Goombi Renewable Energy Hub

Application Number: **03181** Commencement Date: **08/10/2025** Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Goombi Renewable Energy Hub

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 *

01/07/2027

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. *

As outlined in **Att1-MNES Report-Part A, Section 1.2, p4**, the following terminology will be used throughout this referral form to describe the Proposed Action:

- The **Project Area** covers a total area of 14,174.9 hectares (ha) and refers to the boundaries of the involved land parcels for the Proposed Action and road reserves and easements.
- The **Disturbance Footprint** covers a total area of 1,240.2 ha and is the maximum extent of direct physical impacts within the Project Area based on the indicative location of infrastructure, its estimated permanent footprint, and associated construction activities and disturbance. The Disturbance Footprint covers both the footprint of the proposed wind farm and Battery Energy Storage System (BESS).
- The **Micro-siting Corridor** refers to the maximum spatial extent in which the Disturbance Footprint may be located and contains a varying micro-siting buffer area of up to 150 m in width. The Micro-siting Corridor covers approximately 3,023.7 ha.
- Please note that no retention area or avoidance area is proposed.

Goombi Energy Holdings Pty Ltd as trustee for the Goombi Energy Holdings Unit Trust (ACN 667 531 928) (GEH) (the Proponent and the Person proposing to take the action), is the proponent of the Goombi Renewable Energy Hub (the Proposed Action) and is a partnership between LP Renewable Projects Pty Ltd and TagEnergy Australia Pty Ltd, proposing to develop the the Proposed Action. The Proposed Action is a renewable energy project comprising a Wind Farm and associated potential Battery Energy Storage System (BESS), located approximately 12 kilometres (km) west of Chinchilla and 16 km east of Miles. The Project Area consists of 44 freehold land parcels and numerous road reserves, located within the Western Downs Regional Local Government Area (LGA), in the Southern Queensland Renewable Energy Zone (Southern QREZ).

Proposed Infrastructure: The Proposed Action will involve the construction, operation, maintenance and decommissioning of a wind farm and potentially a BESS. The proposed wind farm will consist of the following components (described in **Att1-MNES Report-Part A, Section 1.4.1, p8**):

- up to 107 wind turbine generators (WTGs), with associated hardstand areas
- up to 4 wind monitoring masts (up to 180 m in height)
- an internal overhead transmission line up to 275 kilovolts (kV) and underlying access track
- up to 2 substations, high voltage (HV) cut-in and HV switchyard (transmission network service providers)
- up to 4 permanent wind farm operational and maintenance facilities
- numerous construction laydowns, compounds and associated activities: temporary laydowns, temporary construction compounds/activities, temporary substation construction areas/facilities, and site construction compounds
- electrical reticulation and infrastructure
- internal access tracks.

The BESS is expected to be comprised of containerised units, with each unit similar in size and dimension to a shipping container which will include the battery units and associated electrical equipment. The BESS is expected to have a separate connection to the electricity grid from the wind farm, however the connection points will be located within close vicinity of one another.

Although the potential BESS is included within the Proposed Action and this referral, the interface/relationship between the wind farm and BESS may change in the future. If the BESS is ultimately determined to be undertaken by a different legal person (organisation) and/or operate independent of the wind farm, a separate referral under the EPBC Act (if determined necessary) will be undertaken for a standalone BESS.

Proposed Timeframes: The Proposed Action is anticipated to commence in the third quarter of 2027, with a construction duration of up to 36 months. The Proposed Action is estimated to have an operational life of 30-35 years (**Att1-MNES Report-Part A, Section 1.4.2, Table 1.3, p9**).

Proposed Activities:

Construction Phase: Planned construction activities will include the following for both the wind farm and BESS (**Att1-MNES Report-Part A, Section 1.4.2, p9**):

- site establishment and early works
- vegetation clearing
- earthworks
- access track and footing construction
- transport of components to site
- wind turbine and temporary works hardstand construction
- underground and aboveground power and communication cable installation
- substation and BESS construction
- construction of the facilities buildings
- meteorological mast erection
- turbine delivery and erection
- commissioning of the wind farm
- rehabilitation of temporary construction areas within the Disturbance Footprint.

During the construction phase of the Proposed Action the workforce will consist of approximately 300 staff, with most workers to be housed in existing workers accommodation in Miles and Chinchilla.

Operation and Maintenance Phase: Following the construction and commissioning of the Proposed Action, on-site activities will decrease substantially. The wind farm will be designed to generally operate with limited intervention, with each WTG capable of operating independently of all other WTGs. Most maintenance undertaken on the operational wind farm will be preventative maintenance, undertaken through a schedule which will cycle through all the WTGs to ensure service intervals are met. In addition to maintenance work, some repair work will be required should breakdowns occur (**Att1-MNES Report-Part A, Section 1.4.3, pp 9-10**). The BESS will also be designed to generally operate with limited intervention.

Repowering Phase: Following the Proposed Action's operational lifespan, an assessment will be conducted to determine if the asset will continue operation, be 'repowered', or be decommissioned. Repowering of the wind farm would seek to retain as much of the infrastructure as possible while upgrading or installing new WTGs and associated infrastructure as required. Repowering would trigger subsequent approval requirements of which will be determined and sought at the time (**Att1-MNES Report-Part A, Section 1.4.3, pp 10**).

Decommissioning and Rehabilitation Phase: At the end of the asset's life, if not repowered, the WTGs and associated infrastructure will be decommissioned in line with legal requirements, approval conditions and landowner agreements. All aboveground structures not needed for ongoing agricultural use will be removed and the land rehabilitated, except for the main substation which may remain as part of Powerlink's network. Turbine foundations and underground infrastructure will remain in place, while access tracks and hardstands will be rehabilitated unless the landowner chooses to retain them (**Att1-MNES Report-Part A, Section 1.4.3, pp 10**).

Further detail regarding the proposed decommissioning and rehabilitation activities are provided in (**Att2-MNES Report-Part B, Section 7.4, pp 206-207**).

Investigative and Preliminary Works

The following investigative and preliminary works are proposed to be excluded from the referred action, as they are considered unlikely to have a significant impact on Matters of National Environmental Significance (MNES), and therefore do not require approval under the *Environment Protection and Biodiversity Conservation Act 1999* (Cmwth) (EPBC Act):

- Site investigation works: Activities undertaken to design and assess the potential impacts of the Project, including (but not limited to) geotechnical and environmental investigations, site surveys, and

works to identify or confirm the location and integrity of existing utilities and services.
- Site establishment works: Activities supporting site investigation works, including (but not limited to) the installation of low-impact temporary structures, traffic and environmental controls, and the maintenance of existing access points and tracks.
- Utility works: The protection, modification, or relocation of existing utilities and services, where such activities are comparable in scope and scale to routine replacement, renewal, or maintenance.
- Cultural heritage works: The salvage of Aboriginal cultural heritage material and other management actions required under the *Aboriginal Cultural Heritage Act 2003* (Qld) (ACH Act).
- Low-impact vegetation removal: Vegetation clearing required to facilitate the enabling works listed above, where the removal is unlikely to have a significant impact on MNES.

GEH will ensure that an EPBC Act self-assessment is undertaken to avoid MNES where reasonably practicable, and to minimise impacts on MNES to the extent reasonably practicable. Given the small-scale and low intensity of the Investigative and Preliminary Works, the potential for impacts on MNES is negligible and the self-assessment is appropriate within this context.

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 Proposed Action will require assessment and primary approvals under the *Environment Protection and Biodiversity Conservation Act 1999* (Cmwth) (EPBC Act) and the *Planning Act 2016* (Qld) (Planning Act), as well as a number of secondary approvals under State and Commonwealth legislation to facilitate supporting works and construction activities.

The relevant legislation, policies and planning instruments for the Proposed Action include:

Commonwealth Legislation and Policies

- *Environment Protection and Biodiversity Conservation Act 1999* (Cmwth) (EPBC Act)
    - The EPBC Act is a key piece of Australian environmental legislation, which prescribes a national legal framework to protect and manage matters of national environmental significance (MNES) and regulate actions that may impact Commonwealth land and proposed to be carried out by a Commonwealth agency.
      An EPBC Act referral is required for the Proposed Action, as a detailed likelihood of occurrence assessment identified 19 Matters of National Environmental Significance (MNES) that are either confirmed to occur within the area or have a moderate to high likelihood of occurrence. These comprise two Threatened Ecological Communities (TECs), two threatened flora species, 13 threatened fauna species, and two migratory species.
      Assessments of these MNES were undertaken against the ***Significant Impact Guidelines 1.1 – MNES***, which provides guidance on determining whether an action is likely to have a significant impact on a matter protected under the EPBC Act. If the Proposed Action is determined to be a controlled action, it will need to be assessed and approved by the Commonwealth Minister for Environment under the EPBC Act.
- *Native Title Act 1993* (Cmwth) (NT Act)
    - Native title is the recognition under Australian law that some Indigenous people continue to hold rights to their land and waters through their traditional laws and customs. Native title is governed by the Commonwealth NT Act, which establishes the framework for the recognition and protection of the rights and interests of Aboriginal and Torres Strait Islander people.
- EPBC Act Environmental Offsets Policy 2012 (Cmwth) (EOP)
    - The EOP provides guidance on the role of offsets in environmental impact assessments and how the Department of Climate Change, Energy, the Environment and Water (DCCEEW) considers the suitability of a proposed offset. It aims to improve environmental outcomes through the consistent application of best practice offset principles, provide more certainty and transparency, and encourage advanced planning of offsets. The suitability of a proposed offset is considered as part of the decision to approve or not approve a proposed action under the EPBC Act. It is likely that offsets will be required as part of the Proposed Action.

State Legislation, Frameworks and Policies

- *Planning Act 2016* (Qld) (Planning Act) and Planning Regulation 2017 (Qld) (Planning Regulation)
    - The Proposed Action will require development approval for a Material Change of Use (Wind Farm and BESS) and Operational Works (Native vegetation clearing) under the Planning Act. Additional secondary approvals will also be required under the Planning Act. The Planning Regulation is subordinate legislation to the Planning Act, prescribing matters such as the relevant assessment manager, assessment benchmarks and level of assessment. The development application will be assessed by the State Assessment and Referral Agency (SARA), comprising the Queensland Department of State Development, Infrastructure and Planning (DSDIP) and supported by technical agencies such as the Queensland Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development **(**DNRMMRRD) and the Queensland Department of Transport and Main Roads (DTMR). GEH has engaged with SARA via two pre-lodgement meetings in December 2023 and August 2025. A development application is currently being prepared which will be submitted in Q1 2026.
- State Planning Policy (July 2017) (Qld) (SPP)

