Dunmore Solar Farm and BESS Project

Application Number: **03109** Commencement Date: **01/09/2025** Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Dunmore Solar Farm and BESS Project

1.1.2 Project industry type *

Energy Generation and Supply (renewable)

1.1.3 Project industry sub-type

Solar Farm

1.1.4 Estimated start date *

01/07/2027

1.1.4 Estimated end date *

01/07/2059

1.2 Proposed Action details

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

The Dunmore Solar Farm and BESS Project (the Project) is proposed at 3694 Cecil Plains Moonie Road, Dunmore in Queensland. The Project will comprise a 300MW solar farm and 150MW battery energy storage system (BESS) at the ~534ha site, with access from Cecil Plains Moonie Road. The Site is described as approved Lot 10 SP338904 under the current development approval reference RAL/2023/2217.

The proposal consists of a Solar Farm of up to 300MW (AC) capacity and Battery Energy Storage System (BESS). The final capacity will be determined during final grid studies, but likely to be in the order of 150MW/2hrs. Ancillary facilities will include:

- site office
- operations and maintenance building
- site substation and car parking
- staff amenities and facilities.

An additional 1 into 2 lot subdivision is proposed to create a 9,000m2 freehold lot to accommodate and facilitate the establishment of a new substation. The substation will be delivered and operated by Powerlink, to facilitate the connection of a new solar farm and BESS facility onto the existing 330kV network located west of the site. Easements are also proposed to establish appropriate access from Cecil Plains Road and support transmission line cut in works.

The Project Area is approximately 1056ha, with a disturbance footprint of approximately 534ha and an avoidance area of approximately 522ha.

Att 1 - Project Area, presents the Project Area, the disturbance footprint with indicative layout, extent of development, and the avoidance area on site.

Att 2 - Concept Layout, shows the proposed design layout for the Project.

Solar Farm

The solar farm is comprised of solar modules on a mounting system, with:

- inverter stations,
- cabling connections, operation, and maintenance facility (site office),
- battery Energy Storage System,
- laydown/compound area,
- facility substation area (Dunmore Substation), and
- access from Cecil Plains Moonie Road, fencing, stormwater management and water storage.

The panels being considered are Horizontal Single-Axis Solar Tracking (HSAT) PV panels, which will track from east to west during the day. The panels will be located within ‘development envelopes’ that provide adequate spacing between rows to allow construction and maintenance access within and around the panels.

The photovoltaic (PV) array will generate direct current electricity and will constitute much of the development area. The PV array will consist of many individual panels mounted onto a supporting structure constructed in north-south rows.

Power conversion units will consist of one or more inverters and a step-up transformer. The role of the power conversion units is to convert direct current (DC) electricity from the solar panels to high voltage alternating current (AC) to minimise losses while
transmitting the energy to the substation.

Indicative designs for the project, including staging, development envelopes and preliminary layouts are provided in **Att 2 - Concept Layout**. Generally, one or multiple strings of panels are mounted on a tracker and each tracker is setback 6m from the closest tracker sufficient for maintenance and vehicle access to

service each panel. The schematics are general in nature showing a typical layout and are subject to further refinements to respond to site features during the detailed design stage, however the indicative module layout shows for example, the spacing, location of tracks and inverters.

A high voltage switch yard will be constructed, to integrate the electrical output generated by the solar farm into a single output and distribute the power to the electricity transmission network within the Powerlink easement on the western boundary of the site.

The whole of the solar farm will be contained within a new leasehold. New easements are proposed within the leasehold area to facilitate power infrastructure connections and access.

Co-location with existing High Voltage Transmission infrastructure

A high voltage switch yard will be constructed, to integrate the electrical output generated by the solar farm into a single output and distribute the power to the electricity transmission network within the Powerlink easement along the western boundary of the site. The proximity of this project site to the existing high voltage power network allows a direct benefit for co-locating the solar asset with a new substation within the development footprint to direct feed into the power infrastructure network.

This substation component of the project will consist of the establishment of a new 330kV switchyard between Braemar and Bulli Creek Substation with the inclusion of code compliant type one metering. These functional requirements are subject to Powerlink's design and construction standards and prevailing asset strategies. This element is required for the project to connect to the power network, with connection estimated by ~ July 2029.

The proposed Dunmore substation is proposed to occupy a newly created freehold lot area of 300m x 300m. Equipment to be installed shall be in accordance with Powerlink equipment strategies and Powerlink Queensland will be the land and asset owner.

Battery Energy Storage System (BESS)

The BESS itself includes a battery system capable of both storing and exporting electrical energy and is electrically connected to the national grid (via a substation). Electrically, this includes regulating voltages and both importing and exporting electricity into the grid. The purpose is to absorb excess electricity for re-use during peak demand periods.

The BESS will have a capacity determined by final grid connection studies and designed to maximise the output capacity able to be contained within the storage area. It will be installed on a concrete pad in an area adjacent to site offices and operational phase set down areas.

The most likely battery installation is a modular type with an inverter and step-up transformer coupled to rechargeable battery containers approximately the size of a 20 or 40 ft shipping container. Each battery will also include a temperature regulation and fire suppression systems. Energy will be transmitted to and from each module as high voltage AC.

Ancillary buildings and structures

Buildings and structures for ongoing operation and maintenance for both the solar and battery components will be required, together with a small car parking area which will be located adjacent to the main laydown and main substation area. The operations and maintenance facility will be the hub of the operational phase and include control room, small workshop, storage, and staff facilities.

Ancillary infrastructure which includes inverter stations, substations, cabling and transmission lines, lightning protection, operation and maintenance buildings and storage.

Substation

The project will include a single high voltage substation which connects the many AC outputs from the BESS and the solar farm to the electricity transmission network. The configuration of the substation is subject to detailed design, but will consist of switchrooms, switchyard,and a gantry structure to connect to

the overhead transmission system. The substation will be in the southwestern corner to facilitate connection to the transmission network within the Powerlink easement along the western boundary of the development.

Security and Fencing

Security fencing will be installed around the perimeter of the solar farm. While the details of the final structure will be determined during detailed design, the initial proposal includes security fencing to each stage including property boundaries, with the balance of internal fencing to be developed with stock proof fence.

Signage will be clearly displayed identifying hazards present within the solar plant. CCTV will also be used to manage security on the subject site.

Operations and Maintenance Facilities

Buildings and structures for ongoing operation and maintenance for both the solar and battery components will be required, together with a small car parking area which will be located adjacent to lay down and substation areas. Current expectations are that two staff will be required to run the facility and will be located on site and remotely in part-time or full-time capacities. To accommodate staff and contractors to the site, a site office will be required close to the entry to the proposed facility.

