

# PRELIMINARY ENVIRONMENTAL ASSESSMENT

WEST WYALONG SOLAR FARM



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FINAL

PREPARED FOR LIGHTSOURCE DEVELOPMENT SERVICES AUSTRALIA PTY LTD



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# INTRODUCTION

## 1.1. OVERVIEW

Lightsource Development Services Australia (Lightsource BP) is proposing to construct and operate a 135MW solar farm approximately 17km north-east of West Wyalong within the Bland Shire local government area (LGA) in Western NSW.

The site on which the solar farm is proposed is comprised of two rural lots with a total area of approximately 560ha. The site is currently used for agricultural purposes.

The proposal includes the installation of groups of modules on mounting structures across the site. An estimated 364,182 panels will be installed with tracking capabilities. Each panel will be approximately 1.95m x 0.992m with a depth of 0.05m, they will be dark blue in colour with an aluminium frame and will be coated with an anti-reflective coating in order to maximise daylight absorption.

Power generated by the facility will be transmitted to the local energy grid via a new substation to be installed on the site.

## 1.2. PURPOSE

The proposal is categorised as electrical generating works using solar power that has a capital investment value (CIV) over \$30 million. Consequently, the proposal is deemed to be State Significant Development (SSD) in accordance with clause 20 of the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP). The proposal is permissible with development consent and development application is required to be submitted to the Minister for Planning as the consent authority. The development application is required to be supported by an Environmental Impact Statement (EIS).

This preliminary environmental assessment or scoping study has been prepared to support a request to the Department of Planning and Environment (DPE) for the Secretary's environmental assessment requirements (SEARs) to guide the preparation of the EIS.

To assist in the preparation of the SEARs this report provides:

- An overview of the site and context.
- A description of the proposed development.
- An overview of the relevant planning framework.
- An overview of the potential environmental and planning impacts and relevant mitigation measures.

This request should be read in conjunction with the following documentation:

- Indicative Design Layout prepared by Lightsource BP – **Appendix A**

## 1.3. THE PROPONENT

Lightsource BP is a global market leader in the development, acquisition and long-term management of large-scale solar projects and smart energy solutions. Since 2010, Lightsource BP has become one of the world's leading solar companies based on installed capacity with 2.0GW of solar projects under management.

Lightsource BP specialises as a utility-scale developer acting as the developer, operator, and manager of solar projects with local offices in Melbourne and Sydney.

