

# Marmadua Energy Park

Application Number: 02590

Commencement Date:  
12/09/2024

Status: Locked

## 1. About the project

### 1.1 Project details

#### 1.1.1 Project title \*

Marmadua Energy Park

#### 1.1.2 Project industry type \*

Energy Generation and Supply (renewable)

#### 1.1.3 Project industry sub-type

Wind Farm

#### 1.1.4 Estimated start date \*

04/01/2027

#### 1.1.4 Estimated end date \*

01/01/2065

### 1.2 Proposed Action details

#### 1.2.1 Provide an overview of the proposed action, including all proposed activities. \*

Cubico Sustainable Investments Australia Pty Ltd (Cubico) is proposed to develop the Marmadua Energy Park (the Project) located approximately 23km east of Tara and 41km south-west of Dalby in the Western Downs Regional Council local government area in Queensland. The Project includes a wind farm of up to 110 wind turbines generating up to 792MW, a battery energy storage system (BESS) of 200MW/hr and ancillary infrastructure such as a substation.

The proposed action also captures the works required within nominated State and local roads in proximity to the proposed wind farm, where vegetation clearing is required to provide access for oversize overmass vehicles (OSOM) delivering project components (i.e. turbine towers and blades) to site.

The Project is located in the Western Downs Regional Council Local Government Area. The Project traverses 17 lots (involving four landholders) and a number of adjoining road reserves which will provide access to the Project.

For the purposes of the referral, the total **Project Area is 11,168.36ha** (associated within the boundary of the properties, including road reserves and watercourses where crossings occur) and the **Disturbance Footprint of the proposed Project is 905.4ha**.

### **Site Selection and Project Design**

The site selection process considered environmental and social factors to ensure that the development avoided unnecessary impacts from the outset. The following criteria was considered in the site selection process and ultimately the Project site that will proceed (as per this Referral):

- Land that has been previously cleared, highly fragmented and retains low ecological value within the landscape. Values that may be present within the site can be avoided or impacts minimised through design.
- Co-location and co-existence with other land uses to utilise land that has currently been disturbed for other industries and can continue during project development and operation and after decommissioning.
- Strong wind resource to ensure project viability and outputs to support energy targets and demand.

The design of the Project considered feedback from landholders as well as outcomes of ecological surveys undertaken across the site. The following factors informed the design from the initial stages of the Project:

- Feedback from landholders to avoid farming infrastructure and maintain current practices as well as optimising access roads.
- Avoidance of regulated vegetation and ecological values verified through ground-truthing including threatened ecological communities and remnant vegetation. The Disturbance Footprint is predominantly (98.42%) within non-remnant mapped areas which are cleared.
- Avoidance of watercourses and water features to reduce impacts to riparian vegetation and habitat values.

Key Project infrastructure associated with construction (temporary) and operation include the following:

- Wind turbine generators (WTGs) and hardstand infrastructure – Up to 110 WTGs are proposed, comprising turbines of up to 7.2MW with a total nameplate generating capacity of approximately 792MW. Each turbine will require a handstand area of up to 2.5ha.
- Unsealed access tracks – Access tracks are required to each WTG and ancillary infrastructure such as the substation. Access tracks clearance areas and right of way across the project are typically up to 50m in width (for construction).
- Watercourse crossings – Crossings are generally expected to be at bed level, aside from one or two major watercourse crossings. Widths of up to 75m (in comparison to the standard 50m for access tracks) is required as multiple cables are proposed to traverse a watercourse.
- Substation – A substation adjacent to the 330kV transmission line in the east of the Project Area. The substation will transform the collector reticulation network medium-voltage up to high-voltages suitable to connect into the grid network. This will also include ancillary buildings, switchgear and associated equipment. The proposed footprint for the substation is approximately 14ha.
- BESS – Allowance has been provided for a BESS to be co-located with the substation. The BESS will be co-located with the substation within the identified 14ha footprint.
- Switching station – A switching station adjacent to the existing 330 kV Powerlink transmission line to be constructed, owned and operated by Powerlink.

- Electrical reticulation – A medium-voltage (33kV) underground reticulation network is proposed across the Project (wind turbines generate at low voltage and require a transformer to convert low voltage to medium-voltage 33kV). The turbines are connected to the reticulation network at 4-5 turbines per cable. The reticulation network is typically buried alongside wind farm access tracks.
- Collector substation – A collector substation will converge the 33kV underground collector networks from turbines for connection back to the Project substation via overhead lines or underground cables. A footprint central to the site of up to 1.5ha has been identified for the collector substation.
- Permanent site entrance – The proposed main access to the Project will be via Weranga North Road to the west, Martins Road to the east and Surat Developmental Road to the south.
- Fencing – New fencing with grids and gates (within the Site Boundary).
- Water storage dams – Temporary water storage facilities will be constructed for collection and storage of construction water. A footprint of 0.6ha is estimated to be required for the dams.
- Concrete batching plant – One temporary concrete batching plant to support the construction of the Project. The footprint is up to 1.45ha.
- Construction/site compounds and laydown – 3 temporary construction compounds are proposed to support the construction of the Project, each up to 3ha each. 3 laydown and stockpile areas will be located across the Project in existing cleared areas, each up to 2.25ha each. These areas will be decommissioned post-construction. Additional laydown is provided for at each turbine location (included in the 1.5 to 2ha hardstand). Another satellite construction compound is proposed in the east of the Project area.
- Temporary workforce accommodation facility – option for a temporary workforce accommodation facility to support labour force during the construction period. A footprint of 12.3ha is proposed for the workforce accommodation facility.
- Temporary site offices, workshops, warehouses and amenities (located in the construction compound/laydown areas).
- Operation and maintenance facilities with a proposed footprint of 0.65ha.

The Project will connect to the NEM via the existing Powerlink Braemar to Bulli Creek 330 kV transmission line which traverses the Project site.

### **Access to the Project Site**

To enable the transportation of components of the Project to site, including wind turbine towers and blades on OSOM vehicles, locations along the road network between the Moonie Highway to site entrances require minor upgrade, maintenance and/or additional clearance. Discrete locations along the access route associated with intersections and crossings of water features will require vegetation clearing to provide wider clearances for sufficient and safe access.

The extent of the OSOM Vehicle Access is from all external roads providing for access to the Project to the closest highway, being the Moonie Highway. The roads considered in this scope include the Moonie Highway, Surat Developmental Road, Kumbarilla Lane and Weranga North Road.

To inform the proposed vegetation clearing areas, a route assessment (including swept path analysis) has been undertaken to identify pinch-points along the route where components and/or vehicles require additional clearance. A swept path analysis considers the specifications (length, width and depth) of the large turbine components and the OSOM vehicles and identifies the required dimensions for sufficient access.

### **Project Development**

Project development will be undertaken across stages and disturbance activities consisting of:

- Pre-construction site establishment activities for project infrastructure and site access:
  - Vegetation clearing and grubbing resulting in potential impacts to fauna and flora including loss of habitat, habitat fragmentation and increase in risk of fauna injury or mortality.
  - Earthworks resulting in potential indirect impacts to fauna and flora from erosion and sedimentation, noise, vibration and dust.

- Potential to increase the abundance of pest flora in the Project area and facilitate dispersal of species to previously unaffected areas.
- Construction of project infrastructure including turbines and electrical reticulation:
  - Excavation resulting in potential indirect impacts to fauna and flora from erosion and sedimentation, noise, vibration and dust.
  - Potential risk of accidental releases of hazardous materials, such as fuels and oils from vehicles and machinery resulting in soil and water contamination.
- Commissioning and operation of the wind farm:
  - Fauna injury or mortality due to vehicle strike and barotrauma;
  - Collision with turbines towers, blades and powerlines;
  - Wildlife disturbance due to noise and light emissions;
  - Potential spills of hazardous materials;
  - Increased pests and weeds due to increased vehicle movements; and
  - Increased risk of bushfire due to potential ignition sources on site associated with increased activity.

Other activities to occur during the life of the Project include connection of the wind farm to the NEM and decommissioning of temporary construction related infrastructure and site rehabilitation and restoration.

For the purposes of this assessment, the scope of the Project excludes low impact activities including site investigations for approval requirements and project development (including geotechnical / drilling investigations) and upgrades to internal site access tracks for the purposes of site access during preliminary investigations. These works will avoid impacts to MNES. Where required, low impact activities will be subject to separate approval process under relevant State legislation.

### **1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?**

No

### **1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? \***

The Queensland Energy and Jobs Plan (the Plan), released in September 2022, sets targets for 70 per cent of Queensland's energy needs be met from renewable sources by 2032 and 80 per cent by 2035. The Plan sets out the following vision for Queensland's electricity system in 2035:

- At least 25 GW new and existing renewable energy.
- Gladstone grid reinforcement to support heavy industry to switch to renewable energy and decarbonise their operations.
- All publicly-owned coal-fired power stations operating as clean energy hubs by 2035, supported by a legislated Job Security Guarantee for energy workers.
- Two new world-class pumped hydro projects that together could deliver up to 7 GW of long duration storage.
- Around 1,500 km of new high voltage backbone transmission to move more power around the state.
- Up to 3 GW of low to zero emissions gas generation for periods of peak demand and backup security.
- A smarter grid to support over 11 GW of rooftop solar and around 6 GW of batteries in homes and businesses.

As renewable energy (i.e. wind and solar) is variable in nature, it needs to be 'firmed' meaning it must be stored when available and discharged when it is needed. The concept of 'firming' means matching the variable output of renewable generators to instantaneous demand, which may occur via battery storage or

fast start 'dispatchable' generation, primarily gas-fuelled generators, that can be switched on as required to meet demand.

The Queensland SuperGrid Infrastructure Blueprint which supports the Plan, recognises that Queensland will need at least 6,000 MW of long duration storage complemented by approximately 3,000 MW of grid-scale storage and up to 3,000 MW of new low-to-zero emissions gas-fueled plant to cover so-called 'dunkelflaute' conditions (times when little to no renewable energy generation from wind or solar is possible).

The Project is located in the Southern Queensland Renewable Energy Zone (REZ), specifically within the Darling Downs REZ which identifies an opportunity to generate between 1,600-2,000 MW of renewable energy from between 2025-2030. The Project has potential to deliver up to 1,300 MW to contribute to this target by 2030.

### **Commonwealth Legislation**

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) – Matters of National Environmental Significance (MNES) (listed threatened fauna species) are known to occur within the Project Area. This referral has been prepared in accordance with the Significant Impact Guidelines 1.1, and consideration of the Referral Guidance for Endangered Koala, EPBC Referral Guidance for 14 Birds Listed as Migratory and the EPBC Act Environmental Offsets Policy.

### **State Legislation**

- *Planning Act 2016* – the Project requires a development permit for a material change of use (MCU) in accordance with State Code 23 for wind farm development and ancillary infrastructure from the Queensland Department of Housing, Local Government, Planning and Public Works. An operational works permit is also required for clearing of native vegetation in accordance with State Code 16. Secondary approvals will likely be required under the Planning Act including waterway barrier works approvals for crossing of waterways.
- *Nature Conservation Act 1992* – A Species Management Program (SMP) may be required to authorise impacts to animal breeding habitat.
- *Aboriginal Cultural Heritage Act 2013* (ACH Act) – The Project Area lies within the traditional lands of the Iman People, who are the Aboriginal Party of the purposes of the ACH Act in regard to the identification and management of indigenous cultural heritage within the Project Area. The proponent will enter into a Cultural Heritage Management Plan/Agreement under Part 7 of the ACH Act with the Iman People.
- *Biosecurity Act 2014* - Field ecology surveys have identified the presence of pest plants and animals, including those with classifications under the Biodiversity Act. Weeds listed as weeds of national environmental significance were also noted during survey activities. Management and mitigation measures and plans will be developed to avoid the spread of weed and pest species.
- *Local Government Act 2009* – A road corridor permit may be required for any proposed works required within local government roads.
- *Transport Infrastructure Act 1994* – A road corridor permit may be required for any proposed works required within State-controlled roads.

### **Local Planning Scheme**

Secondary to the MCU and operational works permits under the Planning Act, development permits will be required under the Western Downs Planning Scheme 2017. Project infrastructure components such as borrow pits and concrete batching plants will require MCU permits and excavation and fill associated with the Project will require an operational works permit.