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 Dunmore Solar Farm and Battery Energy Storage System is located in the local government area of Toowoomba, Queensland. Therefore, the *Planning Act 2016* (Planning Act) establishes the relevant planning framework and overarching policy for land-use planning relevant to the project.

The Planning Act establishes the framework and overarching policy for land-use planning in Queensland. The purpose of the Planning Act is to establish an efficient, effective, transparent, integrated, coordinated and accountable system of land use planning, development assessment and related matters to facilitate the achievement of ecological sustainability. Ecological sustainability is defined in the Planning Act as a balance of:

- The protection of ecological processes and natural systems at local, regional, State, and wider levels Economic development
- The maintenance of the cultural, economic, physical and social wellbeing of people and communities.

The Planning Act includes State and local planning instruments that set out policies for planning or development assessment. State planning instruments are State Planning Policies and Regional Plans. Local planning instruments are planning schemes, temporary local planning instruments (TLPI) or a planning scheme policy. The state and local planning instruments relevant to the Dunmore Solar Farm are:

- Local planning instrument:
    - Planning Scheme (including Planning Scheme Policies): *Toowoomba Planning Scheme 2012* (v28 which commenced on 28 Nov 2022)
    - TLPI: NA
- State planning instrument:
    - State Planning Policy: *State Planning Policy (2017)* which has been reflected or partially reflected in the Toowoomba Planning Scheme 2012.
    - Regional Plan: *Darling Downs Regional Plan 2013* and the *Southeast Queensland Regional Plan (Shaping SEQ) 2017* both of which have been reflected in the *Toowoomba Planning Scheme 2012*

Under the Planning Act, development is either accepted, assessable or prohibited. Development may be categorised as assessable development under Schedule 10 of the Planning Regulation or by a local government through a planning scheme. If development is assessable development, it requires development approval under the Planning Act. Relevantly, the *Toowoomba Planning Scheme 2012* prescribes that a solar farm (defined as a Renewable Energy Facility) is assessable development and subject to Impact Assessment, requiring the application to be publicly notified. Accordingly, a development application for a ‘material change of use’ for a Renewable Energy Facility (Council ref: **MCUI/2023/5490)** and an associated ‘Reconfiguration of a Lot’ for a subdivision by lease (Council Ref: **RAL/2023/5493)** was submitted to Toowoomba Regional Council in December 2023.

The development application included an assessment against the planning scheme requirements relevant to the site, the proposed land use and the proposed subdivision by lease (see **Att 19 - Technical plan for the proposed subdivision by lease for RAL**). The development application was supported by the following technical reports:

- **Att 3 - Agricultural Impact Study**
- **Att 4 - Ecological Assessment**
- **Att 5 - Bushfire Risk Assessment**
- **Att 6 - Flood Impact Assessment**
- **Att 7 - Traffic Impact Assessment**
- **Att 8 - Conceptual Servicing and Civil Works Plan**
- **Att 9 - Conceptual Stormwater Management Plan**
- **Att 10 - On-site Water and Wastewater Assessment**

Public Notification was conducted, and no submissions were received.

Toowoomba Regional Council approved the development application subject to conditions in September 2024.

In some project cases, the Chief Executive of the Planning Act is a referral agency for assessable development if the development involved or may involve a matter of state interest as prescribed in Schedule 10 of the Planning Regulation. In this case of the Dunmore Solar Farm Project, state interest is not required and therefore the Chief Executive was not a referral agency.

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. *

A response to this question is required. Your response must succinctly address any applicable sub points of the question and the requirements found in the 'More Guidance' section for this question. If necessary, additional information can be attached and referenced appropriately (e.g. Attachment file name, section, page number/s).

Public notification of the Dunmore Solar Farm and BESS was conducted as part of the development assessment process in accordance with the Planning Act 2016 and the associated Development Assessment Rules v1.3 (2020). More specifically, public notification was undertaken from 22 April 2024 to 15 May 2024 and in accordance with requirements of section 17 and schedule 3 of the Development Assessment Rules:

- A notice was published in the Toowoomba Chronical on 19 April 2024 (**Att 11 - Notice of compliance with public notification requirements**)
- 2x signs were placed on the frontage of the site to Cecil Plains Road
- letters advising of the development application were sent to all adjoining properties.

No submissions were received.

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@dcceew.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

ABN/ACN	37001024095
Organisation name	JACOBS GROUP (AUSTRALIA) PTY LTD
Organisation address	NSW 2060

Referring party details

Name	Tatia Zubrinich
Job title	Principal Environmental Scientist
Phone	0412680288
Email	Tatia.Zubrinich@jacobs.com
Address	Cordelia Street, South Brisbane

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

ABN/ACN	74661046331
Organisation name	SAMSUNG C&T RENEWABLE ENERGY AUSTRALIA PTY LTD
Organisation address	Suite 8.04, Level 8, 227 Elizabeth Street Sydney, NSW 2000

Person proposing to take the action details

Name	Deborah Dinardo
Job title	Senior Development Manager
Phone	0428 305 898
Email	deb.dinardo@samsung.com
Address	Suite 8.04, Level 8, 227 Elizabeth 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. *

Samsung C&T Corporation and its energy division, based in Korea, commenced renewable energy projects in 2007. Samsung C&T is a global leader in innovative technology and sustainability. Samsung C&T has successfully delivered similar renewable energy projects across Europe, Korea, Canada, and USA. Samsung C&T has recently entered into the Australian renewable energy market as Samsung C&T Renewable Energy Australia Pty Ltd (SREA) and have been developing solar farm, BESS and other projects as a developer. In Queensland, there are two Solar Farm and/or BESS projects under development or under technical studies and at least five developments at various stages in New South Wales, and two in Victoria.

SREA has not been involved in any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources.

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

Samsung C&T Renewable Energy Australia, a subsidiary of Samsung C&T Corporation (Korea), has recently expanded its operations into the Australian renewable energy market. The company is actively developing solar farms, battery energy storage systems (BESS), and other clean energy projects. This section outlines the environmental policy and planning framework guiding its operations in Australia, with reference to its global sustainability strategy. **Att 12 - Sustainability Report 2024**, section 2, page 12, which provides Samsung C&T's Sustainability Report 2024.