## 2. SITE CONTEXT

### 2.1. LOCATION

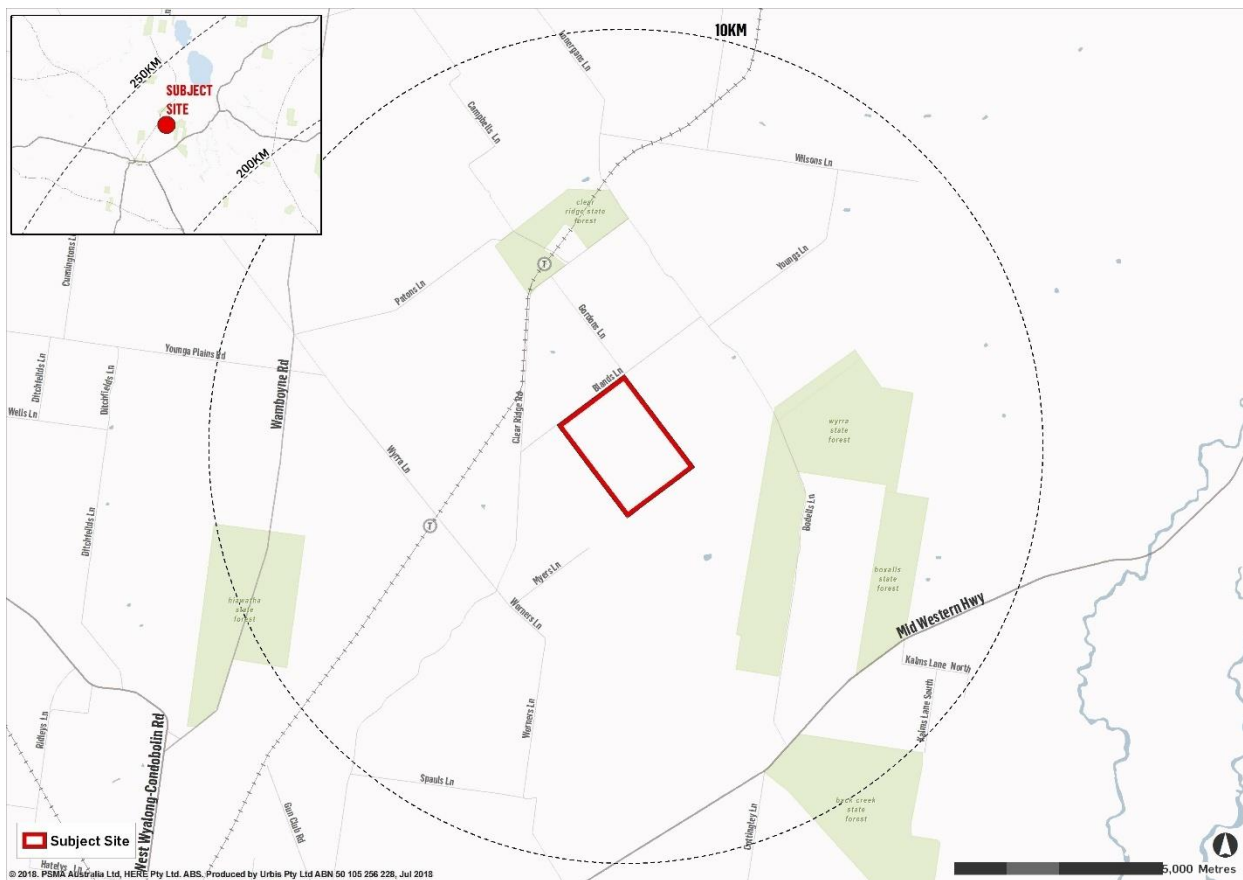
#### 2.1.1. Regional Location

The site is situated on a rural parcel of land located approximately 17km north-east of West Wyalong.

West Wyalong is located 467km west of Sydney and on the crossroads of Newell Highway between Melbourne and Brisbane, and the Mid-Western Highway between Sydney and Adelaide. The town is connected to the regional road network through these direct connections.

The site is connected to West Wyalong via Clear Ridge Road, which is a local road servicing surrounding rural land.

Figure 1 – Regional Location



#### 2.1.2. Locality

The site and surrounds are generally characterised by rural landholdings with limited to no built improvements.

The site has frontage to Blands Lane to the north. Blands Lane provides the connection to Clear Ridge Road and West Wyalong.

The location affords a number of benefits in relation to minimising potential impacts on surrounding land and the environment generally. The location is not subject to travelling stock reserves or identified as Biophysical Strategic Agricultural Land (BSAL).



## 2.2. THE SITE

The details of the site's characteristics are provided in **Table 1** and **Figure 2** below.

Table 1 – Site Description

<b>Address</b>	228-230 Blands Lane, Wyalong.
<b>Legal Description</b>	Lot 17 and Lot 18 in DP753081.
<b>Site Area</b>	Approx. 560ha
<b>Description</b>	The site is a rectangular shaped parcel of land that has been largely cleared of vegetation. The site has a 2km frontage to Blands Lane to the north-west and is adjoined by rural landholdings in all other directions.

Figure 2 – Site Location



### 3. PROPOSED DEVELOPMENT

The proposed SSD development application (SSD DA) will facilitate a 135MW solar farm and supporting infrastructure over the site.

The indicative design of the proposal identifies:

- Installation of 364,182 solar panels, these will be mounted on a single axis tracking frame moving slowly from east to west to maximise exposure to sunlight. The total height of the panel and frame is 3.94m.
- Substation and battery energy storage system.
- Internal access roads and access points.
- Perimeter security fencing.

The proposed layout of the solar arrays is illustrated in **Figure 4** and **Appendix A**. The solar panels are anticipated to be located to the southern portion of the site.

The layout is likely to be subject to change following ongoing design development and consultation with key stakeholders. One substation will be required to be installed. This will be confirmed through detailed design.

It is anticipated that the proposal will connect to the existing transmission line via overhead or underground line, as illustrated in **Figure 3**.

The site will be accessed primarily from Blands Lane, with internal access roads providing permeability through the solar arrays.