    - The SPP is a key component of Queensland's planning system that expresses the state interests in land use planning and development. The state interests are promoted through plan making and development decisions of state and local government. The State Development Assessment Provisions (SDAP) are the assessment benchmarks used by the state in its role as assessment manager or referral agency for development applications which affect a state interest.
- *Aboriginal Cultural Heritage Act 2003* (Qld) (ACH Act)
    - In Queensland, Aboriginal cultural heritage is managed under the ACH Act which intends to provide effective recognition, protection, and conservation of Aboriginal cultural heritage. Under the ACH Act, any person carrying out an activity has an Aboriginal Cultural Heritage Duty of Care (Duty of Care or DoC), which requires the person to take all reasonable and practicable measures to ensure their activity does not harm Aboriginal cultural heritage. Failure to comply with the Duty of Care is an offence.
- *Nature Conservation Act 1992 (Qld)* (NC Act)
    - The NC Act is administered by the Queensland Department of Environment, Tourism, Science and Innovation (DETSI) and provides the framework for the conservation of nature in Queensland. The NC Act is supported by several pieces of subordinate legislation that provide for the listing of protected species, regulate the taking and keeping of native species, manage protected areas and support the conservation of particular species. The Proposed Action may require secondary approvals such as a protected plant clearing permit/s and species management programs.
- *Vegetation Management Act 1999* (Qld) (VM Act)
    - The VM Act provides for the regulation of vegetation clearing in Queensland in a way that conserves remnant vegetation, prevents loss of biodiversity, maintains ecological processes and prevents land degradation. In achieving this purpose, the VM Act is supported by the Vegetation Management Regulation 2012 and the Planning Act. DNRMMRRD administers the VM Act through its assessment of the development application. The Proposed Action will impact regulated vegetation under the VM Act, of which will be assessed through the State development application via assessment of operational work - native vegetation clearing.
- *Biosecurity Act 2014* (Qld) (Biosecurity Act)
    - The Biosecurity Act establishes a framework for an effective biosecurity system for Queensland that seeks to minimise biosecurity risks and respond to impacts on a biosecurity consideration, including responding to biosecurity events, in a timely and effective way. The Biosecurity Act is administered by the Department of Agriculture and Fisheries (DAF) and is supported by the Biosecurity Regulation 2016. The construction and operation of the Proposed Action will be subject to the applicable provisions of the Biosecurity Act.
- *Environmental Offsets Act 2014* (Qld) (EO Act)
    - The purpose of the EO Act is to counterbalance the significant residual impacts of activities on prescribed environmental matters through the use of environmental offsets. The EO Act is administered by the Queensland Department of Environment, Tourism, Science and Innovation (DETSI) and is supported in achieving its purpose by the Environmental Offsets Regulation 2014 (EO Regulation). Offsets will be required under the EO Act for impacts to some Matters of State Environmental Significance.
- *Fisheries Act 1994* (Qld) (Fisheries Act)
    - The Fisheries Act establishes the framework for the management, use, development and protection of Queensland's fisheries resources and fish habitat, and is administered by the Queensland Department of Agriculture and Fisheries (DAF). The Fisheries Act is supported by a range of subordinate legislation and the Planning Act, which provides for the consideration of fisheries values through the development assessment process. The Project Area contains waterways for waterway barrier works which may trigger secondary approvals for operational work - waterway barrier works or necessitate design in accordance with accepted development requirements.

- *Water Act 2000* (Qld) (Water Act)
    - The Water Act provides for the sustainable management of water resources, water supply and demand management, the management of impacts on underground water and the operation of water authorities in Queensland. The Water Act is administered by the Queensland Department of Local Government, Water and Volunteers (DLGWV) and is supported through the Water Regulation 2016, Water Plans for Queensland's water catchments and the Planning Act, which typically provides for the regulation of development activity interfering with water resources. The Project Area contains watercourses which may trigger secondary approvals such as Riverine Protection permits.

Local Planning Instruments

- Western Downs Planning Scheme 2017 (the Planning Scheme)
    - The key instrument used by local governments to regulate development within local government areas are planning schemes (local planning instruments). Generally, planning schemes guide the growth and development within a local government area by identifying a preferred settlement pattern for a local government area, regulating development and providing for the preservation of important local environmental and community values. A range of secondary approvals may be required under the Planning Scheme (e.g. earthworks, roadworks, batching plants, quarries, etc). Secondary approvals will be determined during detailed project design phase.

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. *

GEH has undertaken and implemented a structured stakeholder engagement process since June 2022, to build relationships, share project information, identify concerns, and explore local participation opportunities. Prioritising social licence, engagement followed International Association for Public Participation Core Values and the Public Participation Spectrum to define public roles and levels of commitment. A local Community Engagement Officer has been engaged, to provide a consistent point of community contact. Additionally, since 2023, Umwelt has supported engagement through a Community and Stakeholder Engagement Plan, Social Impact Assessment, and development of communication materials such as newsletters and advertisements. All engagement activities have focused on informing and consulting with stakeholders, as outlined below.

State Regulators

- In-person and online meetings with regulatory agencies to introduce the Project and GEH, outline the approvals pathway and provide an overview of anticipated environmental impacts (meetings held in Dec 2023 and Jul 2025).
- Targeted meetings to present updated project layout and design, highlight avoidance and minimisation principles, and discuss ecological disturbance, matters of state environmental significance (MSES) and proposed mitigation measures (May 2024–Aug 2025).
- Ongoing engagement to seek regulator advice and feedback throughout the feasibility and design stages (2023–2025).

DCCEEWW

- One online pre-referral meeting was completed with DCCEEW in August 2025 to provide a project overview, key timeframes, priorities and surveys undertaken to date. The meeting also discussed the design priorities that were adopted throughout the design and development process.
- DCCEEW provided an overview of the assessment process under the EPBC Act, as well as required information to support the referral submission.

Western Downs Regional Council (WDRC)

- In person/online meetings to provide a Project briefing and pre-lodgement consultation (Dec 2023), align on Project scope and strategic engagement (May 2024), hold detailed discussions on WDRC's policy frameworks, housing pressures, workforce development and community expectations (mid-2024), and present to newly elected councilors and senior leadership (Aug 2024).
- In person meeting to provide Project briefing and further information on approach to sponsorship fund, Neighbour Benefit Scheme (NBS), Community Benefit Fund (CBF), housing constraints, workforce challenges and road impact assessments (Mar 2025).
- Participation in WDRC initiatives including 'Shape Your Energy' and Western Downs Futures to align benefit-sharing with local priorities (Apr 2025).
- Discussions on Community Benefits Agreement (CBA) structure and expectations, with negotiations ongoing ahead of DA lodgement (May 2025, Aug 2025 and Sep 2025).

Project Neighbours and Host Landholders

- Initial engagement in late-2022 with host landholders, and neighbouring landholders from Jan 2024, establishing direct contact and introducing the Project.
- Targeted in-person meetings and design workshop (various dates) with host landholders to discuss project design and agreements.
- Targeted in-person meetings with neighbouring owners to provide updates and discuss key issues (Jan 2024-present).
- Property-specific engagement: House visits for noise monitoring (April–June 2025), demonstration of visualisations showing potential turbine views, and discuss the NBS.
- Three editions of project newsletters (Feb 2024, Feb 2025, Jul 2025) that provided project updates, regulatory changes, technical assessment findings, and contact details for further engagement.

- Eight community information sessions in Miles, Chinchilla and Cameby (Apr 2024, Mar 2025 and Aug 2025).
- Door knocking, to seek direct engagement with surrounding residents that were not reached through other methods.
- Continued meetings, regular calls, and emails, with host and non-host landholders (ongoing).

Broader Community

- Three project newsletters were distributed to approximately 5,000–6,000 addresses per round (Feb 2024, Feb 2025, and July 2025).
- Eight community information sessions were held between April 2024 and August 2025 in Chinchilla, Miles and Cameby, attracting 10–40 attendees each. The sessions presented project updates, technical study outcomes and the final design, while gathering community feedback. An online community survey, launched in Mar 2024, sought to understand local needs, values and concerns.
- Continued response to community queries: Over 50 queries responded to via Project website and email, and more than 30 via phone calls (excluding landowner and neighbour queries (2024–2025)).
- Community sponsorship grants: 17 organisations supported through sponsorships, totalling approximately $25,000 in April 2025. Further $25,000 to be distributed in October 2025.
- Public advertising: Information sessions and surveys advertised in local newspapers, on community noticeboards, Facebook, and at supermarkets and community centres.
- In total, GEH has engaged with over 440 unique stakeholders since the commencement of engagement, and continues to proactively engage with the community on an ongoing basis.

Traditional Owners

- Engagement with Aboriginal Parties through introductory meetings (Dec 2023).
- Establishment of an Early Works Agreement and undertaking cultural heritage field surveys.
- Ongoing cultural heritage engagement including participation in survey work, documentation of cultural values and artefacts, and provision of feedback informing Project design updates.
- Continued dialogue regarding employment, training and contracting opportunities.
- Negotiations are currently underway for a Cultural Heritage Management Plan (CHMP) to guide further surveys and assessment.

Industry and Business Associations (2024-present)

- *Engagement via person and online meetings with Toowoomba and Surat Basin Enterprise (TSBE), Chinchilla Chamber of Commerce and Industry Inc. (CCCI), Miles and District Chamber of Commerce (MDCC) and Industry Capacity Network (ICN) to discuss local procurement approach, workforce development, and collaboration opportunities.*
- *Engagement with organisations representing First Nations business interests, including TSBE's Indigenous Business Connector, and direct engagement with Indigenous-owned and operated enterprises.*
- *Membership with TSBE, CCCI and MDCC to access their services such as supplier mapping support, regular procurement reporting, and assistance with long-term community legacy initiatives.*
- *Community information sessions provided an opportunity for local businesses to express interest in Project-related contracts; GEH invited expressions of interest and added contacts to the supplier database.*

Emergency Services

- *Meetings and correspondence with Queensland Fire and Emergency Services (QFES), Rural Fire Service Queensland (RFSQ) and Bushfire Resilient Communities (BRC) to discuss emergency response and bushfire risk management.*
- *Ongoing coordination to align the Bushfire Management Plan and emergency procedures with QFES/RFSQ requirements.*

Education Providers

- *Engagement with local education providers has focused on workforce pathways and skills development.*
- *Partnership opportunities with TAFE Queensland identified, including support for scholarships, equipment donation and vocational training.*
- *Sponsorship programs with local schools.*
- *Ongoing dialogue with education and training providers to align workforce development with regional needs and Project timelines.*

Accommodation Providers

- *In-person meetings, regular email communication and site visits with four workforce accommodation providers in Chinchilla and Miles.*

Government Stakeholders

- *Initial Project briefings were held with State and Federal Government representatives, including advisors to the Queensland Treasurer and Queensland Deputy Premier.*
- *Meetings with the local Member for Callide (Bryson Head MP) and an advisor to the Federal Member for Maranoa (Hon. David Littleproud MP).*

Overall, future consultation is expected to remain adaptive and iterative, integrating stakeholder feedback into project design and operations while maintaining transparent communication, inclusivity, and alignment with local needs and priorities, with ongoing feedback continuing through meetings, community sessions, surveys, property-specific consultations, and direct communication channels such as in-person meetings, phone, email, and via the GEH's local Community Engagement Officer.

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.

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Alternatively, email us at privacy@dcceew.gov.au.

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1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	18059519041
Organisation name	UMWELT (AUSTRALIA) PTY. LTD.
Organisation address	2284 NSW

Referring party details

Name	Becca McBride
Job title	Environmental Consultant
Phone	1300 793 267
Email	rebecca.mcbride@umwelt.com.au
Address	Level 20/145 Ann Street, Brisbane City Queensland 4000

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	667531928
Organisation name	Goombi Energy Holdings Pty Ltd as trustee for the Goombi Energy Holdings Unit Trust
Organisation address	Suite 6, 618 Ruthven Street, Toowoomba, QLD 4530

Person proposing to take the action details

Name	Llion Parry
Job title	Director
Phone	0422 232 538
Email	llion@lprp.net
Address	Suite 6, 618 Ruthven Street, Toowoomba, QLD 4530

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? *

Yes

1.3.2.16 Describe the nature of the trust arrangement in relation to the proposed action. *

The trust deed for Goombi Energy Holdings Pty Ltd as trustee for the Goombi Energy Holdings Unit Trust (GEH) is provided in **Att9-GEH Unit Trust Deed**

GEH will be wholly owned by TagEnergy Australia Pty Ltd, when the Proposed Action is undertaken.

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. *

Goombi Energy Holdings Pty Ltd as trustee for the Goombi Energy Holdings Unit Trust (GEH), is a partnership between LP Renewable Projects Pty Ltd (LPRP) and TagEnergy Australia Pty Ltd (TagEnergy).