**1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. \***

The Project team has engaged with host landholders and direct neighbours to the Project. Host landholders have provided advice throughout the design process to date to inform suitable locations of infrastructure and access and locations to avoid.

Neighbouring landholders have been notified of the proposal and details have been provided. The Project team has offered to meet with all neighbouring landholders 1:1 to discuss the Project.

Cubico has undertaken various stakeholder engagement activities for the Marmadua Energy Park project. Cubico sent a letter to residents living within 5 km from the project site. The letter informed residents of the proposed development, invited them for a meeting, and provided a link to an online questionnaire and Cubico's contact information. From the 26 to 29 July, Cubico met with residents and other stakeholders to discuss the project. The Marmadua Energy Park project team will be in Weranga and Tara on 25 and 26 September 2024, to host a community information session and a pop-up engagement event.

Cubico has met with representatives of the Barunggam People for a preliminary introduction and negotiation of an Early Works Agreement that subsequently led to the cultural heritage survey and monitoring of the met mast installation. In September 2024, Cubico met with Bigambul representatives for a project introduction.

In Q4 2024 and Q1 2025, Cubico intends to advance engagements with the respective Traditional Owners, including the negotiation of Cultural Heritage Management Agreements/Plans

Cubico has also commenced early discussions with State and local governments to discuss the approvals pathway.

A comprehensive stakeholder engagement plan has been developed and can be found at **Att. 3 MEP Stakeholder Engagement Plan**, which will continue to be implemented as the Project continues through the project development phase.

## 1.3.1 Identity: Referring party

### Privacy Notice:

Personal information means information or an opinion about an identified individual, or an individual who is reasonably identifiable.

By completing and submitting this form, you consent to the collection of all personal information contained in this form. If you are providing the personal information of other individuals in this form, please ensure you have their consent before doing so.

The Department of Climate Change, Energy, the Environment and Water (the department) collects your personal information (as defined by the Privacy Act 1988) through this platform for the purposes of enabling the department to consider your submission and contact you in relation to your submission. If you fail to provide some or all of the personal information requested on this platform (name and email address), the department will be unable to contact you to seek further information (if required) and subsequently may impact the consideration given to your submission.

Personal information may be disclosed to other Australian government agencies, persons or organisations where necessary for the above purposes, provided the disclosure is consistent with relevant laws, in particular the Privacy Act 1988 (Privacy Act). Your personal information will be used and stored in accordance with the Australian Privacy Principles.

See our Privacy Policy to learn more about accessing or correcting personal information or making a complaint. Alternatively, email us at [privacy@awe.gov.au](mailto:privacy@awe.gov.au).

☒ **Confirm that you have read and understand this Privacy Notice \***

**1.3.1.1 Is Referring party an organisation or business? \***

Yes

Referring party organisation details	
<b>ABN/ACN</b>	75637138008
<b>Organisation name</b>	ATTEXO GROUP PTY LTD
<b>Organisation address</b>	4006 QLD
Referring party details	
<b>Name</b>	Rosemary Shearman
<b>Job title</b>	Senior Environmental Consultant
<b>Phone</b>	0416034996
<b>Email</b>	rosemary.shearman@attexo.com.au
<b>Address</b>	T.C. Beirne Building, Level 4, 315 Brunswick Street, Fortitude Valley, QLD 4006

**1.3.2 Identity: Person proposing to take the action**

**1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? \***

No

**1.3.2.2 Is Person proposing to take the action an organisation or business? \***

Yes

---

Person proposing to take the action organisation details

<b>ABN/ACN</b>	48624996078
<b>Organisation name</b>	CUBICO SUSTAINABLE INVESTMENTS AUSTRALIA PTY LTD
<b>Organisation address</b>	2000 NSW

Person proposing to take the action details

<b>Name</b>	David Smith
<b>Job title</b>	Country Head, Australia
<b>Phone</b>	0477883863
<b>Email</b>	david.smith@cubicoinvest.com
<b>Address</b>	88 Phillip Street, Sydney, NSW, 2000

**1.3.2.14 Are you proposing the action as part of a Joint Venture? \***

No

**1.3.2.15 Are you proposing the action as part of a Trust? \***

No

**1.3.2.17 Describe the Person proposing the action's history of responsible environmental management including details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the Person proposing to take the action. \***

Cubico Sustainable Investments Australia Pty Ltd (Cubico) and the broader global Cubico Sustainable Investments GP 1 Ltd have a satisfactory record of environmental performance across its portfolio of operations across Europe, South America, North America and Australia.

Cubico has no existing record of having been the subject of any prosecution or civil proceedings in Australia under State, Territory or Commonwealth environmental or natural resources legislation which is relevant or material to this referral.

Cubico, through one of its associated entities, has referred the following project under the EPBC Act:

- 2020/8727 – Wambo Wind Farm.



Cubico has a clear Environmental and Social Policy which sets principles and objectives for the overall environmental and social performance of the business. The Policy can be found attached at **Att. 1 Cubico Environmental and Social Policy**.

### 1.3.2.18 If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

The Cubico Sustainable Investments GP 1 Ltd Environment and Social Policy is attached at **Att. 1 Cubico Environmental and Social Policy**.

Cubico is committed to operating its business in an environmentally and socially responsible manner to protect natural resources and continually improve our environmental performance.

Cubico understands that its operations may have an impact on the environment and focuses on ensuring that appropriate mechanisms are in place to assess and mitigate those impacts in a socially responsible way.

The Cubico Environmental and Social Policy establishes its aims and objectives relating to the protection or prevention of pollution or degradation of the environment, the general principles governing Cubico's sustainability activity and the mechanisms needed for environmental risk analysis in decisions relating to our business and operations, including compliance with the Equator Principles.

Cubico's commitment to investing in energy efficiency and sustainable energy will positively contribute to reducing global greenhouse gas emissions and slowing climate change, resulting in a safer and healthier environment for both the local communities in which we operate and the wider global community.

## 1.3.3 Identity: Proposed designated proponent

### 1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? \*

No

### 1.3.3.2 Is Proposed designated proponent an organisation or business? \*

Yes

Proposed designated proponent organisation details

**ABN/ACN** 48624996078

**Organisation name** CUBICO SUSTAINABLE INVESTMENTS AUSTRALIA PTY LTD

**Organisation address** 2000 NSW

#### Proposed designated proponent details

<b>Name</b>	Gareth Rees
<b>Job title</b>	Environment and Permitting Manager
<b>Phone</b>	0428628502
<b>Email</b>	gareth.rees@cubicoinvest.com
<b>Address</b>	Level 54, 111 Eagle Street, Brisbane, QLD, 4000

### 1.3.4 Identity: Summary of allocation

---

#### ✔ Confirmed Referring party's identity

The Referring party is the person preparing the information in this referral.

---

ABN/ACN	75637138008
Organisation name	ATTEXO GROUP PTY LTD
Organisation address	4006 QLD
Representative's name	Rosemary Shearman
Representative's job title	Senior Environmental Consultant
Phone	0416034996
Email	rosemary.shearman@attexo.com.au
Address	T.C. Beirne Building, Level 4, 315 Brunswick Street, Fortitude Valley, QLD 4006

---

#### ✔ Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

---

ABN/ACN	48624996078
Organisation name	CUBICO SUSTAINABLE INVESTMENTS AUSTRALIA PTY LTD
Organisation address	2000 NSW

Representative's name	David Smith
Representative's job title	Country Head, Australia
Phone	0477883863
Email	david.smith@cubicoinvest.com
Address	88 Phillip Street, Sydney, NSW, 2000

---

**✔ Confirmed Proposed designated proponent's identity**

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

---

ABN/ACN	48624996078
Organisation name	CUBICO SUSTAINABLE INVESTMENTS AUSTRALIA PTY LTD
Organisation address	2000 NSW
Representative's name	Gareth Rees
Representative's job title	Environment and Permitting Manager
Phone	0428628502
Email	gareth.rees@cubicoinvest.com
Address	Level 54, 111 Eagle Street, Brisbane, QLD, 4000

## 1.4 Payment details: Payment exemption and fee waiver

### 1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? \*

No

### 1.4.3 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? \*

No

**1.4.5 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A?**

No

**1.4.7 Has the department issued you with a credit note? \***

No

**1.4.9 Would you like to add a purchase order number to your invoice? \***

No

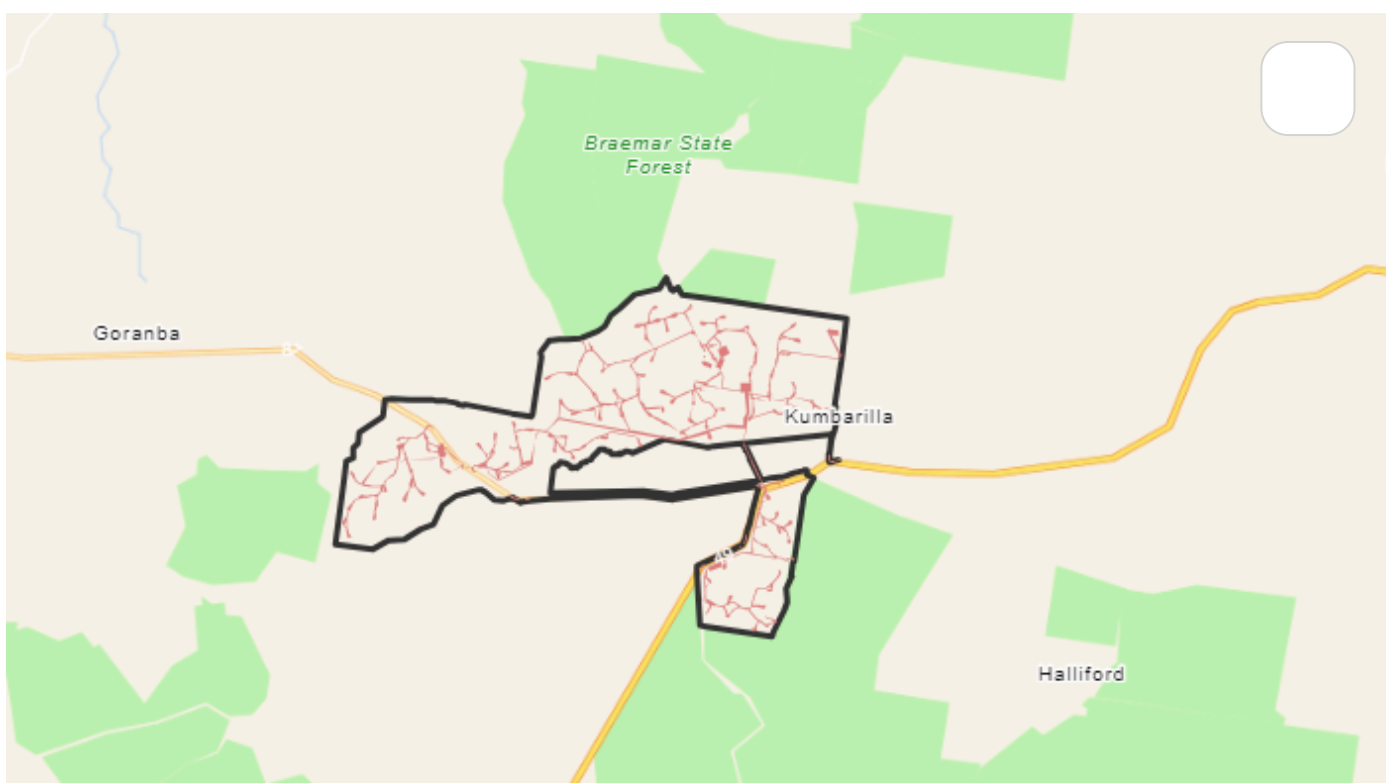
## 1.4 Payment details: Payment allocation