Figure 3 – Transmission Line

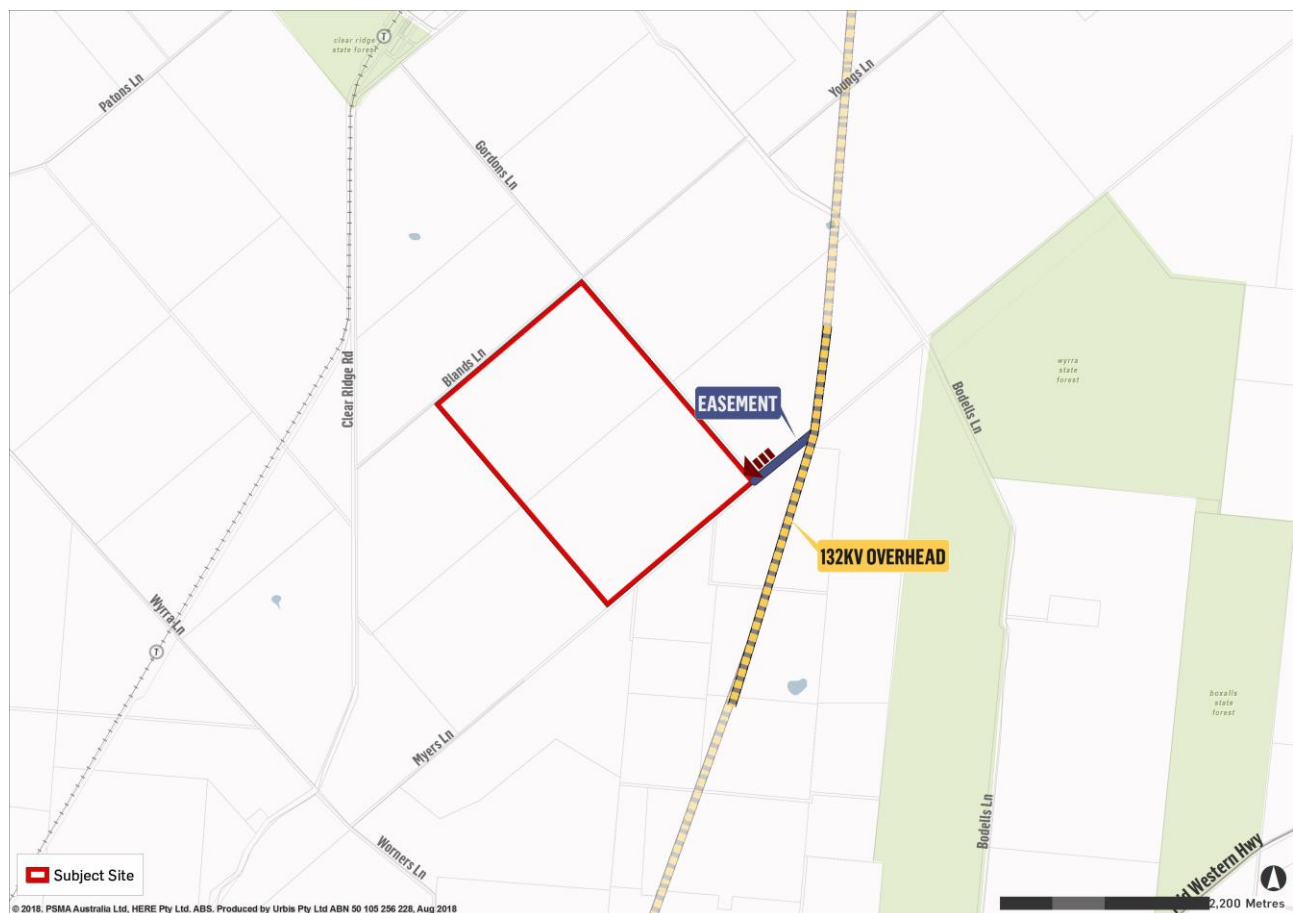




Figure 4 – Indicative Layout



## **4. PROPOSAL JUSTIFICATION AND NEED**

### **4.1. STRATEGIC NEED**

Australia's Federal and State governments and agencies have entered into commitments to various international agreements, conventions, and protocols in relation to climate change, greenhouse gas emissions, and renewable energy. This includes the United Nations Framework Convention on Climate Change, the Paris Agreement, and the Kyoto Protocol.

Both the New South Wales (NSW) and Australian Governments have renewable energy targets and strategies to ensure these commitments can be met, as detailed below.

#### **4.1.1. Australian Renewable Energy Target**

The large-scale renewable energy target (LRET) was introduced by the Australian Government in 2001 to increase the amount of renewable energy being used in Australia's electricity supply. The LRET includes annual targets which require significant investment in new renewable energy generation capacity, with 33,000 gigawatt hours of renewable electricity generation to be met by 2020.

The proposal has a maximum power output up to 135MW and would input renewable electricity into the grid to assist in meeting this target.

#### **4.1.2. NSW Renewable Energy Action Plan**

The NSW Government released a Renewable Energy Action Plan in 2013 to support the LRET and guide renewable energy development in NSW. The Renewable Energy Action Plan adopts 24 actions to achieve the three goals of:

- Attracting renewable energy investment.
- Building community support.
- Attracting and growing renewable energy expertise.

Seventeen of these actions have been completed and the remaining seven are being progressed.

#### **4.1.3. NSW Climate Change Policy Framework**

The NSW Climate Change Policy Framework outlines the NSW Government's long-term objectives to achieve net-zero emissions by 2050 and to make NSW more resilient to a changing climate.

The Policy Framework includes the implementation of emission savings policies and taking advantage of opportunities to grow new industries in NSW, such as 'advanced energy' and renewable energy solutions.

## **4.2. ALTERNATIVES TO THE PROPOSAL**

The development of the West Wyalong Solar Farm has considered the following options:

- A 'do nothing' option.
- Alternative site locations.
- Different site layouts.

The options will be explored in the EIS.

#### **4.2.1. The 'Do Nothing' Option**

The 'do nothing' option would not contribute to the strategic goals and targets set by the Australian and NSW Governments on renewable energy. In addition, not proceeding with the proposal would forfeit the future economic, social and environmental benefits that will be delivered by the proposal.

### 4.2.2. Alternative Site Location and Layout

During the site selection process for the proposed solar farm, a number of alternative locations were considered, including alternative locations in the region. A site resulting in minimal environmental impacts and maximum efficiency was considered critical during this selection process.