Environmental Policy

Samsung C&T's environmental policy is embedded within its broader 2050 Net Zero Strategy, which aims to:

- Achieve 100% renewable energy usage by 2030.
- Reach net zero carbon emissions by 2050.
- Strengthen its eco-friendly business portfolio, including solar, wind, and battery storage projects (**Att 12 - Sustainability Report 2024**, section 5, **Att 13 - 2050 Net Zero Report**, page 8 for 2050 NET ZERO Report)

Key components of the policy include:

- Carbon Reduction R&D: Investment in low-carbon technologies such as cementless concrete and life cycle assessment (LCA) tools.
- Energy Efficiency: Upgrades to construction sites and facilities to reduce energy consumption.
- Stakeholder Engagement: Campaigns and training programs to promote climate awareness among employees, partners, and customers. Scope 3 Emissions Management: Systematic tracking and reduction of emissions across the supply chain.

Environmental Strategy and Framework (2015 - 2025)

Samsung C&T's environmental strategy and framework as outlined in it's 2024 sustainability report (**Att 12 - Sustainability Report 2024**), is summarised below.

2015-2017: Foundation Phase

- Established ESG management system and board-level committees (Audit, Governance, Sustainability).
- Initiated ESG activities and began publishing sustainability reports.

2018–2020: Strategic Direction & Goal Setting

- Developed a 3-year roadmap to enhance governance.
- Continued ESG implementation and reporting.
- Became the first Korean construction company to declare Net Zero.

2021–2023: Board-Centric ESG Management

- Set and executed 3-year ESG goals and plans.
- Strengthened ESG risk monitoring systems.
- Announced commitment to carbon neutrality by 2050.

2023–2025: Continuous Improvement

- Focused on refining ESG systems and maintaining transparency through ongoing sustainability reporting.

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? *

Yes

Proposed designated proponent organisation details

ABN/ACN	74661046331
Organisation name	SAMSUNG C&T RENEWABLE ENERGY AUSTRALIA PTY LTD
Organisation address	Suite 8.04, Level 8, 227 Elizabeth Street Sydney, NSW 2000

Proposed designated proponent details

Name	Deborah Dinardo
Job title	Senior Development Manager
Phone	0428 305 898
Email	deb.dinardo@samsung.com
Address	Suite 8.04, Level 8, 227 Elizabeth Street Sydney, NSW 2000

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	37001024095
Organisation name	JACOBS GROUP (AUSTRALIA) PTY LTD
Organisation address	NSW 2060
Representative's name	Tatia Zubrinich
Representative's job title	Principal Environmental Scientist
Phone	0412680288
Email	Tatia.Zubrinich@jacobs.com
Address	Cordelia Street, South Brisbane

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	74661046331
Organisation name	SAMSUNG C&T RENEWABLE ENERGY AUSTRALIA PTY LTD
Organisation address	Suite 8.04, Level 8, 227 Elizabeth Street Sydney, NSW 2000
Representative's name	Deborah Dinardo
Representative's job title	Senior Development Manager
Phone	0428 305 898
Email	deb.dinardo@samsung.com
Address	Suite 8.04, Level 8, 227 Elizabeth 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.

Same as Person proposing to take the action information.

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

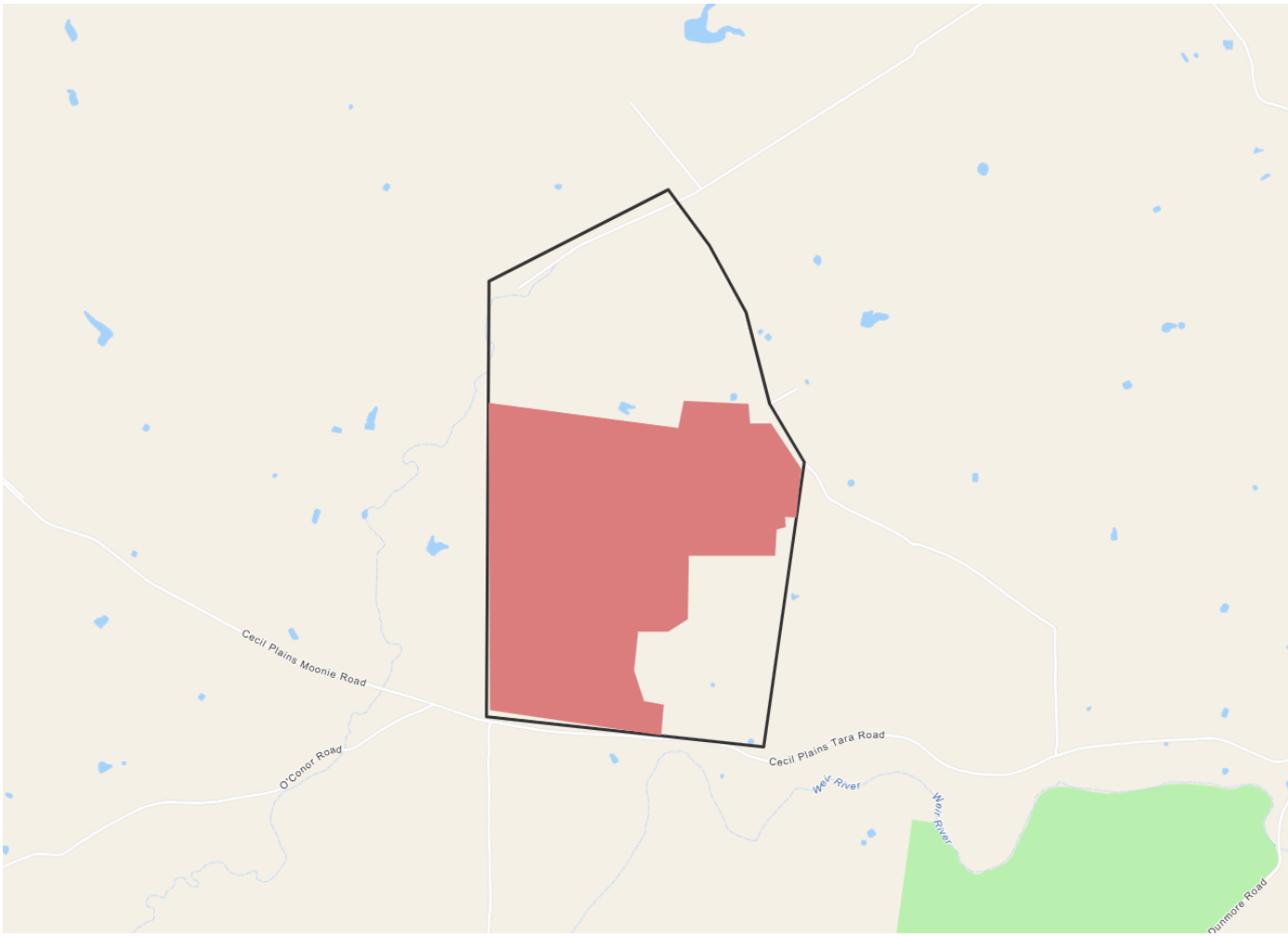
1.4 Payment details: Payment allocation

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

Person proposing to take the action

2. Location

2.1 Project footprint



Project Area: 1054.83 Ha **Disturbance Footprint:** 533.81 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

3694 Cecil Plains Moonie Road Dunmore QLD

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 tenure of the action area is freehold.