LPRP

LPRP is an independent, Australian owned, and Australia based specialist developer of renewable energy projects, with over 40 years of experience delivering energy projects globally. LPRP is focussed on identifying and delivering the highest quality projects that deliver ongoing value for landowners, communities, investors and the environment.

LPRP's core expertise is in site identification and validation, project design and development, technical and engineering assessments and securing development approvals. LPRP is a hands-on developer that is committed to engaging openly and effectively with the landholders, stakeholders and communities that will play a crucial and ongoing role in delivering renewable energy projects and enabling the energy transition.

LPRP is has previously referred the following proposed actions under the EPBC Act:

- EPBC2025/10272 - Belah Battery Energy Storage System (BESS) (project under EPBC Act Referral Assessment)

TagEnergy

TagEnergy is a clean energy enterprise focused on delivering projects that deliver reliable energy affordably and at scale, with a portfolio of renewable energy projects across Australia, United Kingdom (UK) and Europe. TagEnergy has developed a portfolio of close to 12 gigawatt (GW) across Australia, UK, Spain, Portugal and France, and intends to drive the pace of transition through projects that deliver reliable energy affordably, and at scale.

TagEnergy is operated by a highly experienced team of manager-shareholders. Its operations span the renewables value chain, from development, financing, construction and asset management of wind, solar and storage projects, to commercialisation of its competitive energy.

TagEnergy has previously referred the following proposed actions under the EPBC Act:

- EPBC2025/10200 - Talbingo BESS (project under EPBC Act Referral Assessment)
- EPBC2024/09894 - Devlins Bridge Wind Farm (project under EPBC Act Referral Assessment)
- EPBC2021/8910 - Mount Fox BESS (project under EPBC Act Referral Assessment)
- EPBC2025/10108 - Raglan BESS (project approved via EPBC Act Referral Assessment)
- EPBC2017/7965 - Golden Plains Wind Farm (East, Stage 1) (project approved via EPBC Act Referral Assessment)
- EPBC2017/7965 - Golden Plains Wind Farm (West, Stage 2) (project approved via EPBC Act Referral Assessment)
- EPBC2017/7965 - Golden Plains Wind Farm and BESS (project approved via EPBC Act Referral Assessment)
- EPBC2024/10060 - Nebo BESS, received project approval via EPBC Act Referral Assessment under Ace Power, recently acquired by TagEnergy.

Both LPRP and TagEnergy have proven track records of not only responsibly delivering projects in accordance with applicable environmental legislation and regulation, but consistently delivering values based environmental performance initiatives beyond compliance obligations. Neither LPRP nor TagEnergy have been subject to any environmental legal proceedings that have resulted in fines or prosecution.

GEH adopts the mitigation hierarchy which follows the approach of avoidance, minimisation and in the last resort, offsetting. In the first instance this approach for wind farms involves siting turbines and ancillary infrastructure in areas that avoid important natural values (such as stands of remnant vegetation, critical habitat or waterways). If values cannot be avoided, GEH will then work to ensure temporary or permanent impact to those values are minimised.

GEH designs and implements management measures and operating conditions during construction and operational stages to minimise the extent of potential or anticipated impacts.

Examples include:

- management plans covering various environmental matters
- restrictions on construction activities (tree removal outside of nesting periods, limiting haulage or machinery use after hours etc)
- establishment of buffer zones and exclusion areas to protect sensitive areas
- ongoing monitoring and surveillance activities (birds/bats and noise)
- ensuring activities comply with regulatory requirements and best practice standards
- notifying and continuing consultation with key stakeholders and regulators.

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

As stated previously, Goombi Energy Holdings Pty Ltd as trustee for the Goombi Energy Holdings Unit Trust (GEH) is a partnership between LP Renewable Projects Pty Ltd (LPRP) and TagEnergy Australia Pty Ltd (TagEnergy). GEH will be wholly owned by Tag Energy Australia Pty Ltd when the Proposed Action is to be undertaken.

The following community and environmental management charter, environmental and social management systems, and sustainability policy (outlined below), have been adopted by GEH throughout the planning and development of the Proposed Action. These frameworks will continue to apply throughout subsequent stages of the Proposed Action.

GEH Community and Environment Management Charter

The charter serves as a foundational policy framework outlining GEH's approach to community engagement and environmental responsibility across its renewable energy developments. GEH's commitment centres on fostering long-term, respectful relationships with local communities and Traditional Owners, while ensuring that its projects contribute positively to both social and ecological outcomes.

GEH recognises its role in shaping the regions in which it operates. The organisation is guided by principles of responsiveness, innovation, and collaboration, aiming to deliver shared value through inclusive engagement and sustainable land stewardship.

GEH's commitments include:

- Engaging respectfully with the local community, including Traditional Owners where applicable, to seek their opinions and input before finalising the project design and submitting a development application.
- Providing timely information on the project, and being accessible and responsive in addressing the local community's feedback and concerns throughout its life.
- Avoiding, minimising, and mitigating, where possible, impacts to areas of high biodiversity, cultural, and landscape value in the design and operation of projects.
- Minimising impacts on highly productive agricultural land where feasible and exploring opportunities to integrate continued agricultural production into the project.
- Informing the community in a timely manner about potential visual, noise, traffic, and other impacts of the development, and consulting on mitigation options where relevant.
- Supporting the local economy by providing local training, employment, and procurement opportunities wherever possible.
- Offering communities the opportunity to share in the development's outcomes and consulting them on available options, including relevant governance arrangements.
- Committing to using the project to support educational and tourism opportunities where appropriate.
- Demonstrating responsible land stewardship over the life of the development and welcoming opportunities to enhance the ecological and cultural value of the land.
- Recycling waste materials where feasible during the life of the project and committing to responsible decommissioning or refurbishment/repowering at the end of the project's life.
- Sharing project outcomes beyond current regulations, where relevant, by consulting and engaging with recognised ecology experts to target net-positive results for flora and fauna in the region.

The full document is provided in **Att6-GEH_Community and Environment Engagement Charter**

TagEnergy Environmental and Social Management System

This document outlines TagEnergy's internal ESG Management System (ESMS), detailing policies, processes, and requirements for managing ESG risks and impacts throughout its projects. It serves as a corporate-level reference for all employees, adaptable to each country's regulations.

The scope of the ESMS applies across the full project life cycle:

- development

- procurement
- financing
- construction
- asset Management
- refurbishment
- decommissioning.

Local regulations that exceed ESMS commitments will always be followed. The full document is provided in **Att7-TagEnergy_Environmental and Social Management System**

Sustainability Policy

The document outlines TagEnergy's Sustainability Policy, which guides the company's approach to developing renewable energy projects responsibly and ethically. It sets out the company's commitments to protecting the environment, supporting affected communities, and upholding human rights and labour standards in line with international frameworks.

Four key areas are focussed on:

- people and community
- environment and biodiversity
- decarbonization
- education and inclusion

The document serves as a framework for decision-making and action across all levels of the company, ensuring that sustainability is embedded in TagEnergy's culture and operations. It also reflects the values shared by leadership and shareholders to support long-term, responsible growth.

The full document is provided in **Att8-TagEnergy_Sustainability Policy**

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	667531928
Organisation name	Goombi Energy Holdings Pty Ltd as trustee for the Goombi Energy Holdings Unit Trust
Organisation address	Suite 6, 618 Ruthven Street, Toowoomba, QLD 4530

Proposed designated proponent details

Name	Llion Parry
Job title	Director
Phone	0422 232 538
Email	llion@lprp.net
Address	Suite 6, 618 Ruthven Street, Toowoomba, QLD 4530

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	18059519041
Organisation name	UMWELT (AUSTRALIA) PTY. LTD.
Organisation address	2284 NSW
Representative's name	Becca McBride
Representative's job title	Environmental Consultant
Phone	1300 793 267
Email	rebecca.mcbride@umwelt.com.au
Address	Level 20/145 Ann Street, Brisbane City Queensland 4000

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	667531928
Organisation name	Goombi Energy Holdings Pty Ltd as trustee for the Goombi Energy Holdings Unit Trust
Organisation address	Suite 6, 618 Ruthven Street, Toowoomba, QLD 4530
Representative's name	Llion Parry
Representative's job title	Director
Phone	0422 232 538
Email	llion@lprp.net
Address	Suite 6, 618 Ruthven Street, Toowoomba, QLD 4530

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

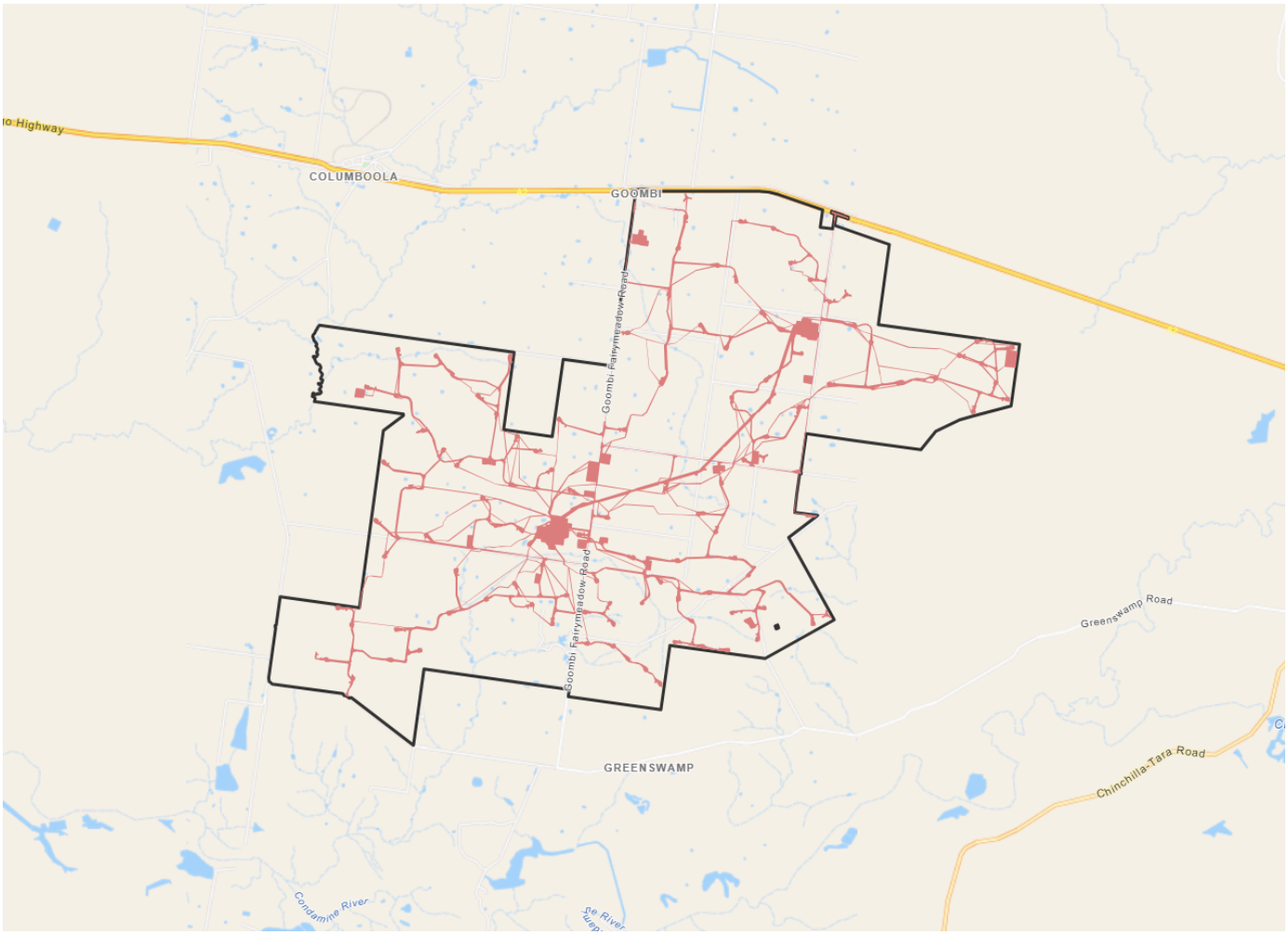
1.4 Payment details: Payment allocation

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: 14188.10 Ha **Disturbance Footprint:** 1241.37 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Goombi Fairymeadow Road, Goombi, QLD 4413