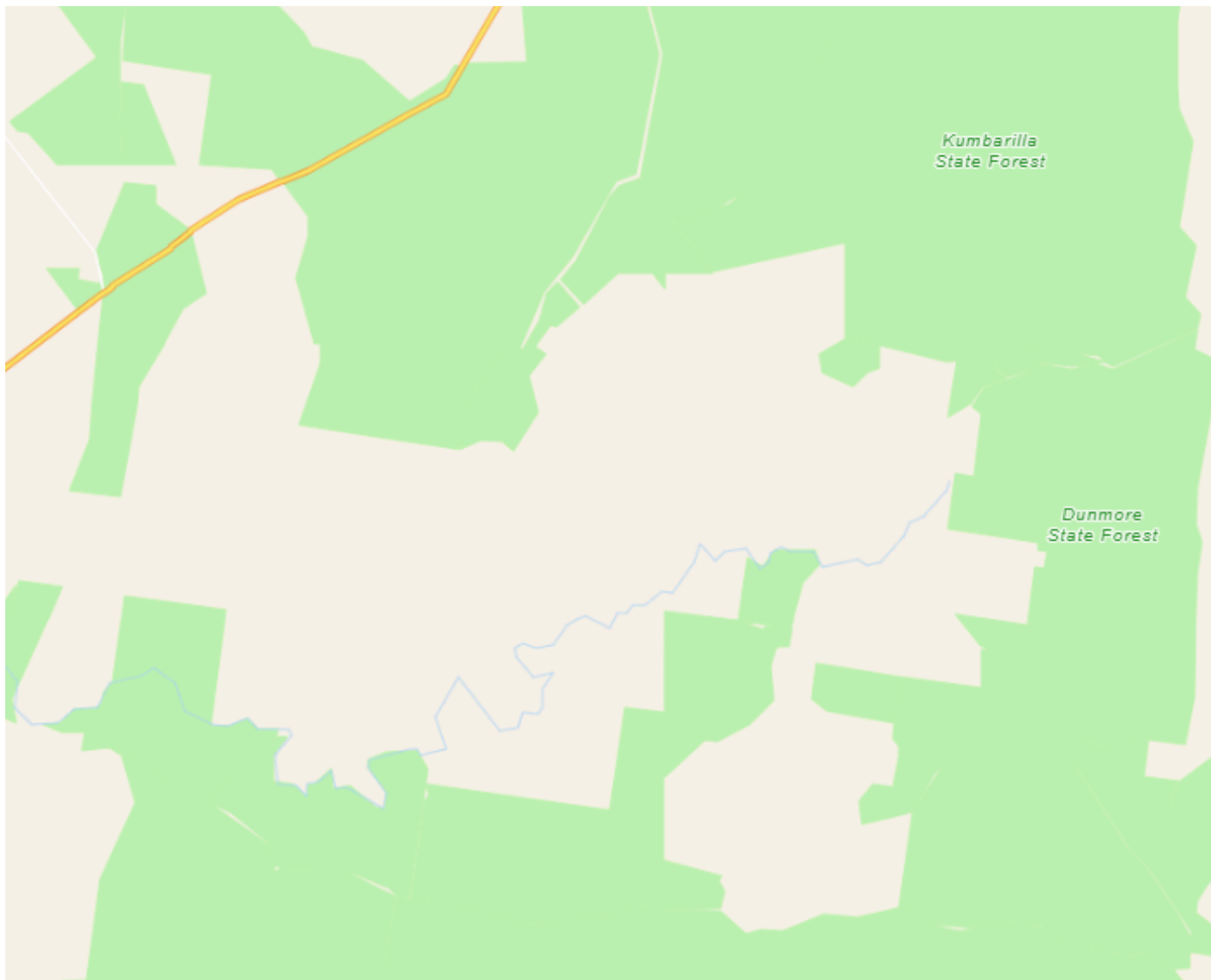
**1.4.11 Who would you like to allocate as the entity responsible for payment? \***

Proposed designated proponent

## 2. Location

### 2.1 Project footprint





Maptaskr © 2024 -27.341981, 151.523197

Powered By Esri - Sources: Esri, TomTom, Garmin, F...

Project area: 11168.36 Ha  
Disturbance footprint: 905.4 Ha

## 2.2 Footprint details

### 2.2.1 What is the address of the proposed action? \*

Martins Road Weranga QLD, Surat Developmental Road Weranga QLD, 17945 Surat Developm

### 2.2.2 Where is the primary jurisdiction of the proposed action? \*

Queensland

### 2.2.3 Is there a secondary jurisdiction for this proposed action? \*

No

## 2.2.5 What is the tenure of the action area relevant to the project area? \*

The Project is proposed across 17 land parcels. All parcels are held in freehold tenure. The applicable lots are:

- 10DY490
- 12DY495
- 13DY203
- 14DY935
- 15DY982
- 16DY982
- 17DY982
- 18DY1044
- 18DY982
- 19DY982
- 1W6104
- 23DY225
- 24DY226
- 25DY688
- 28DY822
- 29DY490
- 32DY225.

The Project Area also comprises of areas within four road reserves. Western Downs Regional Council is the road manager of Kumbarilla Lane and Weranga North Road and Moonie Highway and Surat Developmental Road are State-controlled roads.

# 3. Existing environment

## 3.1 Physical description

### 3.1.1 Describe the current condition of the project area's environment.

#### **Project Location and Land Use/Zoning**

The Project is located on privately-owned properties approximately 23 km east of Tara. The host properties are zoned as Rural under the Western Downs Planning Scheme and are currently utilised for grazing and coal seam gas activities. It is proposed that current land uses will continue during the construction and operation of the Project. The Project Area also includes road reserves, which contain used formed roads. The clearing proposed along the road verges will not change the proposed land use within the road reserves.

The Project is located in the Southern Queensland Renewable Energy Zone (REZ), specifically within the Darling Downs REZ which identifies an opportunity to generate between 1,600-2,000 MW of renewable energy from between 2025-2030. The Project has potential to deliver up to 792 MW, contributing to Queensland's targets of 50 per cent renewable energy by 2030, 70 per cent by 2032 and 80 per cent by 2035.

#### **Site Description**

The site is on a relatively flat rural landscape, generally undulating between 350 m AHD to 390 m AHD. There are two locations, one in the west of the Project Area and one in the north of the Project Area, where the elevation increases to between 400 m AHD and 410 m AHD, respectively.

The Project Area includes the headwaters of the Moonie River near the southern boundary which flows west. The Project Area is predominately characterised by unnamed tributaries. The western portion of the site drains directly into the Moonie River and several of its tributaries before flowing in a west-southwest direction. The eastern portion of the Project area drains into several tributaries of Moramby Creek and Clayhole Creek which flow in a north-easterly direction. Moramby Creek and Clayhole Creek flow into Wilkie Creek which eventually flows into the Condamine River approximately 42 km downstream of the Project.

Approximately five residential dwellings are located within the Site Boundary. These dwellings will remain during the life of the Project as the current land use will co-exist with the proposed action. Other landholder infrastructure such as farm dams, sheds and tracks will also remain. The existing infrastructure within the landholdings has informed the design of the Project layout and therefore the Project does not propose to impact on current land use practices.

Due to the nature of the current land use, the Site is predominately cleared of native vegetation and has been maintained for grazing practices. Vegetation remaining within the Site is generally associated with the Moonie River and its tributaries. Some isolated patches of remnant and regrowth vegetation remain scattered throughout the Site with larger tracts associated with the Moonie River to the south-western boundary, the State Forest to the western boundary and patches on the most eastern and southern property. The vegetation patches can be grouped into riparian vegetation which is generally dominated by *Eucalyptus spp.* and abundant white Cypress pine (*Callitris glaucophylla*), Brigalow and Belah communities dominated by *Casuarina* species, and non-riparian patches dominated by *Eucalyptus*, *Allocasuarina spp.* and *Callitris spp.*

### 3.1.2 Describe any existing or proposed uses for the project area.

#### Existing Land Use

The Project area has historically been cleared to support a number of different activities including decades of grazing and horticulture practices and also hosts active production coal seam gas development. A number of production wells and associated infrastructure are hosted in the eastern extent of the Site. An existing 330 kV transmission line traverses the eastern extent of the Site Boundary in a north-south direction. The Western System railway line, operated by Queensland Rail from Dalby to Meandarra, traverses centrally through the Project Area east-west.

Surrounding land uses are predominantly rural, protected areas for forestry production, residential and energy and gas infrastructure, including:

- Weranga township immediately north, Kumbarrilla immediately west and Tara approximately 23 km west;
- Braemar to Bulli Creek 330 kV electricity transmission line traversing the Project Area on the eastern extent;
- Walloon Gas Fields operated by QGC within the eastern extent of the Project Area extending outside to the east and north;
- Vickery State Forest west of Project - Cypress pine forestry;
- Weranga State Forest north of Project - currently contains CSG wells and associated infrastructure;
- Braemar State Forest north of Project - historically established for western hardwood extraction and currently contains CSG wells;
- Daandine State Forest north-east of Project - currently contains CSG wells and associated infrastructure; and
- Kumbarilla State Forest south of Project - forestry.

#### Proposed Land Use

The proposed land use consists of the Project elements outlined in **Section 1.2 of this Referral**; operational infrastructure includes wind turbines, battery energy storage facility, electrical reticulation, substation and collector substations, operations and maintenance facility and ancillary infrastructure. In accordance with the Planning Act, the proposed development is defined as a renewable energy facility – wind farm.

The proposed land use will co-exist with the existing land use described, with landholder activities and infrastructure remaining on site, as well as coal seam gas operations continuing. The Project design considered the existing land use to ensure no impacts were incurred as a result of the development.

The site selection process considered environmental and social factors to ensure that the development avoided unnecessary impacts from the outset. The following criteria was considered in the site selection process and ultimately the Project site that will proceed (as per this Referral):

- Land that has been previously cleared, highly fragmented and retains low ecological value within the landscape. Values that may be present within the site can be avoided or impacts minimised through design.
- Co-location and co-existence with other land uses to utilise land that has currently been disturbed for other industries and can continue during project development and operation and after decommissioning.
- Strong wind resource to ensure project viability and outputs to support energy targets and demand.

The design of the Project considered feedback from landholders as well as outcomes of ecological surveys undertaken across the site. The following factors informed the design from the initial stages of the Project:

- Feedback from landholders to avoid farming infrastructure and maintain current practices as well as optimising access roads.

### **3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.**

There are no outstanding natural features or other important or unique values that apply to the Project area. There are five State Forests located adjacent to the Project including:

- Vickery State Forest west of Project - Cypress pine forestry;
- Weranga State Forest north of Project – currently contains CSG wells;
- Braemar State Forest north of Project - historically established for western hardwood extraction and currently contains CSG wells;
- Daandine State Forest north-east of Project – currently contains CSG wells; and
- Kumbarilla State Forest south of Project - forestry.

During the Project design process, a minimum buffer of 500 m was applied between the boundary of State Forests and turbine locations to account for blade length and minimise indirect impacts to adjoining protected areas.

### **3.1.4 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.**

The site is on a relatively flat rural landscape, generally undulating between 350 m AHD to 390 m AHD. There are two locations, one in the west of the Project Area and one in the north of the Project Area, where the elevation increases to between 400 m AHD and 410 m AHD, respectively.



## 3.2 Flora and fauna

### 3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.

#### Flora

The Project Area has been historically cleared for grazing, horticulture and coal seam gas operations. The clearing of vegetation has been predominately maintained due to ongoing active land uses and will continue to be maintained, with grazing and agricultural practices and CSG to coexist with the Project. Remaining vegetation within the Site is predominately along water features/creek lines which are dominated by poplar box (*Eucalyptus populnea*) or forest red gum (*Eucalyptus tereticornis*) however, there is also an abundance of white Cypress pine (*Callitris glaucophylla*) throughout most of these riparian communities. Most of the ground cover in these communities was dominated by Guinea grass (*Megathyrsus maximus*), an invasive grass. Other vegetation communities within the project Area include isolated patches of brigalow and belah (*Casuarina cristata*).

Flora surveys were undertaken between 9 to 16 November 2023 and between 18 to 21 March 2024 across the Project Area and Disturbance Footprint. The mapping of vegetation communities across the Project area was conducted via quaternary surveys to verify the mapped vegetation within the Project in accordance with the Methodology for survey and mapping of regional ecosystems and vegetation communities in Queensland version 7.0 (Neldner et al. 2023). Additional quaternary survey sites were assessed as part of a (threatened ecological communities) TEC verification survey program in 2024. Quaternary surveys are intended to provide a rapid means of assessing vegetation structure, floristic composition and status. Flora surveys were undertaken to inform preferred habitat types for threatened flora and fauna species and conducted prior to Project design to ensure ecological constraints were considered and avoided to the extent possible.