A title search was completed as part of the development application and is included in **Att 14 - Development Application Details - Redacted.**

The Project site is not subject to any existing easements or encumbrances on the land title. There is a Powerlink easement (Easement H on SP112991), containing a high voltage transmission infrastructure, that runs along the full length of the western boundary adjoining the subject site.

3. Existing environment

3.1 Physical description

3.1.1 Describe the current condition of the project area’s environment.

The Project site is located at 3694 Cecil Plains Moonie Road, Dunmore, QLD (10SP338904). The project disturbance footprint is located in the eastern corner of the lot plans (**Att 1 - Project Area**) and covers approximately 534 hectares of the Project site. Most of the Project site is cleared farmland used for cattle and crops with several small patches of mature *Casuarina cristata* remaining from previous clearing. *Acacia harpophylla* is growing parallel along a fence line running east to west across the site's location with a large patch of regrowth. A small patch of *Eucalyptus woollsiana* is establishing in the southwest corner of the site's location.

All vegetation within the project disturbance footprint for the solar farm and BESS is mapped as category X non-remnant. Ground cover consists of native and exotic grass species with some other weeds present. Several low-risk waterways are present on the edges of the proposed development footprint, with a number of small to medium dams existing along those waterways.

The study area is presented in **Att 1 - Project Area.**

Locality

The Project site is located in a rural locality, approximately 35km to the south-west of the Cecil Plains township. More broadly, surrounding the site within Dunmore, are the State forests of Kumbarilla (north), Dunmore (East) and Western Creek (south) and the locality is approximately 100km west of Toowoomba.

Historic site usage

No information exists for a previous land use prior to clearing for pastoral and grazing activities.

Current site usage

Currently the subject site and associated land forming Lot 10SP338904, is used by Dunmore Pastoral with a capacity of 3,000 Large Stock Units (LSU) backgrounding cattle, that service feedlots external to the subject site. Grain, hay, and silage production also occurs on the land, ancillary to pastoral activities.

Current zoning

The project area and surrounding locality is zoned as a Rural Zone in the Toowoomba Regional Planning Scheme 2012.

The subject site is comprised of a newly approved lot configuration under development approval RAL/2023/2217, that regularises the existing composition of vinculum lots, that are currently irregular. Approved Lot 10 is the subject site for this development (**Att 19 - Technical plan for the proposed subdivision by lease for RAL**).

Adjoining areas zoning and landuse

The surrounding land uses are predominantly characterised by rural activities, with Intensive Animal Industry (Feedlot) uses located approximately 1.5km and 3.2km south and south-east of the site respectively.

Nearby road infrastructure

An approved new crossover under RAL/2023/2214 is included at the southern section of Lot 10 on Cecil Plains Moonie Road, which will facilitate access for the proposed development.

Contamination

The project area does not intersect any contaminated land.

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

Existing Uses

The predominant land use in the Project area and surrounding locality is farming, primarily livestock grazing and feedstock pastoral.

Currently the Project site and associated land forming Lot 10 SP338904, is used by Dunmore Pastoral with a capacity of 3,000 Large Stock Units (LSU) backgrounding cattle, that service feedlots external to the subject site. Grain, hay, and silage production also occurs on the land, ancillary to the pastoral activities.

Proposed Uses

The proposed use for the project area is the development of a solar farm, battery energy storage system, high voltage infrastructure and associated ancillary buildings and structures.

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 World Heritage properties within 10 km of the project area. The closest world heritage property is the Gondwana Rainforests of Australia, located approximately 142 km south-east from the project area.

There are no National Heritage properties within 10 km of the project area. The closest National Heritageplace is the Gondwana Rainforests of Australia, located approximately 142 km to the south-east of the project area.

The project area is not located near Ramsar listed wetlands. The closest Ramsar listed wetlands are the Moreton Bay Wetlands, located approximately 218 km to the east.

The Referral area contains known or potential habitat for a number of threatened flora and fauna speciesand threatened ecological communities listed under the EPBC Act as discussed in Section 3.2 of this referral. However, no threatened flora and fauna speciesor threatened ecological communities listed under the EPBC Act were recorded in the development area during the field assessments (more information below).

The wider Dunmore area supports historic and Indigenous heritage values as listed in Section 3.3 of this referral. However, there are no known historic and Indigenous heritage values in the project area.

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

Lot 10 SP338904 is situated in Dunmore, Queensland, within the Western Downs region. The topography of this area is predominantly flat to gently undulating, characteristic of the broader Darling Downs physiographic province. The project area is located at an elevation of ~340m. Elevations typically range between 300 to 350 metres above sea level, with minimal slope gradients, making the land suitable for broadacre agriculture and renewable energy developments.

The terrain is interspersed with shallow drainage lines and minor depressions, which may influence local hydrology and soil moisture retention. Surrounding areas exhibit similar topographic features, with land use dominated by cropping, grazing, and increasingly, utility-scale solar and battery energy storage projects. Topographic data from QTopo and Queensland Globe confirm the presence of well-defined cadastral boundaries, sparse vegetation cover, and limited elevation variability.

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.

The proposed development was sited to so as to capitalise on already cleared areas and avoid all patches of remnant vegetation. The project disturbance footprint was previously cleared for farming and is actively used for cattle grazing and crops. Several small patches of mature *Casuarina cristata* remain from previous clearing episodes. In addition, there is a small patch of *Acacia harpophylla* that is growing parallel to a fence line running east to west across the site's location, as well as a patch of regrowth *Eucalyptus woollsiana* present in the southwest corner of the Project site.

All vegetation within the proposed solar farm Project disturbance area is mapped as category X non-remnantunder Queensland's *Vegetation Management Act (1999)* and is not listed as a threatened ecological community (TEC) under the EPBC Act. Ground cover consists of both native and exotic grass species. No Commonweath listed threatened flora species are present within the Project site**.**

A number of desktop and field-based assessments were completed by Redleaf Environmental in 2023 (**Att 4 - Ecological Assessment**) and an updated likelihood of occurrence assessment was completed by Jacobs in August 2025 (**Att 15 - Likelihood of Occurrence**) as part of the EPBC referral process. The results of these assessments are summarised below:

Desktop Assessment

Threatened Ecological Communities

A search of the EPBC Act PMST indicates that four (4) TEC's may occur within the vicinity of the study area (**Att 18 - PMST Search**). No TECs were identified within the Project disturbance area of the project however, the patch of vegetation located to the north, outside of the project footprint is classified as TEC; Brigalow (*Acacia harpophylla* dominant and co-dominant). Brigalow TEC is listed as endangered under the EPBC Act. This patch of vegetation meetsthe criteria for this TEC due to its dominance *Acacia harpophylla* and co-dominance of *Casuarina cristata* with a prominent shrub layer present. *Eucalyptus* species including *Eucalyptus populnea* and *Eucalyptus tereticornis* is also occurring in the tree layer. The Project disturbance area of the proposed development avoids any disturbance or interactions with this endangered TEC through implementing a set back and buffer area.