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 Area covers 14,174.9 ha and includes 44 land parcels. The land parcels are as follows, all of which are freehold:

- 11BWR72
- 42BWR74
- 13BWR588
- 46BWR103
- 14BWR188
- 50BWR104
- 15BWR49
- 52BWR104
- 15BWR74
- 5BWR74
- 1RP139255
- 65BWR96
- 20BWR169
- 67BWR96
- 25BWR74
- 69BWR97
- 26BWR74
- 6BWR691
- 2BWR104
- 70BWR97
- 2RP139255
- 72BWR188
- 2RP206728
- 73BWR188
- 2RP54114
- 74BWR188
- 2SP193864
- 75BWR188
- 30BWR83
- 80RP213925
- 35BWR338
- 82BWR188
- 36BWR192
- 84BWR453
- 37BWR104
- 85BWR181
- 37BWR181
- 87BWR357
- 39BWR104
- 8BWR74
- 40BWR74
- 92BWR373
- 41BWR181
- 9BWR192

The Project Area is encumbered by a number of easements, which include:

- ASP193864
- BNSP265408
- RSP249446

- BOSP265409
- YSP269465
- ZSP269465
- NSP249442
- BRSP265412
- OSP249443
- ASP338866
- BQSP265411
- MSP249441
- BSSP265413
- ASP338865
- JSP249438
- KSP249439
- BVSP265414
- CSP338863
- QSP249445
- PSP249444
- BPSP265410
- ASP338867
- LSP249440
- ASP338864

Numerous local road reserves intersect the Project Area, which include:

- Goombi Fairymeadow Road
- Scoullers Road
- Brennans Road
- Warrego Highway
- Tames Road
- The Peak Road
- Hubbards Road
- McNulty Road
- Lees Road
- Bidgoods Road
- R Kerrs Road

Additionally, various unnamed road reserves exist within the Project Area.

3. Existing environment

3.1 Physical description

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

The Proposed Action will be located approximately 12 kilometres (km) west of Chinchilla and 16 km east of Miles within the Western Downs Regional Local Government Area (LGA), traversing 44 freehold land parcels and numerous road reserves (**Att1-MNES Report-Part A, Section 1.2, p 4**). The Project is located within the rural zone under the Western Downs Planning Scheme 2017 (the Planning Scheme), situated entirely outside of a local plan, precinct area, or priority living area. No changes to zoning are required to facilitate the Proposed Action.

The Project Area has a rural, inland context, located approximately 260 km from the east coast. The Project Area is located within a landscape that has undergone extensive vegetation clearing and habitat modification since the mid-1800s, largely as a result of agriculture, timber harvesting, power generation, livestock grazing, and gas extraction. These activities have significantly altered native ecosystems, resulting in a fragmented landscape dominated by pasture grasses and invasive weed species.

The Project Area contains a range of rural and industrial infrastructure, including unsealed roads, artificial waterbodies (dams and troughs), cattle fencing, stockyards, homesteads, and extensive coal seam gas (CSG) facilities. A small quarry (Lot 15 on SWR49) is also located within the Project Area.

Historical imagery confirms that the Project Area has been subject to widespread clearing for grazing and agricultural services since at least 1959 (Queensland Globe, 2025). Most of the native vegetation has been removed, leaving only small, fragmented patches of remnant vegetation, typically along riparian corridors, roadside verges/windbreaks, and shaded gullies. Larger remnants are mainly confined to elevated areas in the southeast and east, though these too have been disturbed by CSG infrastructure, including well pads, gas pipelines and access tracks.

Current and historic land uses, as well as the existing infrastructure within the Project Area, are described in **Att1-MNES Report-Part A, Section 4.2.6, p 64.**

Surrounding land uses are generally consistent with those within the Project Area, comprising of a largely undeveloped rural landscape. Pockets of cropping occur within and adjacent to the south-west of the Project Area, with additional cropping located approximately 2 km to the north. Cameby Downs Mine is situated approximately 8km to the north-west, and a production forestry area is located approximately 18 km north of the Project Area. No protected areas or forests exist within or near the Project Area. The closest State Forest is Barakula State Forest, located approximately 9 km to the north.

The northern edge of the Project Area runs parallel to state controlled Warrego Highway, upon which most materials, infrastructure and staff will be transported to the Proposed Action. The proposed site access points will be via the existing intersections of the Warrego Highway with Lees Road and Goombi-Fairymeadow Road. The Proposed Action will utilise existing local roads and access tracks where possible, in addition to the proposed access tracks. The Proposed Action will not utilise The Peak Road during construction, as an agreed outcome from neighbour feedback. Upgrades are proposed to be completed at relevant intersections to accommodate the increase in traffic as a result of the Proposed Action. Upgrade works will also be required to sections of the WDRC controlled roads to accommodate the heavy vehicle movements.

Surrounding land uses and infrastructure is described in **Att1-MNES Report-Part A, Section 4.2.6, p 64.**

The Project Area is located within the Brigalow Belt bioregion which encompasses approximately 216,000 square kilometres (km²) of central Queensland, extending from Townsville, Queensland in the north to Narrabri, New South Wales in the south. State Regional Ecosystem (RE) mapping identified the Project Area as largely non remnant vegetation, except for two large contiguous patches of least concern vegetation in the southeast and east, and small areas of endangered vegetation along roads and tracks.

The fauna habitat within the Project Area has been affected by various disturbances, ranging from extensive to localised, stemming primarily from cattle grazing, associated agricultural activities (largescale vegetation clearing for agricultural purposes), and CSG operations. Pressures from existing land uses and disturbance, combined with other agricultural practices, have contributed to a reduction in overall habitat

quality and resilience. Additional disturbances include land clearing, thinning, increased presence of exotic weeds and pests, habitat fragmentation, and erosion, resulting in a general reduction in habitat extent and condition throughout much of the Project Area.

The Project Area can be characterised into seven fauna habitat types based on the findings of Umwelt's on-ground field survey program, which includes the following:

1. Acacia-dominant woodlands and shrublands on lateritic surfaces (as described in **Att1-MNES Report-Part A, Section 4.5.1.1, p 118-119**)
2. Brigalow / belah dominant open forest to woodlands with/without Gilgai formations (as described in **Att1-MNES Report-Part A, Section 4.5.1.2, pp 119-120**)
3. Eucalypt dominant open forest and woodlands on various geology (as described in **Att1-MNES Report-Part A, Section 4.5.1.3, pp 120-121**)
4. Eucalypt woodlands and open forests on alluvium (as described in **Att1-MNES Report-Part A, Section 4.5.1.4, pp 121-123**)
5. Semi-evergreen vine thicket (as described in **Att1-MNES Report-Part A, Section 4.5.1.5, p 123-124**)
6. Ephemeral wetlands, including gilgai formations (as described in **Att1-MNES Report-Part A, Section 4.5.1.6, p 124-125**)
7. Highly modified landscapes (as described in **Att1-MNES Report-Part A, Section 4.5.1.7, p 125-126**).

Outcomes of the ecological surveys undertaken to date indicates that the Project Area is dominated by landscape that is largely modified as a result of historical clearing and ongoing gas extraction, with pasture improvement grasses and weeds relatively common.

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

Existing Use

The Proposed Action occurs within the Western Downs Regional LGA and is zoned rural under the Western Downs Regional Planning Scheme. Cattle grazing is the dominant land use in the Project Area, with largely cleared areas associated with cattle grazing dominating the landscape. Some cropping occurs in the south-west, with patches of remnant native vegetation present within the south-east. CSG infrastructure, including gas wells, access and infrastructure tracks, pipelines and a compression station are located across the Project Area. Existing land uses within the Project Area are described in **Att1-MNES Report-Part A, Section 4.2.6, p 64.**

Proposed Use

The Proposed Action use is a renewable energy facility comprising of up to 107 Wind Turbine Generators (WTG), WTG foundations and hardstands, access tracks, underground cabling, overhead transmission lines, electrical connections, substations and grid connections, BESS, met masts, construction compound and laydown areas, and operation and maintenance facilities. The total disturbance area is anticipated to be a maximum of up to 1,240.2 ha of the total Project Area. Throughout the construction and operation phases of the Proposed Action, the properties comprising the Project Area will continue be able to be utilised for rural and agricultural purposes, with existing land uses continuing to operate. Details about the Proposed Action is described in **Att1-MNES Report-Part A, Section 1.4, pp 8-10.**

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

Ecologically significant locations are present within the broader landscape surrounding the Project Area. These larger tracts of more intact vegetation contrast with the otherwise cleared and modified landscape. There are two State Forests that lie within a 20 km radius of the Project Area (**Att1-MNES Report-Part A, Section 4.2.7, p 65**), and include:

- Barakula State Forest: covering a total area of 283,000 ha and located approximately 9 km north from the edge of the Project Area.
- Condamine State Forest: covering a total area of 10,906 ha and located approximately 16 km south from the edge of the Project Area.

These reserves are managed by the Qld Parks and Wildlife Service for multiple uses that include timber production, recreation, water quality, forest grazing, cultural heritage, quarrying, scenic quality and honey production. Furthermore, intact tracts of remnant vegetation within these State Forests provide habitat for native flora and fauna including threatened species.

The Project Area comprises a mosaic of vegetation communities, with remnant and regrowth vegetation concentrated along riparian corridors, roadside verges, and elevated eastern and south-eastern terrain. Ground-truthed surveys identified a greater diversity of REs than State mapping, including additional endangered, of concern and least concern Regional Ecosystems (REs). While the majority of the Project Area remains non-remnant vegetation, the confirmed remnant patches represent the highest-value ecological areas and occur mostly within fragmented corridors and intact eastern remnants (**Att1-MNES Report-Part A, Section 4.4.1, p 68-69**).

A review of the Queensland wetland environmental values mapping has identified a large state mapped palustrine High Ecological Significance (HES) wetland within the Project Area occupying 79.2 ha. A second HES wetland also occurs in the central western extent of the Project Area (occupying 1.9 ha) (**Att1-MNES Report-Part A, Section 4.6.2, p 145**). No Wetland Protection Areas are mapped within 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.

The Project Area is located on a gently undulating flat landscape that rises to low hills and jump-ups, ranging from 300 m AHD in the south-west, which is associated with low-lying areas and adjacent watercourses, to 390 m AHD in elevated hills and rises. These areas of lower elevation often contain non-remnant vegetation in the Project Area due to their relative ease of access for agricultural practices, and therefore these areas have been historically cleared.

There are no state mapped landscape features directly adjacent to the Project Area. Turkey Mountain (513 m AHD, approximately 60 km to the north-east) and Round Mountain (482 m AHD, approximately 60 km in the north-west) are the nearest mountains peaks from the Project Area. North of the Project Area within Barakula State Forest is the Great Dividing Range, one of the largest mountain ranges in Queensland. Geographically, this locates the Project Area to the south of the Great Dividing Range.

Details regarding the topographic conditions within and surrounding the Proposed Action, is provided in **Att1-MNES Report-Part A, Section 4.2.4, p62**.

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.

Desktop assessments were completed prior to all field surveys which involved a review of literature, record databases, State mapping and publicly available datasets including the Protected Matters Search Tool (PMST) (**Att4-MNES Report-Part D, Appendix A**). The likelihood of occurrence assessment was re-run periodically to ensure latest species' information were captured and reviewed to ensure that outcomes were appropriate within the context of survey findings.

