/reuse-recycling/pv-recycling-where-do-all-the-panels-go/

Solar panels "should be avoided at all costs in the local landfill facility because they contain silver, tin and lead (particularly in older panels)" being "the hazardous components of mono- and polycrystalline silicon panels (estimated at 50% to 60% of the market); indium, gallium, selenium, cadmium, tellurium and also lead are found in thin-film panels, glass, copper, lead, aluminium and the hazardous semiconductor materials which can leak into the ground and groundwater systems. **Strict guidelines** expressly stating the prohibitive use of the surrounding land as a waste disposal landfill option must be included **in the conditions of approval**. Disposal of any waste material onsite should be outlawed and a mandatory condition of approval in any location. To date, there is only one solar panel recycling facility in Australia, *Reclaim PV* photovoltaic (solar) recycling company in Adelaide, South Australia, but transport costs and recycling costs take the profits away from the proponents so are avoided wherever possible. Recycling of solar panels provides two beneficial outcomes

- 1. The absolute removal of any potentially dangerous outcome for the future environment and human health problems for generations to come and
- 2. The recovery of precious metals that were expensive to mine and can now be reused.

If, as it says above, proponents avoid recycling because of the incumbent costs, what will happen with all the faulty or broken solar panels in our area – on property burial perhaps, landfill, removal to local Council rubbish dumps perhaps or the Armidale Waste Management Facility? Do we want this? The answer is a resounding "NO". Recent 'gossip' in the Armidale area is that broken solar panels are being accepted by the Armidale Waste Management Facility, at no cost!

There is real-world precedent for this recycling concern. A tornado in 2015 broke 200,000 solar modules at a southern California solar farm 'Desert Sunlight'. And when Hurricane Maria hit Puerto Rico in September,2017 the nation's second largest solar farm, responsible for 40 percent of the island's solar energy, lost the majority of its panels. Imagine either of these incidents occurring in our local community!

Objections based on Environmental concerns

Rigid guidelines must be set in place and followed to the letter of the law to prevent contamination and soil erosion. The selection of sites must place great significance on topography, existing site conditions and constraints such as soil types.

The following photograph illustrates the devastating effects that erosion can have on similar soils to those found at the proposed Oxley Solar site.



Runoff from solar panels has been largely glossed over in the Oxley proposal but it is a major cause of concern for the environment of the area. Flat surfaces, such as roofs without gutters and in this case, solar panels, increase the severity of erosion because of the concentration of run-off water to a greatly reduced surface area along the 'drip line'. An object falling from a height of 4m hits the ground with a velocity of almost 32km/hr. In a 'gully-raker' storm the 'drip-line' would be a 'waterfall line' and the ensuing erosion could cause irreparable damage to the landscape not to mention the devastating effect on our waterways and adjoining National Park. The precious platypus found in Commissioner's Waters is a treasure that all residents and visitors love and to put this in harm's way would be dreadful, and totally irresponsible.

The possibility of erosion occurring, and the resulting environmental disasters, are in direct conflict with the NSW Government Regional Plan to 2036 (New England and North West) Primary Goal 2 of having a healthy environment with pristine waterways and Direction 11: Protect areas of potential high environmental value, that being Commissioners Waters and Oxley Wild Rivers National Park. It also contravenes one of the factors of the Environmental Planning and Assessment Regulation 2000, NSW which must be taken into account when assessing the impact of an activity on the environment, that being posing any risk to the safety of the environment.

During the construction stage the bare or partially bare soils and lack of vegetation within ditches may increase water velocities. Soil disturbance during construction from grading and digging foundation holes to transporting, locating and installing components equates to widespread surface damage. Heavy vehicular traffic during construction may also exacerbate runoff issues. Topsoil will be stripped from the site in a heavy rain or wind storm and once topsoil is removed, it can never be replaced. Given the widespread soil disturbance during construction and the fact that establishing living erosion control is not started or successful until after final installation, this soil type is particularly susceptible to soil erosion. As the site will be completely stripped of any vegetation throughout the construction stage it is imperative that an Erosion and Sediment Management Strategy be provided as a condition of approval, rather than a post approval permit condition as expressed in the proposal.

"The drainage and runoff issues are a threshold matter that needs to be resolved as part of the planning approval, rather than being left to permit conditions. Resolution of these issues may impact on the design, layout and operation of the facility." (VCAT) – BOOKAR findings

Some pertinent questions that need to be answered before approval is given are: Does Oxley Solar Development Pty Ltd's DA contain:

- "Delineation of the site watersheds;
- Identification of internal drainage areas;
- Completion of high level calculations (typical reports rely on the rational method for calculating peak flows);
- Confirmation that stormwater management is or is not required for the site; and
- Estimation of the scale and locations to accommodate the required stormwater storage?" (Lessons learned: Solar projects present unique stormwater management challenges Dec 8, 2017 https://esemag.com/stormwater/lessons-learned-solar-project-present-unique-stormwater-management-challenges/)

Objections based on Bird deaths

There have been many cited incidents of bird deaths related to solar farms when birds crash into the solar panels having thought they were flying in to land on a body of water – this is known as the Lake Effect. As pelicans are frequent visitors to this area, landing on many of the wider sections of Commissioner's Waters, and with an abundance of ducks and other water birds inhabiting this area, what measures are going to be put in place by Oxley Solar to mitigate this problem?

There was also another notable incident when a bird flew into a pair of wires on a solar farm, creating an electric circuit which resulted in sparks and a bushfire knocking out 84% of its generating capacity and causing an estimated \$8 million in losses.

Objection based on Bushfires

"Bushfire management issues need to be resolved as part of the planning approval, rather than being left to permit conditions after approval has been granted. Resolution of these issues may impact on the design, layout and operation of the facility. Details such as the location of all-weather internal access roads to enable a fire truck to traverse all parts of the site may mean raised access roads on land that is located within the 1:100 AER event. This is relevant to how drainage and runoff are to be managed including the extent of impervious surfaces and surface barriers.

The Tribunal notes that, in bushfire affected areas, as a matter of State planning policy, the protection of human life is a threshold that must be prioritised over all other policy considerations." (VCAT- BOOKAR p 59)

Objections based on Screening proposals

The suggestion that Oxley Solar Development Pty Ltd could screen the solar farm from surrounding properties and tourist attractions shows a complete disregard for, or lack of knowledge of the topography of the area. Shelter belts take many years to establish in this area, and considering the details of their screening proposal, trees would have to grow 40m high within three years, and even then, the industrial solar plant would still be a visual blight on the valley.

Objections based on the Developer

Despite many attempts, in-depth information about the developer, and their origin, has not been forthcoming. This company is hiding these details and they must be obtained, scrutinised and validated before any approval can be given. The importance of maintaining ownership of our Australian land and resources is pivotal in these uncertain times.

I have not at any time given political donations.

"Renewable energy has developed itself a reputation as being environmentally friendly. This reputation is entirely undeserved. Far from improving the world around us, wind, solar, biomass and even hydropower can be highly damaging. A renewables revolution on the scale envisaged by global warming activists will see our landscapes desecrated, our paddocks industrialised or turned to monocultures, and our wildlife slaughtered.

Far from making the world a better place, renewable energy will destroy all we hold dear."

The Executive Summary from "Green Killing Machines" authored by Andrew Mountford of the Global Warming Policy Foundation

Please protect our community from this environmental disaster!