Threatened Flora and Fauna

An EPBC Act PMST report was generated on 25 August 2025 and indicated that habitat for 33 threatened species and 11 migratory species may potentially occur within 10 km of the project area. The search results are included as **Att 18 - PMST Results**. The Queensland Department of the Environment, Tourism, Science and Innovation (DETSI) flora trigger mapping indicates that the patch of vegetation to the southeast outside of the Project disturbance area is mapped as high-risk and as such a protected flora survey is required if works occur within the vegetation. However, this vegetation is not listed under the EPBC Act.

There are three Commonwealth listed species that have records in the broader local area and have the potential to be present within the mapped vegetation; *Rutidosis glandulosa (*herbaceous perennial)*, Prostanthera sp. Dunmore* (mint bush) and *Philotheca sporadica (*Kogan waxflower). *Rutidosis glandulosa* is listed as endangered, while *Prostanthera sp. Dunmore* and *Philotheca sporadica* are both listed as vulnerable under the EPBC Act.

None of these threatened plant species were identified from the field ecological assessment that was undertaken for the Project area.

Koala Habitat

Koalas are listed as endangered under the EPBC Act. All vegetation within the Project disturbance area is mapped as category X non-remnant (**Att 16 - Environmental Constraints**) and is not classified as Koala habitat. The tree species within the Project disturbance area are primarily *Acacia harpophylla* and *Casuarina cristata.* No koala food trees are present on the broader Project site.

Threatened Ecological Communities

The field ecological survey determined that none of the TECs identified within the PMST search are located within the Project development footprint. However, one TEC Brigalow (*Acacia harpophylla* and/or *Casuarina cristata* open forest on Cainozoic fine-grained sedimentary rocks), which is listed as endangered under the EPBC Act, is located north, outside of the Project development footprint. This patch of vegetation will not be impacted by the proposed development.

Field Assessment

A field ecological assessment was conducted by specialist ecological consultants Redleaf Environmental in2023. The findings of this assessment are presented in (**Att 4 - Ecological Assessment**) and is summarised as follows:

Threatened Flora

No threatened flora listed under the EPBC Act was identified within the development footprint, or broader Project site.

Weeds

From the botanical inspection observed one Weed of National Significance (WoNs); *Opuntia spp.*

Threatened Fauna

The field ecological assessment conducted by specialist ecological consultants Redleaf Environmental in 2023 did not identify any threatened fauna species within the Project disturbance area or the broader Project site.

With regard to koala, the field ecological assessment did not identify any koala habitat within the broader Project site, nor did it observe any koala individuals or evidence of their presence, such as scats or scratch marks. Additionally, no koala feed trees were present within the Project Area.

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

The ecological survey conducted by Redleaf Environmental confirmed that the project disturbance footprint has been primarily sited to be outside of vegetated areas and within cleared land, with the exception of several small patches of mature trees in some areas. The patches of mature trees are predominantly *Casuarina cristata.*

There is a patch of juvenile *Eucalyptus woollsiana* growing in the southwest corner of the Project disturbance footprint. There are two patches of mapped remnant vegetation that occur outside of the Project disturbance footprint, but within the Project site on its boundary.

The vegetation patch to the north, outside of the Project disturbance area was confirmed by the field ecological survey to be mapped correctly as RE 11.9.5 *Acacia harpophylla* and/or *Casuarina cristata* open forest to woodland on fine-grained sedimentary rocks, which corresponds to Commonweath TEC Brigalow (*Acacia harpophylla* and/or *Casuarina cristata* open forest on Cainozoic fine-grained sedimentary rocks), listed as endangered under the EPBC Act.

None of the vegetation within the Project disturbance footprint correlates to a Commonwealth listed TEC or comprises Commonweath listed threatened flora.

Att - 16 Environmental Constraints shows the patches of remnant vegetation within the Project site. including the Project disturbance area.

The substrate comprises Cainozoic alluvial plains with variable soil types including texture contrast, deep uniform clays, massive earths and sometimes cracking clays.

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.

There are no Commonwealth heritage places within 10km of the project area. The closest listed Commonwealth heritage place is Warwick Post Office, ~131km south-east of the project area.

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

A Cultural Heritage Database and Register Search was undertaken (**Att 17 - Cultural Heritage Report**).

There are no Aboriginal or Torres Strait Islander cultural heritage site points or polygons recorded in the project area.

The Cultural Heritage Party for the project area are the Bigambul People (Federal Court No. QUD1001/2009).

There are no Cultural Heritage Bodies recorded in the project area.

The Cultural Heritage Management Plans (CHMPs) is in place for the CHMP - APLNG project, sponsored by Origin Energy (Departmental Reference No. CLH000759) and a registration date of Jun 3, 2010.

There are no Designated Landscape Areas (DLA) recorded in the project area.

There are no Registered Cultural Heritage Study Areas recorded in the project area.

There are no National Heritage Areas (Indigenous values) recorded in the project area.

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. *

A flood risk assessment has been undertaken (**Att 6 - Flood Impact Assessment**) to determine the flood risk for both the existing (undeveloped) case and to quantify potential hydraulic impacts which may occur because of the proposed Dunmore Solar Farm development.

To assess flooding characteristics for 1% AEP storm event, a hydraulic model was developed supported by a hydrological assessment to determine inflows from external catchments. This model was used to simulate the 1% AEP design flood for both the existing (undeveloped) case and the case with the proposed solar farm and BESS in place. The modelling results indicate that the existing flood risk within the project site is relatively low. Generally, flooding within the project site is overland flow (i.e., rainfall runoff from intense local rainfall events). Several small watercourses traverse the site that convey flows.

Comparison of runoff projected from the developed versus the undeveloped site shows that the proposed development is unlikely to have significant hydraulic impacts external to the development layout.

Generally, no underground or major overland stormwater infrastructure is proposed to be constructed in conjunction with this development. It is proposed to maintain the existing overland flow paths across the property as much as possible and avoid concentrating flows, noting the presence of sodic soils on site that are easily erodible. For the proposed gravel tracks throughout the Project disturbance area to be constructed to service the inverters and solar arrays, roadside table drains will be avoided to maintain overland flow paths. Localised scour protection will be provided where required.