The survey methods that underpinned field surveys were informed by these desktop searches and were prepared in accordance with the appropriate State survey guidelines, with consideration of Commonwealth survey guidelines where relevant. A total of 12 field mobilisations, comprising 55 survey days, were completed between 2023 and 2025 to conduct vegetation surveys, baseline and targeted flora and fauna surveys, vegetation and fauna habitat mapping, and bird and bat utilisation surveys (BBUS) (**Att1-MNES Report-Part A, Section 3.2.3, pp 20-21**). The primary purpose of the field surveys was to identify and describe ecological values in the Project Area, to inform the assessment of impacts of the Proposed Action on Matters of National Environmental Significance (MNES) and capture seasonal variation in results.

A summary of the survey efforts to date include:

- Baseline flora and fauna (Spring, 7–9 Nov 2023) 3 days, 4 ecologists
- BBUS 1 (Spring/Summer, 29 Nov–2 Dec 2023) 4 days, 2 ecologists
- BBUS 2 (Summer, 17–21 Jan 2024) 5 days, 2 ecologists
- Threatened snail targeted survey (Boobook, Summer, 20–23 Jan 2024) 4 days, 2 ecologists
- Baseline flora and fauna (Summer, 12–16 Feb 2024) 5 days, 2 ecologists
- Grey snake targeted survey (Summer, 12–16 Feb 2024) 5 days / 4 nights, 2 ecologists
- Threatened flora survey (Autumn, 11–14 Mar 2024) 4 days, 2 ecologists
- Micro-bat and nocturnal survey (Autumn, 13–18 Mar 2024) 6 days / 5 nights, 2 ecologists
- Baseline flora and fauna (Gavindale, Spring, 30 Sep–3 Oct 2024) 4 days, 2 ecologists
- BBUS 3 (Spring, 19–25 Nov 2024) 7 days, 2 ecologists
- Baseline flora and fauna (additional lots, Summer, 20–23 Jan 2025) 4 days, 2 ecologists
- BBUS 4 (Summer, 11–14 Feb 2025) 4 days, 3 ecologists

Further details regarding the field survey timing and weather conditions are provided in **Att1-MNES Report-Part A, Section 3.2.3, pp. 20-21.**

Terrestrial Flora

Overall, the Project Area supports a mosaic of vegetation types. Ground-truthed mapping recorded 2,370.4 ha (16.7%) of remnant and 774.9 ha (5.5%) of regrowth vegetation, comprising four endangered, four of concern, and 11 least concern REs. The majority of the Project Area (11,029.6 ha, 77.8%) remains non-remnant vegetation **(Att1-MNES Report-Part A, Section 4.4.1, p 68)**. Endangered Regional Ecosystems (REs) occur primarily in the western portion, associated with watercourses, wetlands, and fragmented remnants used as shade lines or windbreaks. Of concern REs are concentrated along Columboola Creek and within a large intact remnant in the east. Least concern REs are largely confined to two intact patches in the eastern and south-eastern extents. Remnant vegetation is generally restricted to small, fragmented patches along riparian corridors, roadside verges, gullies, and higher elevation areas in the east and south-east. Historically cleared low-lying land supports regrowth and non-remnant vegetation, while woodlands to open Eucalyptus forests dominate higher elevations. Further details regarding the extent and condition of vegetation communities that are ground-truthed within the Project Area, is provided in **Att1-MNES Report-Part A, Section 4.4.1, Table 4.4 pp. 70-89**.

Flora surveys undertaken across the Project Area recorded 255 flora species systematically and opportunistically during field surveys (Att1-MNES_Part 1, Section 4.4.3, pp 109), including:

- 221 native species
- 17 introduced species
- a further 17 that were identified to genus level.

TECs

As detailed in **Att1-MNES Report-Part A, Section 4.4.2, p 100**, six TECs were identified through the PMST report. Two TECs were confirmed as being present in the Project Area through the field survey program, being Semi-evergreen vine thicket (SEVT) TEC and Brigalow (*Acacia harpophylla* dominant and co-dominant) (Brigalow) TEC. The four remaining TECs were determined through field assessments to not be present, either due to the absence of supporting REs, or because the key diagnostic criteria and condition thresholds for the associated TEC were not met. The full likelihood of occurrence assessment for each TEC is provided in **Att4-MNES Report-Part D, Appendix D**.

Threatened Flora Species

As detailed in **Att1-MNES Report-Part A, Section 4.4.4, pp 113-114,** 12 threatened flora species were identified through the PMST report. One threatened flora is considered to have a moderate or high likelihood of occurrence, being the Belson's Panic (*Homopholis belsonii*). The field program confirmed the presence of one threatened flora species being the Queensland white gum (*Eucalyptus argophloia*), planted on formerly cleared land that is not considered naturally occurring. Therefore, provisions from the EPBC Act do not apply to the *Eucalyptus argophloia*. Details regarding this species is further discussed in **Att1-MNES Report-Part A, Section 4.4.4.1, pp 113-114**).

All other threatened flora species identified in the desktop assessment were considered low or unlikely to occur within the Project Area due to a lack of suitable habitat, absence of previous records, and/or failure to detect the species during ecological field surveys despite appropriate timing and survey effort, in accordance species-specific criteria. The full likelihood of occurrence assessment for threatened flora species, are provided in **Att4-MNES Report-Part D, Appendix D**.

Terrestrial Fauna

Fauna surveys were conducted within representative locations of the different fauna habitat types available within the Project Area. Fauna habitat types within the Project Area are described in **Att1-MNES Report-Part A, Section 4.5.1, pp 117-126.** A total of 241 fauna species were recorded during the field survey program, comprising 161 bird species, 32 mammal species, 17 reptile species, 16 gastropod species, and 15 amphibian species (**Att1-MNES Report-Part A, Section 4.5.2, pp 128-133**).

Threatened Fauna Species

As detailed in **Att1-MNES Report-Part A, Section 4.5.3, pp 134-138**, the desktop assessment identified 35 EPBC Act listed threatened fauna species that have been previously recorded (WildNet, ALA) or predicted to occur (PMST) within 20 km of the Project Area. The field survey program confirmed the presence of four threatened fauna species within the Project Area, including:

- glossy black-cockatoo (south-eastern) (Calyptorhynchus lathami lathami)
- painted honeyeater (Grantiella picta)
- white-throated needletail (Hirundapus caudacutus)
- south-eastern long-eared bat (Nyctophilus corbeni)

The likelihood of occurrence assessment identified nine additional species that were considered to have a moderate or high likelihood of occurring within the Project Area, including:

- Latham's snipe (*Gallinago hardwickii*)
- Australian painted snipe (*Rostratula australis)*
- koala (*Phascolarctos cinereus*)
- grey snake *(Hemiaspis damelii*)
- Dunmall's snake (*Furina dunmall*i)
- greater glider (southern and central) (*Petauroides volans*)
- southern whiteface (*Aphelocephala leucopsis*)
- diamond firetail (*Stagonopleura guttata*)

- yakka skink (*Egernia rugosa*)

The full likelihood of occurrence assessment for each threatened fauna species is provided in **Att4-MNES Report-Part D, Appendix D**.

Migratory Species

As detailed in **Att1-MNES Report-Part A, Section 4.5.4, p 141**, a total of six migratory species (excluding those dually listed as threatened) under the EPBC Act were identified through desktop searches within 20 km of the Project Area. The field survey program confirmed the presence of one EPBC Act listed migratory species the Project Area (the glossy ibis (*Plegadis falcinellus*)), and one additional EPBC Act listed migratory species is considered to have a high likelihood of occurrence (fork tailed swift (*Apus pacificus*)). All remaining migratory species are regarded as having a low likelihood of occurring or are unlikely to occur within the Project Area. The full likelihood of occurrence assessment for each species is provided in **Att4-MNES Report-Part D, Appendix D**.

Bird and Bat Collision Risk

A bird and bat risk assessment provided in **Att2-MNES Report-Part B, Section 5.2, pp 155-165** indicates:

- 27 bird species were observed flying within or above rotor swept are (RSA) height range (60–275 m), placing these species at risk of turbine blade strike
- One EPBC Act and NC Act species, the white-throated needletail, was recorded flying at or above (>60 m AGL) RSA height, during the bird and bat utilisation field program
- Seven diurnal raptor species were identified from field surveys to date, encompassing vantage point surveys and incidental observations during BBUS, baseline surveys and targeted surveys

As outlined in **Att2-MNES Report-Part B, Section 5.2.3, pp 165**, the overall collision risk to white-throated needletail is considered high, based on a high likelihood and a high consequence of impact to this species. A further three at-risk species (fork-tailed swift, painted honeyeater and the south-eastern long-eared bat) received a high overall collision risk rating based on the outcomes of the risk assessment.

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

Vegetation Communities

State RE mapping shows the area is mostly non-remnant, with two larger patches of least concern vegetation in the east and south-east, and small pockets of endangered vegetation along roads and tracks. The field survey program ground-truthed all vegetation within the Project Area, revealing discrepancies with State mapping: 19 REs were confirmed compared to 13 mapped **(Att1-MNES Report-Part A, Section 4.4.1, pp 68-69)**.

Most of the Project Area (11,029.6 ha, 77.8%) is non-remnant vegetation, with 2,370.4 ha (16.7%) remnant and 774.9 ha (5.5%) regrowth. The 19 identified REs include four endangered, four of concern, and 11 least concern communities (**Att1-MNES Report-Part A, Section 4.4.1, Table 4.4 pp. 70-89),** including:

1. *Acacia harpophylla* woodland (to 13 m) with subdominant *Casuarina cristata* on alluvial flats (RE 11.3.1)
2. *Eucalyptus populnea* woodland (to 13 m) on alluvial plains and levees (RE 11.3.2)
3. *Eucalyptus tereticornis* woodland to open-forest (to 25 m) with subdominant *Eucalyptus populnea* and *Angophora floribunda* on alluvial plains (RE 11.3.4)
4. *Eucalyptus populnea* woodland (to 15 m) sub-dominant with *C. cristata* on alluvial plains and levees (RE 11.3.17)
5. *Eucalyptus populnea* (to 18 m) with sub-dominant *C. glaucophylla* and *Allocasuarina luehmannii* on higher alluvial plains (RE 11.3.18)
6. Within the Project Area, RE 11.3.27 is present as a remnant patch associated with a large palustrine wetland in the northern extent of the Project Area (RE 11.3.27)
7. *E. woollsiana* woodland with sub-dominant *E. populnea* on Cainozoic alluvial plains (RE 11.3.26)
8. Within the Project Area, RE 11.3.25 is present along the length of Bogrambilla Creek as a remnant community (11.3.25)
9. *Eucalyptus populnea* or *E. woollsiana* (to 20 m) open forest to woodland on margins of Cainozoic clay plains (11.4.10)
10. *Acacia harpophylla* open woodland to woodland (to 13 m) with subdominant *C. cristata*, *Alectryon diversifolius* and *G. parviflora* (RE 11.4.3)
11. Low woodland to low open woodland (to 8 m) of *Melaleuca squamophloia* with subdominant *C. cristata* and occasional *A. harpophylla* (RE 11.4.3a)
12. *E. crebra* and/or *E. populnea* woodland to open woodland (10 – 20 m) with occasional *E. woollsiana* on flat to gently undulating plains (RE 11.5.1)
13. *E. woollsiana* woodland (to 20 m) with *C. clarksoniana*, *Angophora leiocarpa* and *E. crebra* present as subdominant canopy species (RE 11.5.20)
14. Woodland to open-forest on Cainozoic deep sandy soils (15-25 m) of *E. chloroclada* and *Callitris glaucophylla* with associated *Angophora leiocarpa* (RE 11.5.4)
15. Low woodland to low open forest on Cainozoic lateritic duricrust (5-12 m) of *Acacia blakei*, *A. sparsiflora*, *A. burrowii* and *A. shirleyi* with occasional *E. crebra* and *Corymbia clarksoniana* as emergens (RE 11.7.2)
16. Low shrubland (0.5-3 m) on Cainozoic lateritic duricrusts dominated by *Acacia triptera* and *Melaleuca nodosa* (RE 11.7.5)
17. *E. crebra*, *C. glaucophylla* and *C. trachyphloia* open woodland to woodland (to 20 m) on Cainozoic lateritic duricrusts (RE 11.7.4)
18. Woodland to open forest (to 21 m) of *E. crebra*, *E. fibrosa* and *C. trachyphloia* on low hills formed from deeply weathered sediments (RE 11.7.7)
19. Semi-evergreen vine thicket community (to 10 m) of *Croton insularis*, *Denhamia oleaster*, *N. microcarpa*, *Owenia venosa*, *Flindersia collina*, and *G. parviflora* (RE 11.9.4)