The site was identified as the preferred location, based on the following:

- Availability of appropriate land.
- Abundant solar resource.
- Suitability in terms of environmental constraints (minimal vegetation and unlikely environmental impacts).
- Visibility from public areas (located within a large consolidated area of rural land).
- Site access availability from public roads.
- Ability to connect into the grid network.

An indicative layout has been prepared for the site by Lightsource BP. This layout will be refined through the detailed design phase and will respond to any site or locality specific constraints that are identified through the environmental impact assessment process. Subdivision of land will be required for the construction of the substation.

## 4.3. PROPOSAL BENEFITS

The proposal will provide the following benefits:

- Renewable energy that does not produce greenhouse gas emissions.
- Continued support and development of the solar power industry and supply chain in Australia.
- Contribute to Australia's commitments under National and International carbon reduction and renewable energy agreements.
- Additional electricity generation and supply into the Australian grid.
- Direct and indirect employment opportunities during construction and operation phases leading to social and economic benefits for the local community.

## 5. CONSULTATION

Consultation will be undertaken during the preparation of the EIS. A stakeholder engagement strategy will be prepared in accordance with the SEARs and will identify community, business and regulatory stakeholders and outline the consultation activities to be undertaken.

The following key stakeholders are identified:

- Bland Shire Council.
- Essential Energy/TransGrid.
- NSW Department of Planning and Environment.
- NSW Office of Environment and Heritage.
- General community and adjoining landholders.
- Local Aboriginal Land Council and relevant representatives.

The key consultation tools will include media releases, community information booklets, newspaper communications, a drop-in information session and a series of 1-on-1 meetings.

Preliminary engagement has occurred between the proponent and Essential Energy as the network service provider. Investigations into capacity and formal connection are on-going. Essential Energy will continue to be consulted throughout the preparation of the EIS and during detailed design.

Initial notification has occurred with Bland Shire Council and neighbouring properties, as illustrated in Figure 5. This consultation is on-going and will be further developed as part of the engagement strategy.

Figure 5 – Key Neighbouring Properties



## 6. PLANNING FRAMEWORK

### 6.1. NSW LEGISLATION

#### 6.1.1. Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) and its associated regulations establish the principle planning framework for the assessment and determination of development proposals in NSW.

The proposal will be assessed under Part 4 of the EP&A Act.

#### 6.1.2. State Environmental Planning Policy (State and Regional Development) 2011

Under Schedule 1, Part 20 of the *State Environmental Planning Policy (State and Regional Development) 2011*, electricity generating works with a capital investment value of more than \$30 million or a capital investment of more than \$10million and located in an environmentally sensitive area of State significance are declared to be State significant development.

The proposed solar farm has an estimated capital investment value greater than \$30 million and is therefore classified as State significant development under Part 4 of the EP&A Act.

The proposal is permissible with development consent and a development application is required to be submitted to the Minister for Planning as the consent authority. The development application is required to be supported by an EIS prepared in accordance with the SEARs issued by DPE.

#### 6.1.3. State Environmental Planning Policy (Infrastructure) 2007

*State environmental planning policy (Infrastructure) 2007* (Infrastructure SEPP) aims to facilitate the effective delivery of infrastructure across NSW by identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure.

In particular, matters of consideration with respect to the proposed development are:

- Division 4 – Clause 34(1) and (7) – Solar energy systems.
- Division 5, Subdivision 2 – Clause 45 – Determination of development applications-other development.

Clause 34(1) of the Infrastructure SEPP states that:

*‘Development for the purpose of electricity generating works may be carried out by any person with consent on any land in a prescribed rural, industrial or special use zone.’*

A prescribed rural zone is defined in clause 33 of the Infrastructure SEPP as follows:

*‘prescribed rural zone means any of the following land use zones or a land use zone that is equivalent to any of those zones:*

- (a) Zone RU1 Primary Production,*
- (b) Zone RU2 Rural Landscape,*
- (c) Zone RU3 Forestry,*
- (d) Zone RU4 Primary Production Small Lots.’*

The proposal is classified as electricity generating works, is located on land zoned RU1 – Primary Production under the *Bland Local Environmental Plan 2011* (BLEP 2011), and is permissible with consent under clause 34(1) of the Infrastructure SEPP as SSD.

The statutory framework and approval pathways will be addressed within the EIS and supporting documentation. Consultation with relevant authorities will also occur through the referral process of the SSD DA.



#### 6.1.4. Bland Local Environmental Plan 2011

The objectives of the RU1 Primary Production zone are as follows:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To ensure that development on land within this zone does not unreasonably increase the demand for public services or public facilities.*

While the provisions of the Infrastructure SEPP override the provisions of BLEP 2012 the EIS will seek to demonstrate consistency of the proposal with the principles of the zone objectives.

#### 6.1.5. Other NSW Legislation

Other NSW legislation that has been considered and will be relevant to the assessment of the proposal is summarised below.