The development does not have access to reticulated water. Water will be trucked to site and stored for use in and around the operations and maintenance facility. It may be economical to reduce the frequency of water deliveries with a rainfall collection system. Water will also be used to wash each PV panel approximately twice per year. The development will also include dedicated storage and reticulation for firefighting water. The firefighting water system, including water storage, will be designed and installed in accordance with relevant standards and codes. The water storage and onsite reticulation will be designed and installed in compliance with the *Plumbing and Drainage Act 2002*, as well as the National Construction Code (NCC) volume 3 and AS/NZS 3500 requirements.

The development does not have access to the reticulated sewer network. Wastewater generated in the staff facilities of the operations and maintenance building will be managed by an onsite sewage facility (OSSF). Based on the expected loading, a small septic system is sufficient for this duty.

A number of state regulated waterways intersect the project area (as shown in **Att 16 - Environmental Constraints**). The siting and design of the project has taken these hydrological constraints into account
and avoided them where possible.

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	No	Yes
S20	Migratory Species	No	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. *

There are no world heritage properties within 10 km of the project area. The closest world heritage property is the Gondwana Rainforests of Australia, located approximately 142 km south-east from the project area. The proposed development will not result in impacts beyond the Project footprint boundary and therefore will not impact this MNES.

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.

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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. *

There are no natural heritage places within 10 km of the project area. The closest national heritage place is the Gondwana Rainforests of Australia, located approximately 142 km south-east from the project area. The proposed development will not result in impacts beyond the Project footprint boundary and therefore will not impact this MNES.

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	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. *

The three Ramsar Wetlands listed above are all located in South Australia, approximately 1100km to 1400km south-west of the project site and whilst part of the Murray-Darling River basin, will not be directly and indirectly impacted by the project due to their distance from these wetlands.

There are no Ramsar Listed Wetlands within 10km of the project area. The closest Ramsar listed wetlands are Moreton Bay Ramsar Wetlands, located approximately 218km east of the project area.

The proposed development will not result in impacts beyond the Project footprint boundary and therefore will not impact Moreton Bay Ramsar Wetlands.

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	Adclarkia cameroni	Brigalow Woodland Snail
No	No	Anomalopus mackayi	Five-clawed Worm-skink, Long-legged Worm-skink
No	No	Aphelocephala leucopsis	Southern Whiteface
No	No	Cadellia pentastylis	Ooline
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Calyptorhynchus lathami lathami	South-eastern Glossy Black-Cockatoo
No	No	Chalinolobus dwyeri	Large-eared Pied Bat, Large Pied Bat
No	No	Climacteris picumnus victoriae	Brown Treecreeper (south-eastern)
No	No	Dasyurus hallucatus	Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu]
No	No	Delma torquata	Adorned Delma, Collared Delma
No	No	Dichanthium setosum	bluegrass
No	No	Egernia rugosa	Yakka Skink
No	No	Erythrotriorchis radiatus	Red Goshawk
No	No	Falco hypoleucos	Grey Falcon
No	No	Furina dunmalli	Dunmall's Snake
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Geophaps scripta scripta	Squatter Pigeon (southern)
No	No	Grantiella picta	Painted Honeyeater
No	No	Hemiaspis damelii	Grey Snake
No	No	Hirundapus caudacutus	White-throated Needletail

Direct impact	Indirect impact	Species	Common name
No	No	Homopholis belsonii	Belson's Panic
No	No	Hypochrysops piceatus	Bulloak Jewel Butterfly
No	No	Lathamus discolor	Swift Parrot
No	No	Lepidium monoplocoides	Winged Pepper-cress
No	No	Maccullochella peelii	Murray Cod
No	No	Nyctophilus corbeni	Corben's Long-eared Bat, South-eastern Long-eared Bat
No	No	Petauroides volans	Greater Glider (southern and central)
No	No	Petaurus australis australis	Yellow-bellied Glider (south-eastern)
No	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	Rostratula australis	Australian Painted Snipe
No	No	Stagonopleura guttata	Diamond Firetail
No	No	Thesium australe	Austral Toadflax, Toadflax
No	No	Vincetoxicum forsteri	
No	No	Xerothamnella herbacea	

Ecological communities

Direct impact	Indirect impact	Ecological community
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
No	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? *

No

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

The 2023 Redleaf Environmental field ecological investigations (**Att 4 - Ecological Assessment**) have confirmed that the majority of the Project site has been previously cleared for agriculture (grazing and pasture). While a PMST search identified potential for 40 threatened species and four TECs within the project study area (project area with a 10km buffer), the proposed disturbance footprint has been sited by Samsung C&T to avoid all remnant vegetation with Commonwealth or Queensland conservation listing. While there are multiple isolated patches of remnant vegetation throughout the broader Project site, which contain a small amount of habitat suitable for non-threatened species, the field survey confirmed that none of theremnant vegetation supports Commonwealth threatened flora or fauna species.

The Project site includes a number of waterways, that are bordered by native vegetation, and which have also been avoided by the Project disturbance footprint . There is one remnant patch of native vegetation that comprises the Commonwealth TEC Brigalow, listed as endangered under the EPBC Act. As indicated above, the siting and design of the Project's disturbance footprint has been developed specifically to avoid the TEC with buffer and set back areas as shown in (**Att 16 - Environmental Constraints**).

The 2023 ecological surveys completed by Redleaf Environmental (**Att 4 - Ecological Assessment**) and the desktop assessment completed by Jacobs in 2025 (**Att 15 - Likelihood of Occurrence**) both concluded that the project is unlikely to have direct and/or indirect impacts on any Commonwealth listed TECs, threatened species, or their habitat. The results of these assessments are summarised below.

TECs

Field investigations confirmed that the proposed Project disturbance footprint does not intersect, or impact (directly or indirectly) any TECs. A patch of low quality, fragmented TEC Brigalow was confirmed to be present 50m north of the project disturbance footprint This patch of vegetation meets the criteria for the TEC Brigalow (*Acacia harpophylla* and/or *Casuarina cristata* open forest on Cainozoic fine-grained sedimentary rocks).

Threatened Species

No threatened flora and fauna species, or their habitat, were identified within the project footprint (disturbance area) during field investigations. The project disturbance footprint avoids the larger patches of remnant vegetation and is therefore not anticipated to impact directly or indirectly on threatened flora or habitat suitable for threatened fauna.