The PMST identified seven TECs as potentially occurring within the Project Area or within 30 km of the Project Area. Through desktop assessment, three TECs were considered as possible to occur as constituent REs are mapped within the Project Area. As a result of the flora survey the following TECs were confirmed and considered known to occur:

- Brigalow (*Acacia harpophylla* dominant and co-dominant): a single patch of approximately 1.05 ha is located in the western portion of the Project Area.
- Weeping Myall Woodlands: a single patch of approximately 3.79 ha located in the eastern extent within the Project Area.
- Poplar Box Grassy Woodland on Alluvial Plains: five patches ranging from 3.46 ha to 50.59 ha and totalling 89.85 ha located along the southern extent of the Project Area, associated with riparian vegetation.

As a result of the survey effort and confirmation of the occurrence of the TECs, the Project design was revised to avoid all but one patch of TEC. A separation buffer of 50 m minimum was applied between the Disturbance Footprint and mapped TECs that have been avoided to manage potential indirect impacts. Further assessment of the TECs is considered in **Section 4.1.1 of this Referral**.

The PMST identified 17 flora species as potentially occurring within the Project Area. One threatened species, Belson's Panic (*Homopholis belsonii*) listed as Vulnerable under the EPBC Act and Endangered under the NC Act, was considered known to occur due to historical records adjacent to the Project Area and suitable habitat present within the Project Area. Bailey's Cypress (*Callitris baileyi*) listed under the NC Act as near-threatened and not listed under the EPBC Act was also considered known to occur due to historical records and suitable habitat. This species was recorded during survey effort. *Philothea sporadica* is considered likely to occur due to suitable habitat and historical records. No flora species listed under the EPBC Act was recorded during the survey efforts undertaken.

During the ecological surveys, 23 invasive flora species were recorded across the Project Area, including one weed of national significance, Velvety tree pear (*Opuntia tomentosa*). The numerous species of exotic grass makes up the majority of groundcover across the Project Area. A full list of invasive flora species is provided at **Att. 2a MEP MNES Report, Section 5.5, Table 5.4, pg. 34-35**.

Further information on the methodology and results of the flora surveys can be found at **Att. 2a MEP MNES Report, Section 3, pg. 12-13 (Methodology)**, **Att. 2a MEP MNES Report, Section 5, pg. 28-33 (Results)** and **Att. 2a MEP MNES Report, Appendix C (Likelihood of occurrence)**.

## Fauna

Seasonal fauna surveys programs were conducted across the Project Area and Disturbance Footprint from 9 to 16 November 2023, 2 April to 6 April and 29 April to 3 May 2024. In addition to the seasonal surveys, four bird and bat utilisation surveys (BBUS) have been undertaken to date as well as targeted surveys for the Brigalow Woodland Snail (*Adclarkia cameroni*) (further information on the species is provided in below).

During the survey effort across the Project Area to date, a total of 112 birds, 10 amphibians, 14 reptiles, 3 invertebrates and 19 mammals have been observed, including seven feral fauna species, namely Indian myna (*Acridotheres tristis*), Feral cat (*Felis catus*), Feral dog (*Canis familiaris*), European hare (*Lepus europaeus*) Cane toad (*Rhinella marina*), Feral pig (*Sus scrofa*). A full list of invasive fauna species is shown in **Att. 2a MEP MNES Report, Section 5.5, Table 5.4, pg. 34-35**.

The PMST identified 33 birds, 2 fish, 9 mammals, 6 reptiles and 3 invertebrates occurring within 30 km of the Project Area. As a result of the likelihood of occurrence assessment, 9 species were considered likely or potential to occur based on the presence of suitable habitat and supported by nearby known records. Other species were considered possibly or unlikely to occur.

Surveys were conducted in accordance with the relevant Commonwealth and State Department's guidance material for threatened mammals, birds, reptiles and bats. A number of different survey methods were used to consider all potential species. The fauna survey effort and methods are summarised in **Att. 2a MEP MNES Report, Section 3.2.4, pg. 19-23**. Through field surveys and further assessment, five fauna species are considered known to occur, including:

- Diamond firetail (*Stagonopleura guttata*) (Vulnerable);
- Southern whiteface (*Aphelocephala leucopsis*) (Vulnerable);
- White-throated needletail (*Hirundapus caudacutus*) (Vulnerable, Migratory, Marine);
- Short-beaked echidna (*Tachyglossus aculeatus*) (listed under the State's Nature Conservation Act as Special Least Concern); and
- Golden-tailed gecko (*Strophurus taenicauda*) (listed as Near-threatened under the State's Nature Conservation Act).

Although species individuals were not recorded during the survey effort, the following species are considered likely to occur due to presence of suitable habitat:

- Fork-tailed swift (*Apus pacificus*) (Marine, Migratory);
- Painted honeyeater (*Grantiella picta*) (Vulnerable);
- South-eastern glossy black-cockatoo (*Calyptorhynchus lathami sensu lato*) (Vulnerable);
- Koala (*Phascolarctos cinereus*) (Endangered); and
- Yellow-bellied glider (south-eastern) (*Petaurus australis australis*) (Vulnerable).

Further information on the fauna survey and assessment methodology can be found at **Att. 2a MEP MNES Report, Section 3.2.4 (Methodology and Results), pg. 18-24** and **Att. 2a MEP MNES Report, Appendix C (Likelihood of occurrence)**.

### 3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.

#### Land Zones and Soils

Under the Queensland RE framework, land zones are categories that describe the major geologies and associated landforms and geomorphic processes in Queensland. The differences between land zones result in marked differences in the function of ecosystems and their associated biodiversity and this is due in part to the effects that geology (lithology, structure, alteration) has on landform, hydrology and landscape processes (geomorphology and soil formation). There are four land zones across the Project area:

- Land Zone 3 (alluvial river and creek flats) - recent Quaternary alluvial systems, including closed depressions, paleo-estuarine deposits currently under freshwater influence, inland lakes and associated wave built lunettes. Excludes colluvial deposits such as talus slopes and pediments. Includes a diverse range of soils, predominantly Vertosols and Sodosols; also with Dermosols, Kurosols, Chromosols, Kandosols, Tenosols, Rudosols and Hydrosols; and Organosols in high rainfall areas.
- Land Zone 5 (old loamy and sandy plains) - Tertiary-early Quaternary extensive, uniform near level or gently undulating plains with sandy or loamy soils. Includes dissected remnants of these surfaces. Also includes plains with sandy or loamy soils of uncertain origin, and plateau remnants with moderate to deep soils usually overlying duricrust. Excludes recent Quaternary alluvial systems (land zone 3), exposed duricrust (land zone 7), and soils derived from underlying bedrock (land zones 8 to 12). Soils are usually Tenosols and Kandosols, also minor deep sandy surfaced Sodosols and Chromosols. There may be a duricrust at depth.
- Land Zone 7 (ironstone jump-ups) - Cainozoic duricrusts formed on a variety of rock types, usually forming mesas or scarps. Includes exposed ferruginous, siliceous or mottled horizons and associated talus and colluvium, and remnants of these features, for example low stony rises on downs. Soils are usually shallow Rudosols and Tenosols, with minor Sodosols and Chromosols on associated pediments, and shallow Kandosols on plateau margins and larger mesas.
- Land Zone 9 (undulating country on fine-grained sedimentary rocks) - fine grained sedimentary rocks, generally with little or no deformation and usually forming undulating landscapes. Siltstones, mudstones, shales, calcareous sediments, and labile sandstones are typical rock types although minor interbedded volcanics may occur. Includes a diverse range of fine textured soils of moderate to high fertility, predominantly Vertosols, Sodosols, and Chromosols.

#### Connectivity

The Project is situated in the middle of the Inglewood Sandstone biogeographic subregion which contains a significant portion of the region's remnant vegetation. This subregion contains 26 State Forests, of which five are immediately adjacent to the Project area. There are two prominent state biodiversity corridors that connect the northern portion of this bioregion to the southern portion, both of which skirt the boundary of the Project area.

#### Vegetation

The landscape within the Project Area is highly fragmented from years of pastoral and agricultural land use. Based on available aerial imagery, this fragmentation dates back to at least 1984. Native vegetation remains only as isolated patches of vegetation, in addition to riparian vegetation associated with Moonie River and its tributaries).

The Project Area is predominately mapped as non-remnant in accordance with the Queensland State vegetation mapping and is characterised by non-native pasture grasses with patches of vegetation located sporadically across the landscape. The Project Area also contains some areas of regulated vegetation of Category B (remnant), and Category C (high-value regrowth). The regional ecosystems (REs) mapped by the State as occurring within the Project Area are detailed in **Att. 2a MEP MNES Report, Section 5.2, Table 5.2, pg. 33**.

### Habitat Types

Four broad habitat types are identified within the Project Area based on quaternary site assessments and habitat assessments. The habitat types are described in detail in **Att. 2a MEP MNES Report, Section 5.6, Table 5.2, pg. 36-39** and summarised below.

The following habitat types are found within the Project Area:

- **Riparian vegetation** – Riparian vegetation is a prominent feature throughout the central and western portions of the Project area and is primarily associated with the various tributaries of the Moonie River. This habitat incorporates several alluvial vegetation communities including RE 11.3.2, RE 11.3.17, RE 11.3.18 and RE 11.3.25. Most of these communities are dominated by either poplar box (*Eucalyptus populnea*) or forest red gum (*Eucalyptus tereticornis*) however, there is also an abundance of white Cypress pine (*Callitris glaucophylla*) throughout most of these riparian communities suggesting that they could be mixed communities containing RE 11.3.18. Most of the ground cover in these communities was dominated by Guinea grass (*Megathyrsus maximus*), an invasive grass. The confirmed weeping myall and poplar box TEC communities form a portion of this habitat type.
- **Brigalow and Belah Communities** – There are several smaller patches of brigalow and/or belah (*Casuarina cristata*) dominated communities found throughout the central and western portions of the Project area. These patches appear to be leftover relics of larger patches of pre-clearance vegetation that have survived to the present day and are currently mapped as RE 11.9.5. These communities were mostly dominated by belah with the occasional stand of white cypress pine. The ground cover in these communities was mostly dominated by fallen cypress needles, typical of these communities.
- **Non-Riparian *Eucalyptus* and *Callitris* Dominated Communities** – The remaining non-riparian vegetation mapped within the Project area can be broadly grouped together into communities mapped as RE 11.5.1, RE 11.5.1a, RE 11.5.4, RE 11.7.4, RE 11.7.5, RE 11.7.7 and RE 11.9.9. These communities are dominated by Eucalypt species such as narrow-leaved ironbark (*Eucalyptus crebra*), broad-leaved ironbark (*Eucalyptus fibrosa*) and bull oak (*Allocasuarina luehmannii*) with the occasional stand of white Cypress pine. Most of these communities also have thick Acacia understories and a higher abundance of CWD and rocks than similar riparian communities

Predominantly cleared pastoral land – the remaining non-remnant areas mapped within the Project area are predominantly used for pastoral activities. These areas are mostly dominated by Buffel Grass.

## 3.3 Heritage

**3.3.1 Describe any Commonwealth heritage places overseas or other places recognised as having heritage values that apply to the project area.**

No Commonwealth heritage places overseas or other places recognised as having heritage value apply to the Project area.

### **3.3.2 Describe any Indigenous heritage values that apply to the project area.**

The majority of the Project Area is situated on the traditional country of the Barunggam People, with the Bigambul People being the traditional custodians of the balance.

As of 20 March 2024, there were eight sites of Aboriginal significance recorded on the Queensland Department of Treaty, Aboriginal and Torres Strait Islander Partnerships, Communities and the Arts' register and database, all attributed to the Barrungam People.

Six of the identified sites are within close proximity of an existing overhead transmission line, with the others situated proximal to a telecommunication tower and the Surat Developmental Road.

Cubico has undertaken a cultural heritage survey and monitoring of a met mast located on Barunggam Country, with no sites of significance identified.

Cubico will continue to engage with the respective Traditional Owners for the identification, protection and management of their cultural heritage.

## **3.4 Hydrology**

### **3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. \***

The Project sits between the Moonie River sub-basin and the Condamine River sub-basin catchment areas. The western portion of the site drains directly into the Moonie River and several of its tributaries before flowing in a west-southwest direction. The eastern portion of the Project Area drains into several tributaries of Moramby Creek and Clayhole Creek which flow in a north-east direction. Moramby Creek and Clayhole Creek flow into Wilkie Creek which eventually flows into the Condamine River approximately 42 km downstream of the Project.