Out of the above, the following RE's are considered analogous to a TEC (as listed in **Att1-MNES Report-Part A, Section 4.4.2, Table 4.5, p 100-101**):

- REs 11.3.1, 11.4.3, 11.4.7, 11.4.8, 11.4.9, 11.4.10, 11.5.16, 11.9.1, 11.9.5, 11.9.6, 11.11.14, 11.12.21 (Brigalow (*Acacia harpophylla* dominant and co-dominant)
- REs 11.2.3, 11.3.11, 11.4.1, 11.5.15, 11.8.3, 11.8.6, 11.8.13, 11.9.4, 11.8.9, 11.11.18 (Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions).

Endangered REs occur primarily in the western portion, associated with watercourses, wetlands, and fragmented remnants used as shade lines or windbreaks. Of concern REs are concentrated along Columboola Creek and within a large intact remnant in the east. Least concern REs are largely confined to two intact patches in the eastern and south-eastern extents.

Most communities show signs of historical disturbance, including selective logging and fragmentation, and are impacted by weed infestations such as sabi grass (*Urochloa mosambicensis*) and Guinea grass (*Megathyrsus maximus*).

Soil

The Geological Survey of Queensland (2024) Detailed Surface Geology Mapping and GeoScience Australia 1:250,000 geology mapping (Chinchilla Sheet G5609) identified four geological units mapped within the Project Area (**Att1-MNES Report-Part A, Section 4.2.3, p 61-62**). Based on these mapped geological units, four potential land zones may be present including:

- land zone 3: recent Quaternary alluvial systems (alluvial river and creek flats)
- land zone 4: Tertiary-early Quaternary clay plains (clay plains)
- land zone 5: Tertiary-early Quaternary loamy and sandy plains and plateaus
- land zone 9: Fine grained sedimentary rocks.

Fauna Habitat

Terrestrial habitat within the Study Area can be broadly grouped into seven types:

1. **Acacia-dominant Woodlands and Shrublands on Lateritic Surfaces:** Acacia-dominant woodlands and shrublands occur in the south-eastern Project Area, typically forming mid-dense stands with sparse understorey. They occur on lateritic duricrusts (REs 11.7.2 and 11.7.5), contain abundant small woody debris but few hollows, and provide limited refuge during hot conditions. Woodland birds are common, but mammals and reptiles were rarely recorded.
2. **Brigalow / Belah Dominant Open Forest and Woodlands:** Brigalow and belah woodlands occur mainly on alluvial and clay plains, with condition ranging from regrowth to mature, mid-dense remnant patches. These habitats are common across the Project Area but typically small and isolated. Ground cover is patchy, with *Paspalidium caespitosum* present in some areas. Tree density is generally higher on alluvial soils. A mid-dense shrub layer is common, including *Geijera parviflora*, *Eremophila mitchellii* and *Atalaya hemiglauca*. Belah provides foraging resources for glossy black cockatoos, while mistletoe supports painted honeyeaters. Microhabitat features such as surface stones, woody debris, textured bark and occasional large fallen logs are more prevalent in high-quality, less disturbed patches. Gilgai microrelief and cracking clays occur, supporting grey snake habitat in clay-pan brigalow (RE 11.4.3).
3. **Eucalypt Dominant Open Forest and Woodlands on Various Geology:** Eucalypt open forests and woodlands occur across various landforms. Canopies are formed by Corymbia and Eucalyptus species, with a lower layer of Callitris and Allocasuarina and a varied understorey. Mistletoe is common and provides bird foraging habitat. Koala habitat quality ranges from high in well-connected remnants to low in more disturbed or regrowth areas. Hollows are infrequent. Microhabitat quality varies, with some areas containing coarse woody debris and leaf litter that support ground-dwelling fauna, while others contain fewer shelter features.
4. **Eucalypt Woodlands and Open Forests on Alluvium:** Mixed eucalypt woodlands on alluvium occur along watercourses and drainage lines, influenced by historic clearing, grazing and weed invasion. Intact patches support mature eucalypts with a sparse mid-layer and a grassy ground layer. These areas provide diverse fauna habitat, including hollows, flowering trees and scattered timber.

Large eucalypts offer denning and nesting sites for arboreal mammals, microbats and hollow-dependent birds. Casuarinas add foraging resources. The habitat is suitable for threatened species such as greater glider, glossy black-cockatoo and potentially koala, with riparian corridors offering connectivity and climate refuge. Ground-layer features such as coarse woody debris and patchy leaf litter support reptiles and small mammals.

5. **Semi-evergreen Vine Thickets:** Dense vine thickets occur on shaded slopes and gullies in the south-west of the Project Area, often showing moderate disturbance from adjacent clearing. The canopy includes a mix of native trees, with a dense understory of shrubs and occasional ground-layer grasses and forbs. Microhabitats such as coarse woody debris, rocks, leaf litter and boulders provide shelter for reptiles and small ground-dwelling mammals. Flowering and fruiting plants offer foraging for birds, but the absence of Eucalyptus, Casuarina and Allocasuarina limits habitat for species dependent on these trees. Mistletoe was not recorded.
6. **Ephemeral/Intermittent Wetlands, including Gilgai Formations:** Seasonal wetlands, including gilgais and two palustrine HES wetlands, occur across the Project Area. Gilgais provide breeding habitat for frogs, supporting species such as the endangered grey snake. Deeper gilgais offer additional shelter, even in previously cleared brigalow areas. Wetlands are affected by cattle trampling. HES wetlands are ephemeral, shallow, and dominated by sedges and rushes with emergent Eucalyptus tereticornis, providing habitat for wading and migratory birds.
7. **Highly Modified Landscapes:** Highly modified areas include cleared pasture, exotic grasses, farm dams, access tracks and other infrastructure, mostly on central slopes and plains. Original brigalow, belah or Eucalyptus communities are largely lost, with sparse canopy and shrub cover, making the habitat generally unsuitable for most EPBC-listed species. Small vegetated drainage lines provide limited shelter, while open grasslands support macropods, emus, small mammals, reptiles, raptors and granivorous birds. Farm dams are scattered throughout, often degraded by steep banks, weeds and cattle activity, but some provide water and limited habitat for fauna.

Detailed descriptions of the fauna habitat types are outlined in **Att1-MNES Report-Part A, Section 4.5.1, pp 117-126.**

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.

Searches of the following databases were undertaken on 5 February 2025, to identify potential Commonwealth, State and Local heritage places, associated with the Proposed Action:

- Queensland Heritage Register
- Commonwealth Heritage List
- National Heritage List
- World Heritage List
- Western Downs Regional Council Planning Scheme and Local Heritage Register
- Historical stock routes, cemeteries, abandoned mine sites datasets, historical maps, and aerial photographs
- The Queensland Native Mounted Police database
- Colonial Frontier Massacres in Australia, 1788 – 1930 database.

The search did not result in the identification of any historical heritage places within the Project Area. However, based on a review of historical information and historical aerials, there is moderate potential for unrecorded historical heritage associated with past pastoral land uses within the Project Area. Historical features may include surface artefact scatters and dump sites from domestic, agricultural or pastoral activities, as well as the remains of former homesteads, huts, sheds, cattle yards, and other associated structures. Early settler or explorer campsites, blazed trees used as survey or route markers and discarded farming equipment may also be present.

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

A desktop review, involving a search of the Department of Women, Aboriginal and Torres Strait Islander Partnerships and Multiculturalism (DWATSIPM) Cultural Heritage Database and Register was undertaken on 20 October 2025, to ascertain information on the relevant Aboriginal Party and records of previously recorded Aboriginal cultural heritage sites for the Project Area. The DWATSIPM Cultural Heritage Database and Register is not considered a complete record of Aboriginal cultural heritage values as there are a variety of reasons that cultural heritage sites are not recorded on the database. The lack of recorded sites within any given area does not indicate the complete absence of Aboriginal cultural heritage. This result should be viewed as a product of the overall lack of development in the area and associated archaeological investigations, together with no statutory requirement in Queensland to record survey or assessment results on the DWATSIPM Aboriginal Cultural Heritage Register and Database.

The DWATSIPM Search indicated that there are 600 recorded Aboriginal cultural heritage sites within and adjacent to the Project Area. Site types for the area include artefact scatters, rock art, scarred tree, a quarry and isolated artefacts. The DWATSIPM results indicate these sites were recorded between 2011 to 2025 and while many of them have been mitigated (collected), the number of sites found within the Project Area and the geology of cracking clay soil profiles suggest that sites are likely to survive in a disturbed context. That is, despite having been mitigated in the past (collected), each time it rains additional stone artefacts may come to the surface. As a result of extensive coal seam gas activities which are present within the Project Area, the Project Area has undergone extensive historic cultural heritage surveying.

The assessment does not consider intangible Aboriginal cultural heritage. Therefore, consultation with the relevant Aboriginal Parties and traditional knowledge holders is ongoing to understand the full cultural significance of the 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. *

The Project Area is located within the Balonne-Condamine catchment, a major river system that spans 2 million ha across Queensland and New South Wales, covering approximately 13% of the Murray–Darling Basin. This catchment features an extensive network of rivers and creeks, including the Condamine River. All watercourses and tributaries within the local area ultimately drain into the Condamine River. The river originates in the Great Dividing Range near Killarney, southeast of Warwick, and flows northwest past Chinchilla before turning southwest to become the Balonne River near Surat.

The Project Area contains a network of drainage lines and watercourses that generally flow in a south-westerly direction toward the Condamine River, located approximately 5 km to the south. These drainage features typically originate in elevated parts of the site, gradually merging into more defined channels as they move into lower-lying areas. Within the project boundary, Bogrambilla Creek flows southward and ultimately discharges into the Condamine River. To the east of the site, tributaries such as Rocky Creek, Baking Board Creek, and Stockyard Creek contribute to the Condamine via Charleys Creek. In contrast, drainage from the western portion of the site flows into Columboola Creek, which is not hydrologically connected to the Condamine system. Further details pertaining to watercourses within the Project Area is provided in **Att1-MNES Report-Part A, Section 4.6.1, pp. 144-145.**

The Project Area spans three general catchment zones:

- eastern drainage pathways that flow into Rocky Creek and Charleys Creek, eventually reaching the Condamine River
- central and southern drainage areas that discharge into Bogrambilla Creek and then the Condamine River
- western drainage areas that direct runoff into Columboola Creek.

As stipulated earlier, a review of the Queensland wetland environmental values mapping has identified one High Ecological Significance (HES) wetland within the Project Area occupying 79.2 ha, and a HES wetland in the central western extent of the Project Area, occupying 1.9 ha. The HES wetland is located outside of the Disturbance and Micrositing corridors and will not host any Project infrastructure. No Wetland Protection Areas are mapped within the Project Area.