Table 2 – Other NSW Legislation

Legislation	Applicability
<i>Crown Lands Act 1989</i>	A Crown Lands approval may be required for any works located on Crown Land. While the site does not include Crown Land there is potential for the transmission line to be located on Crown Land and therefore a licence under Part 3 of the <i>Crown Lands Act 1989</i> would be required for these works. This will be further explored during the design development phase.
<i>Roads Act 1993</i>	Approval from Roads and Maritime Services (RMS) and/or Bland Shire would be required under section 138 of the <i>Roads Act 1993</i> (Roads Act) as the relevant Roads Authority will be required to erect a structure or carry out work in, on or over a public road.  Bland Shire and RMS would both be consulted regarding the use of roads during construction and for construction and operational site access as required.
<i>Native Vegetation Act 2003</i>	This Act regulates the clearing of native vegetation and applies to the state of NSW. It is anticipated that an assessment will not be required as it is not proposed to clear native vegetation as part of this proposal.
<i>Threatened Species Conservation Act 1996</i>	If a proposal is likely to impact on threatened species, populations or ecological communities listed under the <i>Threatened Species Conservation Act 1995</i> (TSC Act) an assessment is required.  The potential to impact threatened species, populations and ecological communities on site or in the locality, listed under the TSC Act is discussed in section 7.1.1 below.

Legislation	Applicability
<i>National Parks and Wildlife Act 1974</i>	<p>The <i>National Parks and Wildlife Act 1974</i> (NPW Act) outlines the approval requirements for work in the vicinity of Aboriginal heritage and provides for the protection of flora and fauna. While it is not necessary to obtain an Aboriginal Heritage Impact Permit (AHIP) for SSD, the potential to impact Aboriginal sites will be investigated.</p> <p>The potential to impact Aboriginal heritage and native fauna and flora are discussed in section 7.1.1. and 7.1.2.</p>
<i>Heritage Act 1977</i>	<p>Development or activities cannot be carried out which may affect an item listed on the State Heritage Register without approval under section 60 of the <i>Heritage Act 1977</i> (Heritage Act). An approval under Part 4 or an excavation permit under section 139 of the Heritage Act is not required for SSD.</p> <p>The potential to impact non-Aboriginal heritage items is discussed in section 7.2.</p>
<i>Contaminated Land Management Act 1997</i>	<p>Section 60 of the <i>Contaminated Land Management Act 1997</i> (CLM Act) imposes a duty on landowners to notify the Office of Environment and Heritage (OEH), and potentially investigate and remediate land if contamination is above levels set by the Environmental Protection Authority (EPA).</p> <p>The potential for contamination being located on the site is discussed in section 7.2.</p>
<i>Water Management Act 2000</i>	<p>Water use approval, water management work approval and activity approvals are required under sections 89, 90 and 91 of the <i>Water Management Act 2000</i> (WM Act). These approvals are not required for SSD.</p> <p>The potential to impact water resources is outlined in section 7.1.5.</p>
<i>Protection of the Environment Operations Act 1997</i>	<p>The <i>Protection of the Environment Operations Act 1997</i> (POEO Act) is the key piece of legislation for environmental protection in NSW. The POEO Act also clearly outlines pollution offences relating to land, water, air and noise pollution and includes a duty to report pollution incidents.</p> <p>Solar energy generation does not fall within the definition of electricity generation under Schedule 1 of the POEO Act and therefore does not require an environmental protection licence (EPL).</p>
<i>Waste Avoidance and Resource Recovery Act 2001</i>	<p>The <i>Waste Avoidance and Resource Recovery Act 2001</i> (WARR Act) introduces a scheme to promote extended producer responsibility for the life-cycle of a product. The WARR Act outlines the resource management hierarchy principles of priority as:</p> <ul style="list-style-type: none"> <li>• Avoidance of unnecessary resource consumption,</li> <li>• Resource recovery (including reuse, reprocessing, recycling and energy recovery), and</li> <li>• Disposal.</li> </ul> <p>Resource and waste management is discussed in section 7.2</p>

## 6.2. COMMONWEALTH LEGISLATION

### 6.2.1. Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is administered by the Commonwealth Department of the Environment and Energy (DEE). Under the EPBC Act, if the Minister determines that an action is a 'controlled action' which would have or is likely to have a significant impact on a matter of National environmental significance (MNES) or Commonwealth land, then the action may not be undertaken without prior approval of the Minister.

The following are identified as MNES:

- World Heritage properties.
- National heritage places.
- RAMSAR wetlands of international significance.
- Threatened species and ecological communities.
- Migratory species.
- Commonwealth marine areas.
- The Great Barrier Reef Marine Park.
- Nuclear actions (including uranium mining).

When a person proposes to take an action that they believe may be a 'controlled action' under the EPBC Act, they must refer the proposal to the DEE and seek a decision about whether the proposed action is a 'controlled action'.

A search of the Commonwealth Protected Matters Search Tool (10km radius) indicates that there are no World Heritage Properties or National Heritage Places within the proposal site. The search results listed four wetlands of International Importance that are either known to occur or have potential to occur in the area, however these are not relevant to the site or the proposal as they are located approximately 600-800km upstream. Three listed threatened ecological communities, 23 listed threatened species and 11 listed migratory species were found within 10km of the site.