The Project is not located within a Great Barrier Reef (GBR) catchment.

See **Att. 2a MEP MNES Report, Section 4.4, pg. 26.**

## 4. Impacts and mitigation

### 4.1 Impact details

**Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.**

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	No	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	Yes	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	No	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

#### 4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

---

**4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \***

No

**4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \***

In accordance with the PMST report generated through this referral portal, there are no World Heritage areas within 30 km of the Project Area and the Project is not located within a GBR catchment. The activities proposed as part of the action and subsequent potential impacts identified in **Att. 2a MEP MNES Report, Section 7 (Construction – Section 7.2, pg. 42-45; Operational – Section 7.3, pg. 45-47; Decommissioning – Section 7.4, pg.47)** will not have direct or indirect impacts to World Heritage.

**4.1.2 National Heritage**

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

---

**4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \***

No

**4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \***

In accordance with the PMST report generated through this referral portal, there are no National Heritage areas within 30 km of the Project Area and the Project is not in a GBR catchment. The activities proposed as part of the action and subsequent potential impacts identified in **Att. 2a MEP MNES Report, Section 7 (Construction – Section 7.2, pg. 42-45; Operational – Section 7.3, pg. 45-47; Decommissioning – Section 7.4, pg.47)** will not have direct or indirect impacts to National Heritage.

### 4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Ramsar wetland
No	No	Banrock Station Wetland Complex
No	No	Narran Lake Nature Reserve
No	No	Riverland
No	No	The Coorong, and Lakes Alexandrina and Albert Wetland

#### 4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \*

No

#### 4.1.3.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \*

Four Ramsar wetlands were identified as potentially relevant to the Project during the desktop assessment. Ramsar wetlands are wetlands that are representative, rare or unique wetlands, or are important for conserving biological diversity (DCCEEW, 2022a). As the wetlands are not hydrologically connected to the Project Area, no direct or indirect impacts (identified in **Att. 2a MEP MNES Report, Section 7 (Construction – Section 7.2, pg. 42-45; Operational – Section 7.3, pg. 45-47; Decommissioning – Section 7.4, pg.47)**) will occur as a result of the action.

The Ramsar wetlands identified during the PMST include:

- **Bandork Station Wetland Complex** – Located on the River Murray Floodplain immediately downstream of Kingston on Murray in the Riverland of South Australia. This wetland is approximately 1,100-1,200 km from the Project and is considered unlikely to be impacted by the construction of a renewable energy park.
- **The Coorong, and Lakes Alexandrina and Albert Wetland** – Located at the downstream end of the Murray River, in south-east South Australia. This wetland is approximately 1,300-1,400 km from the Project and is considered unlikely to be impacted by the construction of a renewable energy park.
- **Riverland** – Located in South Australia, in the Murray-Darling Basin where it runs along the Murray River, from the town of Renmark to the Victorian and New South Wales border. This wetland is approximately 1,100-1,200 km from the Project and is considered unlikely to be impacted by the construction of a renewable energy park.
- **Narran Lake Nature Reserve** – Located approximately 75 km north-west of Walgett and 50 km north-east of Brewarrina in the north-west of New South Wales. This wetland is approximately 400-500 km



upstream of the Project and is considered unlikely to be impacted by the construction of a renewable energy park.

#### 4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

##### Threatened species

Direct impact	Indirect impact	Species	Common name
No	No	<i>Acacia lauta</i>	Tara Wattle
No	No	<i>Adclarkia cameroni</i>	Brigalow Woodland Snail
No	No	<i>Anomalopus mackayi</i>	Five-clawed Worm-skink, Long-legged Worm-skink
Yes	No	<i>Aphelocephala leucopsis</i>	Southern Whiteface
No	No	<i>Bidyanus bidyanus</i>	Silver Perch, Bidyan
No	No	<i>Cadellia pentastylis</i>	Ooline
No	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	No	<i>Calyptorhynchus lathami lathami</i>	South-eastern Glossy Black-Cockatoo
No	No	<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat, Large Pied Bat
No	No	<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (south-eastern)
No	No	<i>Dasyurus hallucatus</i>	Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu]
No	No	<i>Delma torquata</i>	Adorned Delma, Collared Delma
No	No	<i>Dichanthium setosum</i>	bluegrass
No	No	<i>Egernia rugosa</i>	Yakka Skink
No	No	<i>Erythrorhynchus radiatus</i>	Red Goshawk
No	No	<i>Falco hypoleucos</i>	Grey Falcon
No	No	<i>Furina dunmalli</i>	Dunmall's Snake

<b>Direct impact</b>	<b>Indirect impact</b>	<b>Species</b>	<b>Common name</b>
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Geophaps scripta scripta	Squatter Pigeon (southern)
Yes	No	Grantiella picta	Painted Honeyeater
No	No	Hemiaspis damelii	Grey Snake
Yes	No	Hirundapus caudacutus	White-throated Needletail
Yes	No	Homopholis belsonii	Belson's Panic
No	No	Hypochrysops piceatus	Bullock Jewel Butterfly
No	No	Lathamus discolor	Swift Parrot
No	No	Lepidium monoplocoides	Winged Pepper-cress
No	No	Nyctophilus corbeni	Corben's Long-eared Bat, South-eastern Long-eared Bat
No	No	Petauroides volans	Greater Glider (southern and central)
Yes	No	Petaurus australis australis	Yellow-bellied Glider (south-eastern)
Yes	No	Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)
No	No	Pteropus poliocephalus	Grey-headed Flying-fox
No	No	Rostratula australis	Australian Painted Snipe
Yes	No	Stagonopleura guttata	Diamond Firetail
No	No	Thesium australe	Austral Toadflax, Toadflax
No	No	Vincetoxicum forsteri	
No	No	Xerothamnella herbacea	

## Ecological communities

<b>Direct impact</b>	<b>Indirect impact</b>	<b>Ecological community</b>
No	No	Brigalow (Acacia harpophylla dominant and co-dominant)
No	No	Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions

Direct impact	Indirect impact	Ecological community
Yes	No	Poplar Box Grassy Woodland on Alluvial Plains
No	No	Weeping Myall Woodlands

**4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \***

Yes

**4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. \***

The proposed Disturbance Footprint for the Project is 905.4ha across numerous adjacent land parcels which in some cases are separated by road reserves. The proposed Project components and activities of the action are detailed in **Section 1.2.1 of this Referral**. As a result of the proposed action, the following potential direct and indirect impacts have been identified:

**Construction**

- Vegetation clearing resulting in loss of habitat
- Habitat fragmentation and reduced connectivity
- Fauna injury or mortality during vegetation clearing and potential entrapment in trenches when installing underground powerlines
- Fauna injury or mortality due to vehicle strike
- Wildlife disturbance due to dust, noise, light and vibration emissions
- Reduced water quality due to erosion and sedimentation
- Potential spills of hazardous materials resulting in land contamination and/or reduced water quality
- Introduction or increased prevalence of pests and weeds due to increased vehicle movements and vegetation clearing
- Increased risk of bushfire due to potential ignition sources on site associated with increased activity.

**Operation**

- Fauna injury or mortality due to vehicle strike
- Collision with turbines towers, blades and powerlines
- Barotrauma
- Wildlife disturbance due to noise and light emissions
- Potential spills of hazardous materials
- Increased pests and weeds due to increased vehicle movements
- Increased risk of bushfire due to potential ignition sources on site associated with increased activity.

**Decommissioning**

At the end of the Project's operational life, infrastructure will be decommissioned, and the site rehabilitated to facilitate continuation of the current land use (i.e. agriculture). Decommissioning involves the removal of all above-ground infrastructure such as turbines, overhead transmission lines, switch stations, etc. Removal of buried infrastructure is not normally undertaken as this typically causes additional disturbance and environmental impacts. Once above-ground infrastructure is removed, the land is rehabilitated in line with specific approval conditions and landholder agreements.

Impacts during decommissioning are likely to relate primarily to vehicle movements around the Project Area, potential for spread of weeds and elevated risk of bushfire as described in the sections above. No additional vegetation clearing would be anticipated during decommissioning activities; however, this would be subject to a separate assessment if required.

Further details on the nature, scale and duration of likely impacts are provided at **Att. 2a MEP MNES Report, Section 7 (Construction – Section 7.2, pg. 42-45; Operational – Section 7.3, pg. 45-47; Decommissioning – Section 7.4, pg.47)**.

The threatened species and ecological communities captured in the PMST results generated by the referral portal have been considered and a supporting likelihood of occurrence in **Att. 2a MEP MNES Report, Appendix C**. The likelihood of occurrence assessment along with other desktop results, supported by ecological surveys, identifies if likely impacts from the action, as described above, does/doesn't have a direct and/or indirect impact on protected matters.

8 fauna species were identified as requiring further consideration in the ecological assessment process in accordance with the EPBC Act Significant Impact Guidelines (DOE 2013). The following species are likely to be impacted by the proposed action due to the presence of suitable habitat:

- Diamond Firetail (*Stagonopleura guttata*) (V)
- Painted Honeyeater (*Grantiella picta*) (V)
- South-eastern Glossy Black-cockatoo (*Calyptohynchus lathami sensu lato*) (V)
- Southern Whiteface (*Aphelocephala leucopsis*) (V)
- White-throated Needletail (WTNT) (*Hirundapus caudacutus*) (V, Mi)
- Koala (*Phascolarctos cinereus*) (E)
- Yellow-bellied Glider (YBG) (south-eastern) (*Petaurus australis australis*) (V)
- Brigalow Woodland Snail (*Adclarkia cameroni*) (E).

One flora species was identified as requiring further consideration in the ecological assessment process. The species likely to be impacted is:

- Belson's Panic (*Homopholis belsonii*) (V).

In addition, one threatened community was identified as requiring further consideration in the ecological assessment process due to its verified presence within the Project area:

- Poplar Box TEC (E).

### **Direct Impacts to MNES Threatened Species and Ecological Communities**

As a result of the proposed action and subsequent impacts, the assessment as presented in **Att. 2a MEP MNES Report, Section 7.2, pg. 42-47** concludes that there is likely to be direct impacts on MNES species, primarily due to the clearing of habitat. Collision risk is also a potential direct impact to the WTNT.

Potential habitat for these species was mapped for the Project Area consistent with the habitat descriptions identified in the SPRAT database and includes:

- Diamond Firetail: Suitable habitat for this species within the Project area, defined as fragmented vegetation and cleared areas including (non-remnant), based primarily on State RE mapping.
- Painted Honeyeater: Suitable habitat mapping for this species has been mapped to include all broad vegetation group 25a communities together, including RE 11.3.2, 11.3.17 and 11.9.5.
- South-eastern Glossy Black-cockatoo: Suitable foraging habitat for this species has been mapped as REs with known food trees where the species are dominant and include RE 11.3.18, 11.5.1 and 11.5.1a. Suitable breeding habitat is mapped as all remnant vegetation within 200m of a farm dam or a stream order 4 or 5 watercourse. Suitable breeding and foraging habitat is mapped as the areas where the two layers intersect.
- Southern Whiteface: Suitable habitat for this species has been mapped by combining all the eucalypt dominated REs (11.3.2, 11.3.17, 11.3.18, 11.3.25, 11.5.1, 11.5.1a, 11.5.4, 11.7.4, 11.7.7, 11.9.7,

11.9.9).

- WTNT: Considering their aerial nature, suitable foraging habitat for the White-throated Needletail is not solely linked to terrestrial habitat. To be conservative, all habitat has been considered suitable for foraging. Suitable roosting habitat includes vegetation communities that have a structural category of 'dense' in their REDD description, and within the Project area, this is limited to RE 11.9.4. The species is also at risk of collision with turbines during operation. Two flocks of 15-25 have been recorded in the Project Area, however a collision risk model is yet to be developed (pending further bird utilisation surveys).
- Koala: Suitable breeding and foraging habitat: REs with known food trees (including RE 11.3.2, 11.3.17, 11.3.18, 11.3.25, 11.5.1, 11.5.1a, 11.5.4, 11.7.4, 11.7.7, 11.9.7 and 11.9.8). Suitable dispersal habitat: remaining REs within Project area (RE 11.7.5 and 11.9.5) and all mapped non-remnant areas.
- YBG: Suitable habitat for this species has been mapped by combining all the riparian eucalypt-dominated REs (11.3.2, 11.3.17, 11.3.18 and 11.3.25) that are present within the Project Area, excluding small isolated patches of habitat, or habitat that is considered inaccessible to the species in relation to their average glide distance (25.2m).
- Brigalow Woodland Snail: Potential habitat for brigalow woodland snail has been mapped as water features traversing the site and vegetation patches dominated by brigalow (*Acacia harpophylla*).
- Belson's Panic: The resulting suitable habitat mapping for Belson's panic includes remnant and regrowth patches of the following REs (11.3.2, 11.3.17, 11.3.18, 11.5.1, 11.7.4, 11.9.5 and 11.9.7).
- Poplar Box TEC: verification surveys confirmed the TEC in the Project Area met the diagnostic characteristics and condition thresholds.