A site plan illustrating the surface geology of the Project Area is shown in **Att1-MNES Report-Part A, Section 4.2.4, Figure 4.2, p 63**, and watercourses and wetlands are shown in **Att1-MNES Report-Part A, Section 4.6.2, Figure 4.10, p 147**.

Most watercourses and drainage features that are present within the Project Area are highly degraded due to historical agricultural management practices, including clearing, the sewing of exotic pasture grasses, weed invasion and altered hydrology through the construction of farm dams.

The Disturbance Footprint for the Proposed Action has been designed in a way that, as much as practicable, the potential crossing of drainage lines and watercourses will be avoided. Where improvements to existing tracks are required, the construction methodology will be dependent upon the size of the watercourse and will be in line with the Queensland Accepted Development Requirements for Operational Work that is Constructing or Raising Waterway Barrier Works.

To ensure that the proposed infrastructure will be constructed in a manner that minimises erosion and run-off, control drainage, and preserve bank stability, a suite of management plans, including an Erosion and Sediment Control Plan – Construction and an Erosion and Sediment Control Plan – Operation, will be prepared to facilitate construction and operational phases, which will implement a range of erosion and sediment control measures.

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.

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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 Areas within or adjacent to the Project Area.

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 National Heritage places within the Study Area or within proximity to the Project Area.

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. *

There are four Ramsar sites including Banrock Station Wetland Complex, Narran Lake Nature Reserve, Riverland, and the Coorong, and Lakes Alexandrina and Albert Wetland that range from 400 km upstream to 1,400 km upstream to the Project Area. Locations of these Ramsar Wetland Sites with respect to the Proposed Action, is illustrated in **Att1-MNES Report-Part A, Section 4.1, p 60, Figure 4.1**.

However, due to the nature of the Project (i.e. the type of infrastructure, the anticipated disturbance and the potential localised impacts) and the significance distance from these sites, it is considered highly unlikely the Project would impact on Wetlands of International Importance. No further assessment is considered necessary.

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	Adclarkia dulacca	Dulacca Woodland Snail
No	No	Anomalopus mackayi	Five-clawed Worm-skink, Long-legged Worm-skink
Yes	Yes	Aphelocephala leucopsis	Southern Whiteface
No	No	Cadellia pentastylis	Ooline
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper
Yes	Yes	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
Yes	Yes	Egernia rugosa	Yakka Skink
No	No	Erythrotriorchis radiatus	Red Goshawk
No	No	Falco hypoleucos	Grey Falcon
Yes	Yes	Furina dunmalli	Dunmall's Snake
Yes	Yes	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Geophaps scripta scripta	Squatter Pigeon (southern)
Yes	Yes	Grantiella picta	Painted Honeyeater
Yes	Yes	Hemiaspis damelii	Grey Snake

Direct impact	Indirect impact	Species	Common name
Yes	Yes	Hirundapus caudacutus	White-throated Needletail
Yes	Yes	Homopholis belsonii	Belson's Panic
No	No	Lathamus discolor	Swift Parrot
No	No	Lepidium monoplocoides	Winged Pepper-cress
No	No	Maccullochella peelii	Murray Cod
Yes	Yes	Nyctophilus corbeni	Corben's Long-eared Bat, South-eastern Long-eared Bat
No	Yes	Petauroides volans	Greater Glider (southern and central)
No	No	Petaurus australis australis	Yellow-bellied Glider (south-eastern)
Yes	Yes	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	Polianthion minutiflorum	
No	No	Pteropus poliocephalus	Grey-headed Flying-fox
Yes	Yes	Rostratula australis	Australian Painted Snipe
Yes	Yes	Stagonopleura guttata	Diamond Firetail
No	No	Thesium australe	Austral Toadflax, Toadflax
No	No	Westringia parvifolia	
No	No	Xerothamnella herbacea	

Ecological communities

Direct impact	Indirect impact	Ecological community
Yes	Yes	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	Natural grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland
No	No	Poplar Box Grassy Woodland on Alluvial Plains

Direct impact	Indirect impact	Ecological community
No	Yes	Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions
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. *

Activities associated with the Proposed Action, being the wind farm and BESS, are categorised into 3 phases: construction, operation and maintenance, and decommissioning and rehabilitation. The Proposed Action has potential direct and/or indirect impacts on TECs, threatened flora and fauna species during all phases, including:

Potential direct impacts:

- During construction phase: vegetation clearance and habitat loss, fauna injury and mortality, loss of fauna movement opportunities (**Att2-MNES Report-Part B, Section 6.1.1, pp 167-173**).
- During operation and maintenance phase: vehicle strike and collision and/or entanglement risk with wind turbines, transmission line, or associated infrastructure (**Att2-MNES Report-Part B, Section 6.2.1, pp 178-180)**.
- During the decommissioning and rehabilitation phase: slashing and pruning of recolonised vegetation in specific locations that may support threatened species habitat, and vehicle and equipment strike (**Att2-MNES Report-Part B, Section 6.3, pp 182-183**).

Potential indirect impacts:

- During construction phase: exacerbation of pest fauna and weeds, edge effects, changes to hydrological regimes, soil erosion/sedimentation, contamination from spills and leaks, dust impacts, increased human activities, increased risk of fire incursion, increased noise, and vibration/artificial light (**Att2-MNES Report-Part B, Section 6.1.2, pp 173-178**).
- During operation and maintenance phase: barotrauma, barrier effects, exacerbation of pest fauna and weeds, increased risk of fire incursion, noise impacts (**Att2-MNES Report-Part B, Section 6.2.2, pp 180-182)**.
- During the decommissioning and rehabilitation phase: elevated noise/light, soil erosion/sedimentation, edge effects, increased dust generation (**Att2-MNES Report-Part B, Section 6.3, pp 182-183**).

Further details regarding the potential direct and indirect impacts associated different phases of the Proposed Action are provided in **Att2-MNES Report-Part B, Section 6.0, pp 167-183**. Direct impacts will be limited to the maximum disturbance limit of habitat within the Disturbance Footprint, while indirect impacts accounted for in the broader area around the Disturbance Footprint.

Based on species records and field survey findings, a detailed likelihood of occurrence assessment was conducted for MNES (**Att4-MNES Report-Part D, Appendix D**), which identified two TECs, one threatened flora, and 13 threatened fauna species, that are considered ‘known’, have a ‘moderate likelihood’, or have a ‘high likelihood’ to occur. Potential associated direct and indirect impacts are addressed below:

TECs

Two TECs that are known to occur within the Project Area, being the Brigalow (*Acacia harpophylla* dominant and co-dominant) TEC (Brigalow TEC) and the Semi-evergreen Vine Thickets of the Brigalow Belt (North and South) and Nandewar Bioregions TEC (SEVT TEC).

Potential direct impacts to the Brigalow TEC are approximately 16.8ha (13.1ha confirmed, and 3.7ha potential). Proposed vegetation clearing may induce further fragmentation within the Project Area. Potential indirect impacts include, further weed and pest incursion, increased edge effects and elevated dust levels, potentially leading to reduced vegetation health. Potential impacts to this TEC are discussed in detail in **Att3-MNES Report-Part C, Section 8.2.1, pp 213-219**.

There will be no direct impact on the SEV TEC, as the Disturbance Footprint was designed and located to ensure full avoidance of this TEC (**Att3-MNES Report-Part C, Section 8.2.2.4, p 231**). Further details about this species are provided in **Att3-MNES Report-Part C, Section 8.2.2, pp 230-235.**

Threatened Species:

Flora

One threatened flora species has a high likelihood of occurring within the Project Area, being the Belson's Panic (*Homopholis belsonii*). No individuals have been detected within the Project Area. However, the species was assessed as having a high likelihood due to habitat within the Project Area meeting the species broad habitat requirements. Approximately 160.7ha of suitable habitat occurs within the Disturbance Footprint, noting however, that a conservative approach to habitat modelling was applied, which resulted in a likely over-estimated extent of the mapped suitable habitat. Potential indirect impacts relevant to the species includes further weed and pest incursion, increased edge effects, and mortality as a result of chemical spray drift and elevated dust. Further details regarding the potential impacts on this species is provided in **Att3-MNES Report-Part C, Section 8.3.1.7, pp 238-239.**

Birds

Seven threatened bird species are known, or have a 'moderate' or 'high likelihood' to occur within the Project Area, including:

- Glossy-black Cockatoo (South-eastern) (*Calyptorhynchus lathami lathami*) - Known, with direct impacts to 14.1 ha (breeding and foraging habitat), and 95.7 ha (foraging and dispersal habitat) (**Att3-MNES Report-Part C, Section 8.4.1.7, p 250**).
- Southern Whiteface (*Aphelocephala leucopsis*) - Moderate likelihood, with direct impacts to 108.0 ha of foraging, breeding, and dispersal habitat (**Att3-MNES Report-Part C, Section 8.4.2.7, p 259-260**).
- Painted Honeyeater (*Grantiella picta*) - Known, with direct impacts to 125.0 ha of potential breeding, foraging and dispersal habitat (**Att3-MNES Report-Part C, Section 8.4.3.7, pp 269-270**).
- White-throated Needletail (*Hirundapus caudacutus*) - Known, with direct impacts to 1,161.8 ha of potential foraging and dispersal habitat and 78.4 ha of roosting habitat (**Att3-MNES Report-Part C, Section 8.4.4.7, pp 278-279**).
- Australian Painted Snipe (*Rostratula australis*) - High likelihood, with direct impacts to 27.6 ha of ephemeral wetlands (i.e., gilgai formations), that account for seasonal breeding, foraging and dispersal habitat (**Att3-MNES Report-Part C, Section 8.4.5.7, p 286-287**).
- Diamond Firetail (*Stagonopleura guttata*) - Moderate likelihood, with direct impacts to a total of 23.0 ha of potential habitat, including 11.3 ha (breeding, foraging and dispersal habitat) and 11.8 ha (marginal breeding, foraging and dispersal habitat) (**Att3-MNES Report-Part C, Section 8.4.6.7, p 295**).
- Latham's Snipe (*Gallinago hardwickii*) - High likelihood, with direct impacts to a total of 27.6 ha of gilgai habitat, accounting for seasonal foraging and dispersal habitat (**Att3-MNES Report-Part C, Section 8.4.12.7, p 361**).

Potential impacts on bird species are largely associated with habitat loss and degradation, mortality from turbine collision or vehicle strike, exacerbation of pest populations, and habitat degradation from increased weed incursion and grazing.

Potential indirect impacts on bird species include, increased edge effects, potential alteration of fire regimes resulting in increased frequency or intensity of bushfire, soil exposure, increased contamination, temporary changes in hydrology, periods of elevated noise, increased pest levels.

Bats

One threatened Bat species is known to occur within the Project Area, being the South-eastern Long-eared Bat (*Nyctophilus corbeni*). 104.9 ha of suitable habtiat will be cleared during the Project's construction phase, comprising 81.3 ha of breeding, roosting and foraging habitat and 23.7 ha of dispersal and foraging habitat (**Att3-MNES Report-Part C, Section 8.4.7.4, Table 8.20, pp 304-306**).

The primary direct impact is expected to be habitat loss and resulting fragmentation. An additional potential direct impact is the high risk of turbine collisions during operation.

Potential indirect impacts include increase in fragmentation impacts, reduced abundance of roosting and breeding opportunities, physical injury/fatality via entrapment in tree hollows during vegetation removal, greater incursion of weeds/pests, and potential altered fire regimes.

Mammals

One threatened mammal has a 'high likelihood' to occur within the Project Area, being the Koala (*Phascolarctos cinereus*). Although no individuals were recorded in the Project Area, likelihood is considered high due to habitat requirement availability, despite this habitat being fragmented.