Koala Habitat

No koalas were observed in the project disturbance footprint. Additionally, no koala habitat or feed trees were identified within the broader Project Area. A precautionary approach was taken during the field survey and assessment included searching for signs of koala, such as presence of scats or scratch marks on the base of trees. There was no evidence of koala presence.

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	Actitis hypoleucos	Common Sandpiper
No	No	Apus pacificus	Fork-tailed Swift
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Calidris melanotos	Pectoral Sandpiper
No	No	Cuculus optatus	Oriental Cuckoo, Horsfield's Cuckoo
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Hirundapus caudacutus	White-throated Needletail
No	No	Motacilla flava	Yellow Wagtail
No	No	Pandion haliaetus	Osprey

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

No

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

Desktop assessments identified 10 migratory specie that could potentially transient or flyover within 10km of the project area.

The field investigations (**Att 4 - Ecological Assessments**) did not observe any of these listed migratory species and it was determined that they are unlikely to utilise habitat within or nearby the Project site, due to lack of vegetation present.

The Fork-tailed Swift and White-throated Needletail are largely aerial species and may overfly the study area on occasion (DoE, 2015).

The White-throated Needletail roosts at night in the crowns of tall trees, mainly in forest habitats (DoE, 2015); however, the canopy within
the study area is not as dense as known roost sites. As a result, the study area is considered highly unlikely to provide important habitat for
this species.

The Horsfield's Cuckoo inhabits lightly wooded areas, typically open-structured eucalypt woodlands (Cornell Lab, 2025). The predominantly cleared vegetation found in the project area is unlikely to provide important habitat for this species.

The Pectoral Sandpiper, Common Sandpiper, Curlew Sandpiper, Sharp-Tailed Sandpiper, Yellow Wagtail, Ospreys and Latham's Snipe all favour wetland habitats, such as flooded fields, wet meadows and prairie pools—plus muddy shorelines and marsh edges (Cornell Lab, 2025). These habitats are not found in the project area and therefore these species are unlikely to occur.

Through a combination of desktop assessments, field investigations and likelihood of occurrence assessments, it is concluded that the project area does not contain any of the listed migratory species or habitat suitable for these species. Therefore, the project is unlikely to have direct or indirect impacts on migratory species.

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. *

The project is not a nuclear action.

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.

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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. *

The project area is located approximately 234 km from the east coast of Australia and therefore it is not near a Commonwealth Marine
Area.

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 area is located inland 370km south-west of the Great Barrier Reef and there will not impact it.

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 project is not a coal mine or coal seam gas development and is not located near any of these developments.

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.

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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. *

The Project area is not located on or near 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.

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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. *

The Project area is located in south-east Queensland and is therefore not located near 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:

None

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)
- Threatened Species and Ecological Communities (S18)
- 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. *

A robust screening and scoping exercise was undertaken across land in the regional area prior to selecting the preferred site. Other properties were progressively removed and not considered further from the master list as a result of not meeting one or more necessary criteria. Results of the scoping exercise, and justification for the selected site, are summarised below:

Grid access

A large number of suitably sized paddocks (i.e. 300-600ha) within 50 km of the existing Dalby - Chinchilla 132 kV substation was initially scoped. Nearly every other parcel either lacked capacity at the nearest take-off point or would have required 10 - 15 km of new transmission line through native eucalypt remnants and mapped koala habitat, far exceeding our predicted clearing allowance. Furthermore, proximity to major nearby load centres and Queensland-New South Wales Interconnector (QNI) offers low network losses when transmitting the electrical energy to consumers.

Habitat Constraints

Sites closer to the substation fell inside high-value remnant patches of vegetation mapped as habitat for the Commonwealth listed Koala and foraging grounds for the Golden-shouldered Parrot.

Solar Yield vs Clearing

Land further west was considered to potentially be able to deliver similar sun hours but required 40 - 50 % more panel area (and therefore 40 - 50 % more vegetation clearing) to achieve the same 300 MW output.

Vegetation Clearing and impact on protected matters

There are no alternative and suitable sites proximate to the 330kV transmission line for interconnection without significant vegetation clearing and potentially impacting protected matters.

Agricultural land

There are no alternative sites proximate to the 330kV transmission line for interconnection without impacting existing agricultural use of the land including for grazing and cropping.

Gas fields

The northern portion of the Project site adjoining the 330kV transmission line for interconnection is located proximate to gas development fields which make solar farm development impossible.

Access Route

There are no alternative sites nearby which have existing sealed road suitable for construction traffic and during operation period.

In addition, a do-nothing scenario would not deliver a low-cost, renewable energy option to the NEM. Considering the abundance and reliability of solar energy and the stability provided by a BESS, combined with the sparse population in the area, and proximity to existing transmission and the NEM, the use of solar energy is justified. The project has a generating capacity of up to 300 megawatts, adding significant amounts of renewable energy supply and the stability of a BESS over a 30-year period.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 - Project Area.pdf Figure showing the project site location, disturbance area and avoidance area.	05/09/2025	No	High
#2.	Document	Att 1 - Project Area.pdf Figure showing the project site location, disturbance area and avoidance area.	04/09/2025		High
#3.	Document	Att 2 - Concept Layout.pdf Concept layout of the Dunmore Solar Farm and BESS.	27/03/2024	No	High
#4.	Document	Att 2 - Concept Layout.pdf Concept layout of the Dunmore Solar Farm and BESS.	26/03/2024	No	High

1.2.6 Commonwealth or state legislation, planning frameworks or policy documents that are relevant to the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 10 - Onsite Water and Wastewater Assessment.pdf Dunmore Solar Farm and BESS On-site Water and Wastewater Assessment Report	06/12/2023	No	High
#2.	Document	Att 19 - Technical plan for the proposed subdivision by lease for RAL.pdf Dunmore Solar Farm and BESS plan of Reconfiguration prepared by Fyfe surveyors.	06/12/2023	No	High
#3.	Document	Att 3 - Agricultural Impact Study.pdf Report provides an Agricultural Impact Study for the Dunmore Renewable Energy Project	22/11/2023	No	High
#4.	Document	Att 4 - Ecological Assessment.pdf Ecological Assessment undertaken for the Dunmore Solar Farm project site.	22/11/2023	No	High
#5.	Document	Att 5 - Bushfire Risk Assessment.pdf Bushfire risk assessment conducted for the Dunmore Solar Farm project site.	06/12/2023	No	High
#6.	Document	Att 6 - Flood Impact Assessment.pdf Report provides a flood impact assessment for the Dunmore Renewable Energy Project	06/12/2023	No	High
#7.	Document	Att 7 - Traffic Impact Assessment.pdf Report that presents the Dunmore Solar	06/12/2023	No	High