The following provides a breakdown of the amount of field verified habitat or potential habitat for each listed threatened species in the Disturbance Footprint (**Att. 2a MEP MNES Report, Section 7.2.1, Table 7.1, pg. 42-43**):

- Diamond Firetail: 339.05ha of vegetated habitat and 853.72ha of predominantly cleared habitat (1.23% and 10.7%, respectively, of habitat available within the Project Area).
- Painted Honeyeater: 2.89ha of suitable habitat (0.45% of habitat available within the Project Area).
- South-eastern Glossy Black-cockatoo: 23.84ha of suitable foraging habitat (2.63% of suitable foraging habitat available within the Project Area).
- Southern Whiteface: 47.02ha of suitable habitat (1.65% of suitable habitat available within the Project Area).
- WTNT: 905.4ha of foraging habitat (8.1% suitable foraging habitat available within the Project Area).
- Koala: 42.37ha of breeding and foraging habitat and 861.53ha of dispersal habitat (1.7% and 9.95%, respectively, of the habitat available within the Project Area).
- YBG: 11.84 ha of suitable habitat (1.09% of suitable habitat available within the Project Area).
- Brigalow Woodland Snail: 0.82ha of potential habitat (0.65% of potential habitat within the Project Area).
- Belson's Panic: 40.65ha of suitable habitat (1.76% of suitable habitat available within the Project Area).
- Poplar Box TEC: 0.88ha of TEC (0.98% of that found within the Project Area).

### **Indirect Impacts to MNES Threatened Species and Ecological Communities**

As a result of the proposed action, there are a number of indirect impacts that have the potential to impact MNES including YBG and Koala. No indirect impacts are anticipated to the White-throated Needletail or threatened communities.

The impacts associated with the construction and operation of the Project have the potential to change the behaviour of MNES in the area, i.e., discourage individuals from utilising the area (due to noise and dust) or degrade other habitat outside of the Project Area (through erosion and sedimentation and increasing presence of weed and pest species). These indirect impacts have been considered through the ecological

assessment process and the significant residual impact assessment undertaken for the species considered known or likely present within the Project Area. The indirect impacts are also proposed to be managed through mitigation measures which are discussed in **Section 4.1.4.10 of this Referral**.

#### **4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? \***

Yes

#### **4.1.4.5 Describe why you consider this to be a Significant Impact. \***

Significant impact assessments have been undertaken in accordance with the EPBC Significant Impact Assessment Guidelines and EPBC Act Policy Statement 1.1 for all listed threatened species that are either known to occur or are likely to occur within the Project Area. The significant impact assessments for each of these species is presented in **Att. 2a MEP MNES Report, Section 7.6, pg. 55-114**.

In accordance with the outcomes of the significant impact assessments undertaken for the four applicable fauna species, and two threatened communities, as there are no other alternative locations for the Project footprint, it has been determined that the proposed action will have a potential significant impact on the following threatened species:

- Diamond Firetail (339.05ha of vegetated habitat) (**Att. 2a MEP MNES Report, Section 7.6.1, pg. 55**)
- Southern Whiteface (47.02ha of suitable habitat) (**Att. 2a MEP MNES Report, Section 7.6.5, pg. 76**)
- Koala (10.31 ha of breeding and foraging habitat) (**Att. 2a MEP MNES Report, Section 7.6.7, pg. 86**)
- Belson's Panic (40.65ha of suitable habitat) (**Att. 2a MEP MNES Report, Section 7.6.10, pg. 104**)
- Poplar Box TEC (0.88 ha) (**Att. 2a MEP MNES Report, Section 7.6.11, pg. 111**).

The significant impact assessment for the remaining five relevant species, Painted Honeyeater, South-eastern Glossy Black-cockatoo, White-throated needletail, Yellow-bellied Glider and Brigalow Woodland Snail determined the proposed action will not have a significant impact on these species. The reasoning for each species is briefly described below.

*Painted Honeyeater* (assessment against the EPBC Significant Impact Assessment Guidelines at **Att. 2a MEP MNES Report, Section 7.6.3, pg. 63**)

It is acknowledged the proposed action may have a direct impact on the species through the removal of suitable breeding and/or foraging habitat. However, as the species was not recorded in the Project Area, and abundant areas of contiguous suitable habitat will be retained, a significant impact to this species is considered unlikely.

*South-eastern Glossy Black-cockatoo* (assessment against the EPBC Significant Impact Assessment Guidelines at **Att. 2a MEP MNES Report, Section 7.6.4, pg. 69**)

No direct or indirect impacts are anticipated to the South-eastern Glossy black-cockatoo, principally because despite extensive survey effort, the species was not recorded in the Project Area. In addition, Project design has minimised impacts to suitable habitat, with all breeding habitat avoided, and only a relatively small area of suitable foraging habitat to be impacted by the Project.

*White-throated Needletail* (assessment against the EPBC Significant Impact Assessment Guidelines at **Att. 2a MEP MNES Report, Section 7.6.6, pg. 82**)

It is acknowledged collision risk during operations is a potential direct impact to this species; although, the degree of risk is presently unknown, pending the collision risk modelling results. It is anticipated the collision risk modelling results will inform the development and implementation of an adaptive bird and bat management plan, which will minimise collision risk below the significant impact threshold for this species.

*Yellow-bellied Glider* (assessment against the EPBC Significant Impact Assessment Guidelines at **Att. 2a MEP MNES Report, Section 7.6.8, pg. 93**)

No direct or indirect impacts are anticipated to the Yellow-bellied Glider, principally because despite extensive survey effort, the species was not recorded in the Project area. In addition, Project design has minimised impacts to suitable habitat, with only a relatively small area of suitable habitat to be impacted by the Project.

*Brigalow Woodland Snail* (assessment against the EPBC Significant Impact Assessment Guidelines at **Att. 2a MEP MNES Report, Section 7.6.9, pg. 99**)

As a result of a nearby historical record (22 km northeast of the Project Area) and potential for the species to occur within the Project Area due to the presence of potential habitat, a targeted survey was undertaken. During the survey, an abundance of shells were collected for specimen identification by Australia's foremost expert on land snails, Dr John Stanisic. Dr Stanisic confirmed no Brigalow Woodland Snail specimens were recorded as a result of the targeted survey effort. Dr Stanisic supports the conclusion and the Project Area is unlikely to support this species, and endorsed the conclusion that the species is unlikely to be impacted by the proposed action. Therefore no direct or indirect impacts are anticipated to the Brigalow Woodland Snail. A technical note has been prepared to support this determination and is signed by and endorsed by Dr Stanisic. The Brigalow Woodland Snail technical note is at **Att. 2a MEP MNES Report, Appendix E and Att. 2b (continuation of Appendix E)**.

**4.1.4.7 Do you think your proposed action is a controlled action? \***

Yes

**4.1.4.8 Please elaborate why you think your proposed action is a controlled action. \***

Throughout the development of the Project, the design has been optimised to avoid impacts to MNES to the extent possible in accordance with the avoidance, minimise and mitigation hierarchy. However, the Project recognises significant impact on four listed threatened species and one TEC, being:

- Diamond Firetail
- Southern Whiteface
- Koala
- Belson's Panic
- Poplar Box Grassy Woodland on Alluvial Plain.

It is considered the proposed action would constitute a controlled action under the EPBC Act.

**4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. \***

To reduce impacts to species, the following mitigation measures are proposed:

**General mitigation measures**

**Vegetation clearing**

- Infrastructure will be sited in accordance with the State and Commonwealth approval conditions;

- Areas requiring vegetation removal will be clearly delineated to ensure disturbance to areas being retained is avoided. Clearing limits are to be delineated using barricading or temporary fencing and signage prior to works commencing. Exclusion areas are to be clearly shown and labelled on all operational and management drawings and plans;
- GIS shapefiles of exclusion areas will be provided to clearing personnel and/or contractors prior to the commencement of clearing operations;
- Prior to entry to the project area, all site personnel including contractors shall be made aware via toolbox talks and site information sheets, of the sensitive environs they will be working in and around, and be advised of specific limitations to construction works being undertaken in or adjacent to threatened fauna habitat. All staff and contractors will be required to report sightings of relevant fauna in the activity area to the environmental officer (EO) immediately;
- The EO or delegate will routinely inspect the disturbance limit boundaries to ensure that no clearing or disturbance of vegetation of habitat beyond the approved limits has occurred;
- Pre-clearance surveys will be undertaken by a suitably qualified ecologist or fauna spotter prior to the commencement of clearing activities;
- A fauna spotter will be present for all clearing activities and will conduct a walk-through survey prior to commencement of clearing and prior to clearing works each day to check the vegetation and for fauna.

### **Degradation of MNES habitat**

- The areas of MNES habitat adjacent to the disturbance footprint and within the Project area that are not to be cleared will be clearly delineated and shown and labelled on all operational and management drawings and plans;
- Selected trees or logs will be salvaged and reused as fauna habitat to enhance retained vegetation habitat values. Trees and other habitat features to be salvaged will be identified and flagged by the fauna spotter during the walkthrough survey;
- Appropriate sediment and erosion control measures will be put in place during vegetation to clearing to avoid the sedimentation of adjacent watercourses;
- A weed management plan will be prepared to ensure the invasive species already present within the Project area are managed appropriately to ensure that their presence is not exacerbated by the construction and ongoing operation of the Project, and no new invasive species become established. This plan will ensure that vehicles and other equipment entering the Project area have been sufficiently cleaned and are held to the appropriate Queensland Biosecurity standards; and
- Dust, noise, vibration, and air emissions will be managed through a site-specific construction environmental management plan (CEMP). The CEMP will be prepared by the contractor(s) prior to the commencement of construction.

### **Weed species management**

- All vehicles entering the Project Area are required to have a weed declaration form confirming their vehicle has had a certified weed washdown;
- A site induction will provide weed management information to staff, contractors, and visitors; and
- Access to the retained habitat areas will be limited.

### **Invasive fauna**

- Control of feral fauna will be undertaken via several methods that are:
  - Species specific (wherever possible);
  - Cause no or little damage to the natural environment;
  - Undertaken by suitably qualified and experienced contractors;
  - Humane; and
  - Meet relevant Work, Health, Safety and Environment regulatory requirements.
- No domestic dogs allowed on site; and
- A site induction will provide information about invasive animals to staff, contractors, and visitors.



## Vehicle strike

- All vehicles to maintain designated speed limit when on site;
- Speed limit signs to be installed on each road and in a number of locations as deemed appropriate;
- Wildlife signage to be installed at key fauna habitat areas to identify potential for wildlife to be present and cross the road; and
- A site induction will provide fauna injury information, including wildlife zoo and carer contact details to staff, contractors, and visitors.

## Species specific mitigation measures

- White-throated Needletail
  - The implementation of a comprehensive Bird and Bat Management Plan (BBMP) will ensure that the risk of operational impacts for this species (i.e. collision and displacement) is minimised.
- Koala
  - Where koalas are present, identify the tree they are in and adjacent trees, and ensure these are not cleared until the individual has left the area of its own accord
  - Maintain koala habitat outside of disturbance footprints
  - Site personnel will not be permitted to bring domestic dogs into the Project area
- Yellow-bellied glider
  - As yellow-bellied gliders are dependent on large, hollow bearing trees for shelter/denning resource, nocturnal and diurnal pre-clear surveys will be conducted to identify and locate all potential habitat trees;
  - To encourage dispersal of the species once clearing has commenced, no habitat trees will be isolated, and instead dispersal corridors will be left in place that link vegetation with clearing areas to adjacent areas of retained habitat;
  - During pre-clearance surveys Cubico will record all tree hollows that are of suitable size for Yellow-bellied glider. Post-completion of the pre-clearance surveys, Cubico will replace any suitable hollow with nest boxes on a 1:1 basis; and
  - Maintain connectivity for yellow-bellied glider through the use of glider rope crossings.
- South-eastern Glossy Black-cockatoo
  - As south-eastern Glossy black-cockatoo are dependent on large, hollow bearing trees for shelter/denning resource, nocturnal and diurnal pre-clear surveys will be conducted to identify and locate all potential habitat trees; and

During pre-clearance surveys Cubico will record all tree hollows that are of suitable size for South-eastern Glossy black-cockatoo. Post-completion of the pre-clearance surveys, Cubico will replace any suitable hollow with nest boxes on a 1:1 basis.