The proposal is not likely to have a significant impact on the environment of Commonwealth land. The extent to which this legislation applies, and whether an EPBC referral is required will be assessed in the flora and fauna impact assessment as part of the EIS.

### 6.2.2. Native Title Act 1993

The *Native Title Act 1993* provides a legislative framework for the recognition and protection of common law native title rights. Native title is the recognition by Australian law that Indigenous people had a system of law and ownership of their lands before European settlement. Where that traditional connection to land and waters has been maintained and where government acts have not removed it, the law recognises this as native title.

People who hold native title have a right to consult or continue to practise their law and customs over traditional lands and waters while respecting other Australian laws. This could include visiting protected important places, making decisions about the future use of the land or waters, hunting, gathering and collecting bush medicines. Further, when a native title claimant application is registered by the National Native Title Tribunal, the people seeking native title recognition gain a right to consult or negotiate with anyone who wants to undertake a project on the area claimed.

A search of the Register of Native Title Claims was conducted in July 2018. The results identified that there are no native title claims, recorded or claimed near the project area.

## 7. PRELIMINARY ENVIRONMENTAL ASSESSMENT

A preliminary environmental risk analysis has been conducted using desktop analysis to assist in the identification of key environmental matters that will require detailed assessment in the preparation of the EIS. Risks were identified for both the construction and operation phase of the project and analysed in relation to their possible consequence and likelihood of occurrence.

This analysis has identified key issues requiring further detailed or specialist assessment and investigation to determine whether they are likely to have a significant impact on the environment and mitigation measures explored.

A summary of the key environmental issues is provided below. A detailed risk assessment will be undertaken during the preparation of the EIS.

### 7.1. ASSESSMENT OF KEY ISSUES

#### 7.1.1. Biodiversity

##### Existing Environment

The site is largely cleared of vegetation due to past agricultural practices. The combination of landscape features, soil types, and land use history underpin the vegetation types and habitat conditions on site.

As part of the investigations the following information sources have been used:

- Existing threatened species listings under the EPBC Act.
- Existing records of threatened species sightings in the study area, as recorded in the Bionet Atlas of NSW Wildlife.
- Department of Environment *Protected Matters Search Tool* (nationally threatened species listed under the EPBC Act).

A review of the above indicates that no native vegetation community types or threatened flora species are recorded within the site. There are however threatened species and ecological communities outside of the site within a 10km radius which are known, or have the potential to occur at the site and may require further consideration, as follows:

##### Threatened Ecological Communities

- Grey Box (*Eucalyptus macrocarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia (Endangered).
- Weeping Myall Woodlands (Endangered).
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Critically endangered).

##### Threatened Species

- A range of birds, including:
  - Painted Honeyeater, *Grantiella picta* (Vulnerable).
  - Regent Honeyeater, *Anthochaera Phrygia* (Critically Endangered).
  - Australasian Bittern, *Botaurus Poiciloptilus* (Endangered).
- Several threatened mammals, fish, and reptile species, including:
  - Murray Cod, *Maccullochella peelii* (Vulnerable).
  - Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (south-eastern mainland population), *Dasyurus maculatus maculatus* (Endangered).
  - Corben's Long-eared Bat, South-eastern Long-eared Bat, *Nyctophilus corbeni* (Vulnerable).

- Pink-tailed Worm-lizard, Pink-tailed Legless Lizard, *Aprasia parapulchella* (Vulnerable).
- Native plant species, as follows:
  - *Austrostipa metatoris* (Vulnerable).
  - *Austrostipa wakoolica* (Endangered).
  - Spiny Peppercreess, *Lepidium aschersonii* (Vulnerable).
  - *Philotheca Ericifolia* (Vulnerable).
  - Slender Darling-pea, Slender Swainson, Murray Swainson-pea, *Swainsona murrayana* (Vulnerable).
  - *Tylophora linearis* (Endangered).

Further it is considered that threatened fauna species could potentially be present on the site at times, and would require further investigation.

#### **Potential impacts and need for further assessment**

As the site is largely cleared and does not support significant groupings of vegetation, it is considered that there would be minimal impacts on flora and fauna presented by the proposal. Notwithstanding, there is some mature vegetation on site and there are identified threatened communities and species within the locality.

As part of the EIS, a flora and fauna impact assessment and/or biodiversity assessment will be undertaken to ascertain the environmental value existing on site, whether this would be impacted by the proposed development, and any mitigation measures that may be required in the case of vegetation removal and its effect on threatened species. The assessment would also address the potential impact of the proposal on identified flora and fauna species in proximity to the proposal and proposed mitigation measures.

The biodiversity assessment report would be undertaken in accordance within the requirements of the NSW *Biodiversity Conservation Act 2016*.

### **7.1.2. Aboriginal Heritage**

#### **Existing Environment**

An extensive search of the AHIMS was completed on 18 July 2018 for the site and surrounding area. The search returned no registered sites or places.