		Farm and BESS Traffic Impact Assessment			
#8.	Document	Att 8 - Conceptual Servicing and Civil Works Plan.pdf This report contains information pertaining to the Conceptual Servicing and Civil Works Plan for Dunmore Solar Farm	06/12/2023	No	High
#9.	Document	Att 9 - Conceptual Stormwater Management Plan.pdf This rpoert contains the Conceptual Stormwater Management Plan for Dunmore Solar Farm	06/12/2023	No	High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 11 - Notice of Compliance with Public Notification Requirements.pdf Notice of compliance with public notification requirements under Section 18.1 of the Development Assessment Rules	15/05/2024	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 12 - Sustainability Report 2024.pdf SAMSUNG C&T Sustainability Report for 2024	01/12/2024	No	High
#2.	Document	Att 12 - Sustainability Report 2024.pdf SAMSUNG C&T Sustainability Report for 2024	30/11/2024	No	High
#3.	Document	Att 12 - Sustainability Report 2024.pdf SAMSUNG C&T Sustainability Report for 2024	30/11/2024	No	High
#4.	Document	Att 13 - 2050 Net Zero Report.pdf Samsung's net zero report prepared for 2050	01/07/2022	No	High

2.2.5 Tenure of the action area relevant to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 14 - Development Application Details Redacted.pdf Redacted Development Application	07/12/2023	No	High

supporting documentation including Queensland Title Search					
#2.	Document	Att 14 - Development Application Details.pdf Dunmore Solar Farm Development Application Details and Titles Search information	06/12/2023	Yes	High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 - Project Area.pdf Figure showing the project site location, disturbance area and avoidance area.	04/09/2025		High
#2.	Document	Att 1 - Project Area.pdf Figure showing the project site location, disturbance area and avoidance area.	04/09/2025		High
#3.	Document	Att 19 - Technical plan for the proposed subdivision by lease for RAL.pdf Dunmore Solar Farm and BESS plan of Reconfiguration prepared by Fyfe surveyors.	05/12/2023	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att - 15 Likelihood of Occurrence.docx Likelihood of occurrence assessment completed by Jacobs as part of the EPBC referral process.	29/08/2025	No	High
#2.	Document	Att 16 - Environmental Constraints.pdf Figure showing the key environmental constraints that informed siting and design.	11/09/2025	No	High
#3.	Document	Att 18 - PMST Search.pdf PMST Search for Dunmore Solar Farm and BESS conducted on 25/08/25	25/08/2025	No	High
#4.	Document	Att 18 - PMST Search.pdf PMST Search for Dunmore Solar Farm and BESS conducted on 25/08/25	24/08/2025	No	High
#5.	Document	Att 18 - PMST Search.pdf PMST Search for Dunmore Solar Farm and BESS conducted on 25/08/25	24/08/2025	No	High
#6.	Document	Att 4 - Ecological Assessment.pdf Ecological Assessment undertaken for the Dunmore Solar Farm project site.	21/11/2023	No	High

#7.	Document	Att 4 - Ecological Assessment.pdf Ecological Assessment undertaken for the Dunmore Solar Farm project site.	21/11/2023	No	High
#8.	Document	Att 4 - Ecological Assessment.pdf Ecological Assessment undertaken for the Dunmore Solar Farm project site.	21/11/2023	No	High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 16 - Environmental Constraints.pdf Figure showing the key environmental constraints that informed siting and design.	10/09/2025	No	High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 17 - Cultural Heritage Report.pdf Cultural heritage database search report completed for Dunmore Solar Farm and BESS project site.	05/09/2025	No	High

3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 16 - Environmental Constraints.pdf Figure showing the key environmental constraints that informed siting and design.	10/09/2025	No	High
#2.	Document	Att 6 - Flood Impact Assessment.pdf Report provides a flood impact assessment for the Dunmore Renewable Energy Project	05/12/2023	No	High
#3.	Link	National Construction Code https://ncc.abcb.gov.au/editions/ncc-2022/adopte..			High
#4.	Link	PLUMBING AND DRAINAGE ACT 2002 https://www.legislation.qld.gov.au/view/pdf/asma..			High

4.1.4.3 (Threatened Species and Ecological Communities) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence

#1.	Document	Att - 15 Likelihood of Occurrence.docx Likelihood of occurrence assessment completed by Jacobs as part of the EPBC referral process.	28/08/2025	No	High
#2.	Document	Att 16 - Environmental Constraints.pdf Figure showing the key environmental constraints that informed siting and design.	10/09/2025	No	High
#3.	Document	Att 4 - Ecological Assessment.pdf Ecological Assessment undertaken for the Dunmore Solar Farm project site.	21/11/2023	No	High
#4.	Document	Att 4 - Ecological Assessment.pdf Ecological Assessment undertaken for the Dunmore Solar Farm project site.	21/11/2023	No	High

4.1.5.3 (Migratory Species) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 4 - Ecological Assessment.pdf Ecological Assessment undertaken for the Dunmore Solar Farm project site.	21/11/2023		High
#2.	Link	All about Birds https://www.allaboutbirds.org			High
#3.	Link	Referral guideline for listed migratory species under the EPBC Act. https://www.dcceew.gov.au/sites/default/files/do..			High

5.2 Declarations

Completed Referring party's declaration

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

ABN/ACN	37001024095
Organisation name	JACOBS GROUP (AUSTRALIA) PTY LTD
Organisation address	NSW 2060
Representative's name	Tatia Zubrinich
Representative's job title	Principal Environmental Scientist
Phone	0412680288
Email	Tatia.Zubrinich@jacobs.com
Address	Cordelia Street, South Brisbane

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

☑ Check this box to confirm these are the correct identification details. *

☑ By checking this box, I, **Tatia Zubrinich of JACOBS GROUP (AUSTRALIA) 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. *

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your profile.

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	74661046331
Organisation name	SAMSUNG C&T RENEWABLE ENERGY AUSTRALIA PTY LTD
Organisation address	Suite 8.04, Level 8, 227 Elizabeth Street Sydney, NSW 2000
Representative's name	Deborah Dinardo

Representative's job title	Senior Development Manager
Phone	0428 305 898
Email	deb.dinardo@samsung.com
Address	Suite 8.04, Level 8, 227 Elizabeth Street Sydney, NSW 2000

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

☑ Check this box to confirm these are the correct identification details. *

☑ I, **Deborah Dinardo of SAMSUNG C&T RENEWABLE ENERGY 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. *

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your profile.

✔ 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.

Same as Person proposing to take the action information.

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

☑ Check this box to confirm these are the correct identification details. *

☑ I, **Deborah Dinardo of SAMSUNG C&T RENEWABLE ENERGY 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. *

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your profile.