Full detail on the proposed impact avoidance, minimisation and mitigation measures are outlined in **Att. 1 MEP MNES Report, Section 7.5, pg. 47-54.**

### **4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. \***

Significant residual impacts may occur to the Diamond Firetail, Southern Whiteface, Koala, Belson's Panic and Poplar Box Grassy Woodland on Alluvial Plain TEC as a result of the Project. Therefore, offsets will be proposed for these MNES in accordance with the EPBC Environmental Offsets Policy (DSEWPC, 2012). Specifically, offsets will:

- Be primarily land-based and designed to deliver a direct conservation outcome for the relevant MNES;
- May include indirect offsets where appropriate;
- Will support habitat for the MNES and preferably have connection to populations or occurrences within or adjoining the offset area;

- Offset areas will preferably be located as close as possible to the area of impact and have good connectivity to ensure they remain viable in the longer-term;
- Provide habitat quality gains through restoration, fire management, weed and pest animal management; and
- Involve robust monitoring and reporting programs to ensure conservation outcomes are being demonstrated.

An offset availability analysis will be undertaken as part of an offset strategy during the next phase of the project assessment. An Offset Area Management Plan will be prepared once an appropriate site (or sites) have been identified.

### 4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Species	Common name
No	No	<i>Actitis hypoleucos</i>	Common Sandpiper
No	No	<i>Apus pacificus</i>	Fork-tailed Swift
No	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	No	<i>Calidris melanotos</i>	Pectoral Sandpiper
No	No	<i>Cuculus optatus</i>	Oriental Cuckoo, Horsfield's Cuckoo
No	No	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
Yes	No	<i>Hirundapus caudacutus</i>	White-throated Needletail
No	No	<i>Motacilla flava</i>	Yellow Wagtail
No	No	<i>Myiagra cyanoleuca</i>	Satin Flycatcher
No	No	<i>Rhipidura rufifrons</i>	Rufous Fantail

#### 4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \*

Yes

#### 4.1.5.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. \*

The proposed Disturbance Footprint for the Project is 905.4ha across numerous adjacent land parcels which in some cases are separated by road reserves. The proposed Project components and activities of the action are detailed in **Section 1.2.1 of this Referral**. As a result of the proposed action, the following potential direct and indirect impacts have been identified:

### **Construction**

- Vegetation clearing resulting in loss of habitat;
- Habitat fragmentation and reduced connectivity;
- Fauna injury or mortality during vegetation clearing and potential entrapment in trenches when installing underground powerlines;
- Fauna injury or mortality due to vehicle strike;
- Wildlife disturbance due to dust, noise, light and vibration emissions;
- Reduced water quality due to erosion and sedimentation;
- Potential spills of hazardous materials resulting in land contamination and/or reduced water quality;
- Introduction or increased prevalence of pests and weeds due to increased vehicle movements and vegetation clearing; and
- Increased risk of bushfire due to potential ignition sources on site associated with increased activity

### **Operations**

- Fauna injury or mortality due to vehicle strike;
- Collision with turbines towers, blades and powerlines;
- Barotrauma;
- Wildlife disturbance due to noise and light emissions;
- Potential spills of hazardous materials;
- Increased pests and weeds due to increased vehicle movements; and
- Increased risk of bushfire due to potential ignition sources on site associated with increased activity.

### **Decommissioning**

At the end of the Project's operational life, infrastructure will be decommissioned, and the site rehabilitated to facilitate continuation of the current land use (i.e. agriculture). Decommissioning involves the removal of all above-ground infrastructure such as turbines, overhead transmission lines, switch stations, etc. Removal of buried infrastructure is not normally undertaken as this typically causes additional disturbance and environmental impacts. Once above-ground infrastructure is removed, the land is rehabilitated in line with specific approval conditions and landholder agreements.

Impacts during decommissioning are likely to relate primarily to vehicle movements around the Project area, potential for spread of weeds and elevated risk of bushfire as described in the sections above. No additional vegetation clearing would be anticipated during decommissioning activities; however, this would be subject to a separate assessment if required.

Further details on the nature, scale and duration of likely impacts are provided at **Att. 2a MEP MNES Report, Section 7 (Construction – Section 7.2, pg. 42-45; Operational – Section 7.3, pg. 45-47; Decommissioning – Section 7.4, pg.47)**.

The threatened species and ecological communities captured in the PMST results generated by the referral portal have been considered and a supporting likelihood of occurrence in **Att. 2a MEP MNES Report MNES Report, Appendix C**. The likelihood of occurrence assessment along with other desktop results, supported by ecological surveys, identifies if likely impacts from the action, as described above, does/doesn't have a direct and/or indirect impact on protected matters.

Three migratory species were identified during the field survey programs undertaken across the Project Area.

White-throated Needletail (*Hirundapus caudacutus*) was recorded in the northern part of the Project area. As the species is also listed as a threatened species - vulnerable under the EPBC Act, potential impacts to the species are considered in **Section 4.1.4 of this Referral** and not considered further in this section of the Referral.

Fork-tailed Swift (*Apus pacificus*) was not recorded during the survey program within the Project Area, however suitable foraging habitat for the species is approximately 3 km to the northwest and correlates with a historical record. As the species is predominantly aerial, clearing of potential suitable foraging habitat within the Project Area may lead to some localised habitat fragmentation of vegetation within the Project area. However, the species is highly mobile and has broad habitat requirements which suggest that these impacts are unlikely to substantially modify or destroy habitat potentially utilised by this species.

#### **4.1.5.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? \***

No

#### **4.1.5.6 Describe why you do not consider this to be a Significant Impact. \***

##### *White-throated Needletail*

It is acknowledged collision risk during operations is a potential direct impact to this species; although, the degree of risk is presently unknown, pending the collision risk modelling results. It is anticipated the collision risk modelling results will inform the development and implementation of an adaptive bird and bat management plan, which will minimise collision risk below the significant impact threshold for this species.

A significant impact assessment is provided in **Att. 2a MEP MNES Report, Section 7.6.6, pg. 82-85**.

##### *Fork-tailed Swift*

During field surveys, a Fork-tailed Swift were not recorded in the Project area. Although the Project is unlikely to have direct or indirect impacts on the species, an assessment was undertaken in accordance with the EPBC Act Significant Impact Guidelines (DOE 2013). The assessment concluded that the proposed action would not result in any direct or indirect impacts this species for the following reasons:

- The scale of suitable habitat removal relative to the available habitat in the broader landscape is low (8.1%);
- Lack of identification of an important population; and
- The existing level of fragmentation in the landscape is high.

As no direct or indirect impacts to this species are anticipated, this species is not considered further in this Referral.

A significant impact assessment is provided in **Att. 2a MEP MNES Report, Section 7.6.2, pg. 61-62**.

#### **4.1.5.7 Do you think your proposed action is a controlled action? \***

No

#### **4.1.5.9 Please elaborate why you do not think your proposed action is a controlled action. \***

The Project is unlikely to have significant impact on migratory species; for the purposes of this Referral, migratory species is not considered a relevant controlling provision.

**4.1.5.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. \***

To reduce impacts to species, the following mitigation measures are proposed:

**General mitigation measures**

**Vegetation clearing**

- Infrastructure will be sited in accordance with the State and Commonwealth approval conditions;
- Areas requiring vegetation removal will be clearly delineated to ensure disturbance to areas being retained is avoided. Clearing limits are to be delineated using barricading or temporary fencing and signage prior to works commencing. Exclusion areas are to be clearly shown and labelled on all operational and management drawings and plans;
- GIS shapefiles of exclusion areas will be provided to clearing personnel and/or contractors prior to the commencement of clearing operations;
- Prior to entry to the project area, all site personnel including contractors shall be made aware via toolbox talks and site information sheets, of the sensitive environs they will be working in and around, and be advised of specific limitations to construction works being undertaken in or adjacent to threatened fauna habitat. All staff and contractors will be required to report sightings of relevant fauna in the activity area to the environmental officer (EO) immediately;
- The EO or delegate will routinely inspect the disturbance limit boundaries to ensure that no clearing or disturbance of vegetation of habitat beyond the approved limits has occurred;
- Pre-clearance surveys will be undertaken by a suitably qualified ecologist or fauna spotter prior to the commencement of clearing activities;
- A fauna spotter will be present for all clearing activities and will conduct a walk-through survey prior to commencement of clearing and prior to clearing works each day to check the vegetation and for fauna.

**Degradation of MNES habitat**

- The areas of MNES habitat adjacent to the disturbance footprint and within the Project area that are not to be cleared will be clearly delineated and shown and labelled on all operational and management drawings and plans;
- Selected trees or logs will be salvaged and reused as fauna habitat to enhance retained vegetation habitat values. Trees and other habitat features to be salvaged will be identified and flagged by the fauna spotter during the walkthrough survey;
- Appropriate sediment and erosion control measures will be put in place during vegetation to clearing to avoid the sedimentation of adjacent watercourses;
- A weed management plan will be prepared to ensure the invasive species already present within the Project area are managed appropriately to ensure that their presence is not exacerbated by the construction and ongoing operation of the Project, and no new invasive species become established. This plan will ensure that vehicles and other equipment entering the Project area have been sufficiently cleaned and are held to the appropriate Queensland Biosecurity standards; and

- Dust, noise, vibration, and air emissions will be managed through a site-specific construction environmental management plan (CEMP). The CEMP will be prepared by the contractor(s) prior to the commencement of construction.

### **Weed species management**

- All vehicles entering the Project Area are required to have a weed declaration form confirming their vehicle has had a certified weed washdown;
- A site induction will provide weed management information to staff, contractors, and visitors; and
- Access to the retained habitat areas will be limited.

### **Invasive fauna**

- Control of feral fauna will be undertaken via several methods that are:
  - Species specific (wherever possible);
  - Cause no or little damage to the natural environment;
  - Undertaken by suitably qualified and experienced contractors;
  - Humane; and
  - Meet relevant Work, Health, Safety and Environment regulatory requirements.
- No domestic dogs allowed on site; and
- A site induction will provide information about invasive animals to staff, contractors, and visitors.

### **Vehicle strike**

- All vehicles to maintain designated speed limit when on site;
- Speed limit signs to be installed on each road and in a number of locations as deemed appropriate;
- Wildlife signage to be installed at key fauna habitat areas to identify potential for wildlife to be present and cross the road; and
- A site induction will provide fauna injury information, including wildlife zoo and carer contact details to staff, contractors, and visitors.

### **Species specific mitigation measures**

- White-throated Needletail
  - The implementation of a comprehensive Bird and Bat Management Plan (BBMP) will ensure that the risk of operational impacts for this species (i.e. collision and displacement) is minimised.
- Koala
  - Where koalas are present, identify the tree they are in and adjacent trees, and ensure these are not cleared until the individual has left the area of its own accord
  - Maintain koala habitat outside of disturbance footprints
  - Site personnel will not be permitted to bring domestic dogs into the Project area
- Yellow-bellied glider
  - As yellow-bellied gliders are dependent on large, hollow bearing trees for shelter/denning resource, nocturnal and diurnal pre-clear surveys will be conducted to identify and locate all potential habitat trees;
  - To encourage dispersal of the species once clearing has commenced, no habitat trees will be isolated, and instead dispersal corridors will be left in place that link vegetation with clearing areas to adjacent areas of retained habitat;
  - During pre-clearance surveys Cubico will record all tree hollows that are of suitable size for Yellow-bellied glider. Post-completion of the pre-clearance surveys, Cubico will replace any suitable hollow with nest boxes on a 1:1 basis; and
  - Maintain connectivity for yellow-bellied glider through the use of glider rope crossings.
- South-eastern Glossy Black-cockatoo
  - As south-eastern Glossy black-cockatoo are dependent on large, hollow bearing trees for shelter/denning resource, nocturnal and diurnal pre-clear surveys will be conducted to identify

and locate all potential habitat trees; and

During pre-clearance surveys Cubico will record all tree hollows that are of suitable size for South-eastern Glossy black-cockatoo. Post-completion of the pre-clearance surveys, Cubico will replace any suitable hollow with nest boxes on a 1:1 basis.