#### **Potential impacts and need for further assessment**

An Aboriginal heritage assessment of the site will be completed as part of the EIS. Consultation with representatives of local Aboriginal groups would also be undertaken as part of the assessment.

### **7.1.3. Noise**

#### **Existing Environment**

Background noise levels on and surrounding the site are expected to be low and typical of a rural setting. Sources of background noise include vehicle use along Bland Lane and Clear Ridge Road, including equipment used on adjacent rural landholdings.

There are two rural-residential dwellings located within proximity to the site approximately 2km and 5km to the north and south of the site respectively.

#### **Potential impacts and need for further assessment**

Construction of the proposed development will generate noise. Due to the distance of these isolated receivers, potential construction impacts are likely to be minimal and the majority of works would be undertaken during standard working hours.

Operational noise is expected to be minimal.



#### **7.1.4. Visual Impact**

##### **Existing Environment**

The surrounding landscape to the site is generally characterised by rural vistas in all directions. The site comprises an expansive landscape previously utilised for dryland agriculture with some pockets of mature vegetation. The groundcover is a mixture of bare soil, dry grass, and isolated dams, with clusters of vegetation.

Surrounding land has views of the site. Most views will alter as a result of the proposed development. There is some vegetation to the east and south which will partially screen the proposal, however views from the north will be largely unobstructed.

Generally, sensitive receptors and surrounding development is distanced from the site (approximately 2km and beyond).

##### **Potential impacts and need for further assessment**

The development will be visible from a number of adjacent landholdings and properties. Many of these properties will only view the proposal from a distance. Views of the proposal from the south and east will mostly be obscured by the existing tree line.

A visual impact assessment for the proposal will be undertaken as part of the EIS.

#### **7.1.5. Hydrology and Groundwater**

##### **Existing Environment**

###### Surface water

The site is located on relatively flat land isolated from natural waterways. The site contains one man made waterway being a small dam. The site is not located in a Flood Planning Area.

###### Groundwater

A search of the Office of Water's groundwater database identified no bores on the site.

##### **Potential impacts and need for further assessment**

Water demand for the project will be minimal as the construction and operation of the solar farm is not water intensive. The EIS will consider any potential impacts to water quality (surface and groundwater) and hydrology on surrounding land.

#### **7.1.6. Land Compatibility**

##### **Existing Environment**

The site is zoned RU1 – Primary Production under the Bland LEP 2011. The land is generally used for rural/agricultural purposes.

Surrounding land is predominately used for agricultural purposes.

##### **Potential impacts and need for further assessment**

The development will result in a total reduction in the area of agricultural land in the region due to the establishment of the solar farm and associated infrastructure. It is not considered that the proposal will impact surrounding agricultural operations.

An assessment of the likely socio-economic impacts on the local community will be undertaken as part of the EIS.

### **7.1.7. Traffic and Site Access**

#### **Existing Environment**

There are no formal roads or car parking arrangements within the site. Vehicle access to the site will be via an unsealed private driveway from Blands Land.

Blands Lane is an undivided road that runs along the northern boundary of the site and joins to Clear Ridge Road. These roads will be used for site access and the major transport route for delivery during construction and operation.

It is proposed that construction and operation traffic would pass through Wyalong to access the site.

#### **Potential impacts and need for further assessment**

The development will increase the number of vehicles on the surrounding road network due to truck movements for the delivery of equipment during construction. Traffic once the solar farm is operational will be minimal, consisting of several visits each month by Operations and Maintenance staff in transit vans, 4x4s or standard cars. The EIS will address these impacts through a transport and traffic impact assessment.

## **7.2. OTHER ENVIRONMENTAL ISSUES**

There are a number of other environmental issues that are considered relevant, but not key issues that will be addressed as part of the EIS. This is explored in Table 3.

Table 3 – Other Environmental Issues

Issue	Existing Environment	Potential Impacts	Further Assessment
Non-Aboriginal heritage	<p>A search of the NSW Heritage Database, including Bland LEP 2011 did not identify any heritage items on the site</p> <p>Non-Aboriginal heritage is not considered to be a constraint for the proposal.</p>	<p>As there are no heritage items identified on site, and given the disturbed nature of the land for agricultural purposes it is considered unlikely that any heritage artefacts will be present on site.</p>	<p>The Construction Environmental Management Plan (CEMP). prepared for the development will address and manage any potential unexpected heritage finds during the construction phase.</p>
Contaminated land	<p>A search of the NSW EPA contaminated land records was undertaken on 19 July 2018. The results indicate that the site is not affected by contamination.</p> <p>There is potential for contamination to be present on site associated with former agricultural activities.</p>	<p>Minor soil disturbance will be required for the construction of the proposal.</p> <p>There is the potential that contaminants may be disturbed during the construction phase, however based on desktop analysis, the risk of this is considered low.</p>	<p>If contamination is identified during construction, it would be managed in accordance with the CEMP.</p>
Bushfire risk	<p>The site is not identified as bushfire prone under the Bland LEP 2011 and has been predominately cleared of vegetation.</p>	<p>There are some pockets of vegetation located within the site. It is considered that any bushfire risk associated with the proposal is low and the site will be unaffected by bushfire risk.</p>	<p>Bushfire risk at the site will be considered in the EIS.</p>
Soils and geology	<p>Soil mapping published by OEH reveals that the site comprises dark reddish brown sandy clay. The land is not identified as not having any acid sulphate soils.</p>	<p>Any earthworks for the installation of the proposal are expected to be minor in nature and not result in major soil disturbance.</p>	<p>A site earthworks plan will be prepared and addressed within the EIS.</p>