Full detail on the proposed impact avoidance, minimisation and mitigation measures are outlined in **Att. 1 MEP MNES Report, Section 7.5, pg. 47-54.**

**4.1.5.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. \***

Offsets for migratory species are not proposed as there is unlikely to be significant impact on species. Offsets will be pursued for threatened species that the Project may have significant impact on, as described in **Section 4.1.4.11 of this Referral.**

**4.1.6 Nuclear**

**4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? \***

No

**4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \***

There are no nuclear activities proposed as part of the action. The activities proposed as part of the action and subsequent impacts identified in **Att. 2a MEP MNES Report, Section 7 (Construction – Section 7.2, pg. 42-45; Operational – Section 7.3, pg. 45-47; Decommissioning – Section 7.4, pg.47)** do not include nuclear activities, therefore there are no direct or indirect impacts.

**4.1.7 Commonwealth Marine Area**

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

**4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \***

No

**4.1.7.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \***

In accordance with the PMST report generated through this referral portal, there are no Commonwealth marine areas within 30 km of the Project Area. The activities proposed as part of the action and subsequent potential impacts identified in **Att. 2a MEP MNES Report, Section 7 (Construction – Section 7.2, pg. 42-45; Operational – Section 7.3, pg. 45-47; Decommissioning – Section 7.4, pg.47)** will not have direct or indirect impacts to Commonwealth marine areas.

**4.1.8 Great Barrier Reef**

**4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? \***

No

**4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \***

The Project is not located within a Great Barrier Reef (GBR) catchment. The activities proposed as part of the action and subsequent potential impacts identified in **Att. 2a MEP MNES Report, Section 7 (Construction – Section 7.2, pg. 42-45; Operational – Section 7.3, pg. 45-47; Decommissioning – Section 7.4, pg.47)** will not have direct or indirect impacts to the GBR.



#### **4.1.9 Water resource in relation to large coal mining development or coal seam gas**

**4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? \***

No

**4.1.9.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \***

The proposed action does not include large coal mining development or coal seam gas, therefore does not trigger the water resource controlling provision. The activities proposed as part of the action and subsequent impacts identified in **Att. 2a MEP MNES Report, Section 7 (Construction – Section 7.2, pg. 42-45; Operational – Section 7.3, pg. 45-47; Decommissioning – Section 7.4, pg.47)** will not have direct or indirect impacts on water resources.

#### **4.1.10 Commonwealth Land**

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

**4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \***

No

**4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.**

**\***

In accordance with the PMST, Commonwealth Lands is not a triggered controlling provision for this Project. There is no Commonwealth Land within 30 km of the Project Area. The activities proposed as part of the action and subsequent impacts identified in **Att. 2a MEP MNES Report, Section 7 (Construction – Section**

7.2, pg. 42-45; Operational – Section 7.3, pg. 45-47; Decommissioning – Section 7.4, pg.47) will not have direct or indirect impacts on Commonwealth Land.

#### 4.1.11 Commonwealth Heritage Places Overseas

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

##### 4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \*

No

##### 4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

\*

In accordance with the PMST, Commonwealth Heritage Places overseas is not a triggered controlling provision for the Project. There is no Commonwealth Heritage Places overseas within 30 km of the Project Area. The activities proposed as part of the action and subsequent impacts identified in **Att. 2a MEP MNES Report, Section 7 (Construction – Section 7.2, pg. 42-45; Operational – Section 7.3, pg. 45-47; Decommissioning – Section 7.4, pg.47)** will not have direct or indirect impacts on Commonwealth Heritage Places overseas.

#### 4.1.12 Commonwealth or Commonwealth Agency

##### 4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? \*

No

## 4.2 Impact summary

### Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

- Threatened Species and Ecological Communities (S18)

### Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

## 4.3 Alternatives

### 4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? \*

No

### 4.3.8 Describe why alternatives for your proposed action were not possible. \*

The Project is proposed to support the objective of the Queensland Energy and Jobs Plan. In particular, the Project will support the Southern Queensland Renewable Energy Zone (REZ), specifically within the Darling Downs REZ which identifies an opportunity to generate between 1,600-2,000 MW of renewable energy from between 2025-2030. The Project has potential to deliver up to 782 MW to contribute to this target by 2030.

Wind farm development was determined to be the appropriate type of development on this site due to the wind resource and highly fragmented environment. The existing land use of agricultural, farming and CSG is able to continue and co-exist with the development of a wind farm as opposed to a solar farm development which requires a larger extent of more permanent land cover.

### Site Selection and Project Design

The site selection process considered environmental and social factors to ensure that the development avoided unnecessary impacts from the outset. The following criteria was considered in the site selection process and ultimately the Project site that will proceed (as per this Referral):

- Land that has been previously cleared, highly fragmented and retains low ecological value within the landscape. Values that may be present within the site can be avoided or impacts minimised through design.
- Co-location and co-existence with other land uses to utilise land that has currently been disturbed for other industries and can continue during project development and operation and after decommissioning.
- Strong wind resource to ensure project viability and outputs to support energy targets and demand.

The design of the Project considered feedback from landholders as well as outcomes of ecological surveys undertaken across the site. The following factors informed the design from the initial stages of the Project:

- Feedback from landholders to avoid farming infrastructure and maintain current practices as well as optimising access roads.
- Avoidance of regulated vegetation and ecological values verified through ground-truthing including threatened ecological communities and remnant vegetation. The Disturbance Footprint is predominantly (98.42 per cent) within non-remnant mapped areas which are cleared.
- Avoidance of watercourses and water features to reduce impacts to riparian vegetation and habitat values.

Slight variations of the current project layout were considered which proposed greater impact on remnant vegetation. As a result of desktop and field assessment, design refinement avoided the majority of TECs verified and informed siting of access tracks and electrical reticulation to minimise vegetation clearing to the extent possible i.e. necessary crossings of watercourses at the least vegetated location, resulting in 98.42 per cent of the Project Disturbance Footprint located within non-remnant and cleared areas.

## 5. Lodgement

### 5.1 Attachments

#### 1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 3. MEP Stakeholder and Community Engagement Plan.pdf The Stakeholder Engagement Plan for Marmadua Energy Park was prepared for the Project development phase and will be updated for the construction phase.	06/12/2024	No	High

1.3.2.17 (Person proposing to take the action) Proposer's history of responsible environmental management

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att. 1 Cubico Environmental and Social Policy.pdf CUBICO SUSTAINABLE INVESTMENTS GP 1 LTD's global environmental and social policy	01/01/2020	No	High

1.3.2.18 (Person proposing to take the action) If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att. 1 Cubico Environmental and Social Policy.pdf CUBICO SUSTAINABLE INVESTMENTS GP 1 LTD's global environmental and social policy	01/01/2020	No	High

3.2.1 Flora and fauna within the affected area

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	06/12/2020	No	High

3.4.1 Hydrology characteristics that apply to the project area

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	05/12/2020	No	High

4.1.1.3 (World Heritage) Why your action is unlikely to have a direct and/or indirect impact

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	05/12/2020	No	High

4.1.2.3 (National Heritage) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	05/12/2024	No	High

4.1.3.3 (Ramsar Wetland) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	05/12/2024	No	High

4.1.4.2 (Threatened Species and Ecological Communities) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	05/12/2024	No	High
#2.	Document	Att. 2b MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	06/12/2024	No	High
#3.	Document	Att. 4 Unredacted - Diamond firetail habitat mapping (inc record).pdf Sensitive information contained - locations of recorded diamond firetail record sighted within the project area shown on maps. Redacted versions in MNES Report.	06/12/2024	Yes	High

4.1.4.5 (Threatened Species and Ecological Communities) Why you consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document				

	Att. 2a MEP MNES Report.pdf	05/12/2024	No	High
	MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.			
#2.	DocumentAtt. 2b MEP MNES Report.pdf	05/12/2024	No	High
	MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.			

4.1.4.10 (Threatened Species and Ecological Communities) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att. 2a MEP MNES Report.pdf	05/12/2024	No	High
	MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.				

4.1.5.2 (Migratory Species) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att. 2a MEP MNES Report.pdf	05/12/2024	No	High
	MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.				

4.1.5.6 (Migratory Species) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att. 2a MEP MNES Report.pdf	05/12/2024	No	High
	MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.				

4.1.5.10 (Migratory Species) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	05/12/2024	No	High

4.1.6.3 (Nuclear) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	05/12/2024	No	High

4.1.7.3 (Commonwealth Marine Area) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	05/12/2024	No	High

4.1.8.3 (Great Barrier Reef) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	05/12/2024	No	High

4.1.9.3 (Water resource in relation to large coal mining development or coal seam gas) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings,	05/12/2024	No	High



description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.

#### 4.1.10.3 (Commonwealth Land) Why your action is unlikely to have a direct and/or indirect impact

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	05/12/2024	No	High

#### 4.1.11.3 (Commonwealth heritage places overseas) Why your action is unlikely to have a direct and/or indirect impact

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att. 2a MEP MNES Report.pdf MNES Assessment Report completed for the Project to support the referral. Report includes desktop, field findings, description of existing environment, potential project impacts and significant impact assessments. To note, the likelihood of occurrence assessment is Appendix C to this Report.	05/12/2024	No	High

## 5.2 Declarations

### ✔ Completed Referring party's declaration

The Referring party is the person preparing the information in this referral.

ABN/ACN	75637138008
Organisation name	ATTEXO GROUP PTY LTD
Organisation address	4006 QLD
Representative's name	Rosemary Shearman
Representative's job title	Senior Environmental Consultant
Phone	0416034996
Email	rosemary.shearman@attexo.com.au

Address T.C. Beirne Building, Level 4, 315 Brunswick Street, Fortitude Valley,  
QLD 4006

- ☒ Check this box to indicate you have read the referral form. \*
- ☒ I would like to receive notifications and track the referral progress through the EPBC portal. \*
- ☒ By checking this box, I, **Rosemary Shearman of ATTEXO GROUP PTY LTD**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. \*
- ☒ I would like to receive notifications and track the referral progress through the EPBC portal. \*

---

☒ **Completed Person proposing to take the action's declaration**

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

---

ABN/ACN	48624996078
Organisation name	CUBICO SUSTAINABLE INVESTMENTS AUSTRALIA PTY LTD
Organisation address	2000 NSW
Representative's name	David Smith
Representative's job title	Country Head, Australia
Phone	0477883863
Email	david.smith@cubicoinvest.com
Address	88 Phillip Street, Sydney, NSW, 2000

- ☒ Check this box to indicate you have read the referral form. \*
- ☒ I would like to receive notifications and track the referral progress through the EPBC portal. \*
- ☒ I, **David Smith of CUBICO SUSTAINABLE INVESTMENTS AUSTRALIA PTY LTD**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or

misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. \*

☒ I, **David Smith of CUBICO SUSTAINABLE INVESTMENTS AUSTRALIA PTY LTD**, the Person proposing the action, consent to the designation of **Gareth Rees of CUBICO SUSTAINABLE INVESTMENTS AUSTRALIA PTY LTD** as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. \*

☐ I would like to receive notifications and track the referral progress through the EPBC portal. \*

---

### **Completed Proposed designated proponent's declaration**

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

---

ABN/ACN	48624996078
Organisation name	CUBICO SUSTAINABLE INVESTMENTS AUSTRALIA PTY LTD
Organisation address	2000 NSW
Representative's name	Gareth Rees
Representative's job title	Environment and Permitting Manager
Phone	0428628502
Email	gareth.rees@cubicoinvest.com
Address	Level 54, 111 Eagle Street, Brisbane, QLD, 4000

☒ Check this box to indicate you have read the referral form. \*

☒ I would like to receive notifications and track the referral progress through the EPBC portal. \*

☒ I, **Gareth Rees of CUBICO SUSTAINABLE INVESTMENTS AUSTRALIA PTY LTD**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. \*

☒ I would like to receive notifications and track the referral progress through the EPBC portal. \*