Issue	Existing Environment	Potential Impacts	Further Assessment
EMF	The site has no substantial sources of EMF.	The proposed solar farm and associated electrical infrastructure would potentially generate electromagnetic fields.	Layout design and position of equipment would seek to minimise impacts. All electrical equipment will meet standards set by the Australian Radiation and Nuclear Safety Agency (ARPANSA). Further assessment will be undertaken as part of the EIS.
Air quality	<p>The air quality of the site is considered to be good and typical of a rural setting.</p> <p>Sources of air pollution are generally the result of vehicle movement along Clear Ridge Road and agricultural equipment use.</p>	<p>Some air quality impacts are expected during construction, traffic movements and minor vegetation removal, which may result in minor increases in emissions and dust.</p> <p>There are not expected to be emissions during the operation of the development.</p>	Air quality impacts will be considered as part of the EIS.
Waste	There are not considered to be any major waste streams currently produced on the site.	<p>During the construction phase, excavated soil and green waste is likely to be generated in addition to general construction waste.</p> <p>There is not expected to be a significant generation of waste during the operation of the development.</p>	A waste management plan would be developed and incorporated in the CEMP.

Issue	Existing Environment	Potential Impacts	Further Assessment
Social and economic impacts	<p>Workforce accommodation would be required for potentially 350 people during in-peak construction and 3 ongoing operational jobs.</p> <p>Some of these may already reside locally. For visiting workers, accommodation is anticipated to be located within West Wyalong and surrounding towns between 1.5-2 hour drive away including Parkes, Wagga Wagga, and Griffith. On-site accommodation will not occur.</p>	<p>The proposal would generate economic benefits during construction and operation. Additional business would be driven to hotel and motels for long-term accommodation.</p>	<p>The EIS will assess potential social and economic impacts of the proposal.</p>
Cumulative impacts	<p>Cumulative impacts could be experienced by the community if construction and operation of the project occurs concurrently with other local developments.</p> <p>Presently there are no major projects currently proposed within close proximity of the site.</p>	<p>If any project is commenced during the construction of the proposal then additional impacts may occur.</p> <p>This would include increased construction vehicle traffic, pressure on local accommodation and managing socio economic outcomes.</p>	<p>The EIS will consider any potential cumulative impacts based on information available for any proposed project.</p>



## 8. CONCLUSION

This report provides support to the request for SEARs for the development of 228-230 Blands Lane, Wyalong, for the purposes of a solar farm. The development is driven by the need to further advance renewable resources within NSW and provide additional electricity generation capability.

Development consent will be sought under a proposed SSD DA which will be accompanied by an EIS. The EIS will undertake a comprehensive assessment of the potential environmental impacts of the proposed development (positive and negative) and will identify mitigation measures where required.

All relevant impacts will be assessed in the EIS, as guided by the SEARs.

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All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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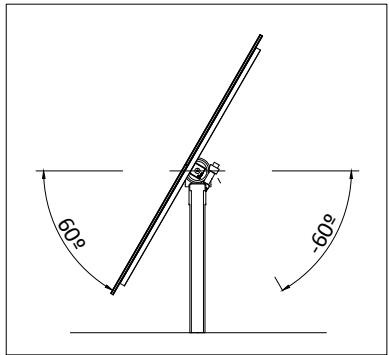
This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.



# **APPENDIX A      INDICATIVE DESIGN LAYOUT**

Wyalong\_Proposed\_Layout\_Rev1

Area 2,855,643 m2 (705.64 acres)



Scale 1:100

	Site Access
	Site Boundary
	Security Fence
	Soltec Single Axis Tracker 43.5 x 2
	Transformer
	Inverter
	Battery storage
	Area for Substation
	Access Road
	Overhead Line
	POA

Scale 1:50000



A3 - (420 x 297)mm

Revisions:

1	21/05/18	Various amendments	GM
Rev	Date	Comments	Dwn Chkd

GM			18.05.18
DRAWN	CHECKED	APPROVED	DATE

PROJECT NAME & ADDRESS:

Australia

NOTES:

- 370 Wp modules
- Tracker 40% GCR
- 
- 

Paper Size:	Scale:	Sheet:
A3	1:10000@A3	1

CAPACITY:

364,182\_Modules      134.74 MWp

DRAWING TITLE:

Wyalong\_Proposed\_Layout\_Rev1

DRAWING NUMBER:	STATUS:
WLG_01	Preliminary

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