1,238.8 ha of suitable habitat will be cleared during the Project's construction phase, comprising 89.8 ha of breeding and foraging, 3.9 ha of climate refugia, 1,089.2 ha of dispersal, and 55.9 ha of shelter, roosting and foraging habitat, and 23.7 ha of dispersal and foraging habitat (**Att3-MNES Report-Part C, Section 8.4.8.7, Table 8.22, pp 320-321**).

Although a one-off event, the loss of habitat is expected to be the direct impact with the greatest potential consequences, most prevalent in the construction phase. Although habitat fragmentation is a known threat to the species, it is not anticipated that impacts from the Project would result in isolation of koala populations due to habitat fragmentation.

Indirect impacts may include pest predation, habitat degradation from pests and weeds, noise/dust disturbance, heightened disease and predation vulnerability, altered fire regimes, and hydrological changes affecting runoff, flood behaviour, and riparian habitat condition.

Reptiles

Three threatened reptiles are known, or have a 'moderate' or 'high likelihood' to occur within the Project Area, including:

- Yakka Skink (*Egernia rugosa*) - Moderate likelihood, with direct impacts to 91.6 ha (suitable habitat) (**Att3-MNES Report-Part C, Section 8.4.9.7, p 333**).
- Dunmall's Snake (*Furina dunmalli*) - Moderate likelihood, with direct impacts to 92.9 ha (suitable habitat) (**Att3-MNES Report-Part C, Section 8.4.10.7, pp 341-342**).
- Grey Snake (*Hemiaspis damelii*) - High likelihood, with direct impacts to 23.8 ha (shelter and foraging), and 302.7 ha (dispersal) (**Att3-MNES Report-Part C, Section 8.4.11.4, Table 8.28, pp 349-351**).

Potential direct impacts to reptile species include habitat loss and degradation, and direct mortality.

Potential indirect impacts include pest predation or trampling, habitat degradation from pests and weeds, noise/ light disturbance, reduced refuge increasing predation risk, altered fire regimes, and hydrological changes affecting riparian habitats.

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 (SIAs) were undertaken for MNES values (TEC and threatened species) that are known to occur, or have a moderate to high likelihood of occurrence. Two MNES values (the greater glider (southern and central), and *Eucalyptus argophloia*) will have no direct or indirect impacts from the Proposed Action (Att1-MNES, Section 8.0, pp198). Therefore, these species were not subject to a further significant impact assessment. The significant impact assessments were conducted in accordance with the Significant Impact Guidelines 1.1-Matters of National Environmental Significance using the threatened species and communities criteria, which determined the outcomes of potential significant impacts for the TECs and Threatened Species, as follows:

TECs:

Brigalow TEC
The SIA determined it is likely that the Proposed Action will have a significant impact on Brigalow TEC (**Att3-MNES Report-Part C, Section 8.2.1.7, pp 216 - 219).** Within the Project Area, approximately 476.1 ha of potential and confirmed Brigalow TEC will remain (~6.3% of the estimated Eastern Darling Downs subregion extent). In the context of the subregion's already severely reduced extent, the proposed removal of 16.8 ha is likely to represent a significant additional impact on this TEC, through dissecting patches and reducing total extent. As illustrated in **Att3-MNES Report-Part C, Section 8.2.1.7, Figure 8.2, pp 221**, Brigalow TEC occurs as isolated remnant and regrowth patches within the Project Area that are largely separated by cleared land. Given the linear configuration and positioning of infrastructure, the Proposed Action is likely to further subdivide larger patches into smaller, more isolated fragments.

The full SIA for this species is provided in **Att3-MNES Report-Part C, Section 8.2.1.7, Table 8.3, pp 216 - 219.**

Threatened Fauna:

Painted Honeyeater (*Grantiella picta*)
The SIA determined it is likely that the Proposed Action will have a significant impact on the Painted honeyeater (**Att3-MNES Report-Part C, Section 8.4.3.8, pp. 270-274)**. The Proposed Action will result in the direct loss of 125.0 ha of breeding, foraging and dispersal habitat. Project Area habitat meets the definition of 'habitat critical to the survival of the species', with an important population of the painted honeyeater likely to use habitat within the Project Area, which acts as a biodiversity corridor between multiple State Forests.

As the species is likely to rely on the Project Area for breeding and foraging, and individuals dispersing between regional habitats may also be affected, the risk to this population is greatest during the operational phase due to the high likelihood of turbine collision. Nest failure may also result from fatalities. Considering these impacts, the Proposed Action has the potential to interfere with the recovery of the species. Specifically, the Project may impact the objectives of the National Recovery Plan by reducing habitat availability, increasing mortality risk, and potentially disrupting landscape-scale connectivity, which are central to the protection, management, and restoration strategies outlined for the species.

The full SIA for this species is provided in **Att3-MNES Report-Part C, Section 8.4.3.8, Table 8.13, pp. 270-274.**

South-Eastern Long eared Bat (*Nyctophilus corbeni*)
The SIA determined it is likely that the Proposed Action will have a significant impact on the South-Eastern Long Eared Bat (**Att3-MNES Report-Part C, Section 8.4.7.8, pp 308-314)**. Vegetation clearing will result in direct impacts to 104.9 ha of potential habitat, including up to 81.3 ha of breeding, roosting and foraging habitat, and 23.7 ha of foraging and dispersal habitat, potentially modifying, removing or fragmenting habitat

to a level that could contribute to local species decline. Proposed clearing within two patches of large, contiguous habitat patches present within the Project Area, is likely to increase fragmentation, edge effects and decrease quality of habitat utilised by the species by reducing availability of shelter habitat.

The turbine collision risk for this species is rated high, reflecting the species' vulnerable listing, presence within the Project Area and precautionarily a moderate risk of consequence of collisions/mortality. Given the likely importance of all mature individuals for local genetic diversity, any risk of mortality is likely to impact the population. Additionally, given a lack of knowledge surrounding the species abundance within the Project Area, the loss of mature, breeding or pregnant individuals within an important population, may have a disproportionately large impact on the species breeding cycle.

Based on these factors, despite some uncertainty of the Proposed Action impacts on an important population of the species, it is possible the Proposed Action may lead to the long-term decrease to a size of an important population. The full SIA for this species is provided in **Att3-MNES Report-Part C, Section 8.4.7.8, Table 8.21, pp 308-314**.

Koala (*Phascolarctos cinereus*)
The SIA determined it is likely that the Proposed Action will have a significant impact on this species (**Att3-MNES Report-Part C, Section 8.4.8.8, pp 322-328**). Construction of the Proposed Action will result in impacts to a maximum of 1,238.8 ha of potential koala habitat. However, this predominately impacts dispersal habitat (1,089.2 ha) comprising non-remnant cleared paddocks and pastures. The remaining areas of impact include 3.9 ha of climate refugia (considered the highest quality habitat type), 89.8 ha of breeding and foraging and 55.9 ha (areas of shelter / non-food trees).

Habitat loss is a recognised threat to the recovery of this species, as per the National Recovery Plan for the Koala, with habitat within the Project Area possibly comprising habitat critical to the survival of the species. While the Project Area is not known to support a population of the species, the Conservation Advice includes currently 'unoccupied' areas in the definition of habitat critical to the survival of the species. While large areas of habitat will remain, the magnitude of habitat removal required is considered an 'adverse effect' on habitat critical as per the Conservation Advice. Furthermore, habitat within the Project Area may be recolonised in the future, supporting the species and providing important movement corridors due to its connectivity to known populations and protected areas.

The full SIA for this species is provided in **Att3-MNES Report-Part C, Section 8.4.8.8, Table 8.23, pp 322-328**.

Dunmall's snake (*Furina dunmalli*)
The SIA determined it is possible that the Proposed Action will have a significant impact on this species (**Att3-MNES Report-Part C, Section 8.4.10.8, pp 342-346)**. Direct impacts via vegetation clearing will occur to a maximum of 92.9 ha of potential breeding, foraging and dispersal habitat, which is considered to provide habitat for an important population. While many of the mapped suitable habitat areas are small, isolated patches, there are some large, connected patches particularly in the east and south-eastern portion of the Project Area that will be fragmented by the Disturbance Footprint. The Draft Referral Guidelines for the Nationally Listed Brigalow Belt Reptiles identify the clearing of >4 ha of important habitat for Dunmall's Snake as a high risk action with the potential to result in a significant impact. Given such habitat clearing, it is considered possible that the Project may lead to a long-term decrease in the size of an important population of Dunmall's snake. Additionally, as the species is highly cryptic and known to shelter in microhabitat, there is a risk of mortality during clearing works.

The full SIA for this species is provided in **Att3-MNES Report-Part C, Section 8.4.10.8, Table 8.27, pp 342 - 346.**

Grey Snake (*Hemiaspis damelii*)
The SIA determined it is possible that the Proposed Action will have a significant impact on this species (**Att3-MNES Report-Part C, Section 8.4.11.8, pp 352-356).** There is possibility for adverse effect on habitat critical to the survival of the species. Direct impacts via vegetation clearing will occur to a maximum of 326.6 ha of habitat, of which 23.8 ha is classified as shelter and foraging habitat (considered critical habitat), resulting in the loss of approximately 8.3% of habitat available critical habitat to the survival of the species. The remaining 302.7 ha of cleared habitat is considered dispersal habitat.

The Project works to clear of up to 23.8 ha of core habitat the species is likely to utilise for breeding at suitable times of the year. Despite the Project employing measures to minimise impacts to areas that support the species breeding requirements, the species is susceptible to clearing impacts (i.e. direct mortalities and potential for disruptions in breeding individuals). Additionally, a cryptic species such as the grey snake is unlikely to flee from machinery works that occur during Project construction. As such, it is considered likely that the species has a high risk of mortality during construction stages.

The full SIA for this species is provided in **Att3-MNES Report-Part C, Section 8.4.11.8, Table 8.29 pp. 352 - 356.**

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. *

Significant impact assessments have concluded that significant impacts have potential to occur for the following MNES values:

- Brigalow TEC (**Att3-MNES Report-Part C, Section 8.2.1.7, Table 8.3, pp 216 - 219)**
- Painted Honeyeater (*Grantiella picta*) (**Att3-MNES Report-Part C, Section 8.4.3.8, Table 8.13, pp. 270 - 274**)
- South-Eastern Long eared Bat (*Nyctophilus corbeni*) (**Att3-MNES Report-Part C, Section 8.4.7.8, Table 8.21, pp 309 - 314**)
- Koala (*Phascolarctos cinereus*) (**Att3-MNES Report-Part C, Section 8.4.8.8, Table 8.23, pp 322 - 328**)
- Dunmall's snake (*Furina dunmalli*) (**Att3-MNES Report-Part C, Section 8.4.10.8, Table 8.27, pp 342 - 346**)
- Grey Snake (*Hemiaspis damelii*) (**Att3-MNES Report-Part C, Section 8.4.11.8, Table 8.29 pp. 352 - 356**)

Therefore, the Proposed Action is considered likely to be a controlled action for Threatened Species and Threatened Ecological Communities.

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. *

A hierarchy of management principles were applied throughout planning and development of the Proposed Action. The principles and order in which they were applied, are:

- **Avoid:** locating activities to avoid direct and indirect impacts on MNES (**Att2-MNES Report-Part B, Section 7.1, pp 184 - 188**)
- **Minimise:** minimising direct and indirect impacts where they cannot be completely avoided (**Att2-MNES Report-Part B, Section 7.2, pp 189 - 190**)
- **Mitigate:** implementing mitigation and management measures to reduce direct, indirect and cumulative impacts (**Att2-MNES Report-Part B, Section 7.3, pp 190 - 206**)
- **Remediate and rehabilitate:** actively remediate and rehabilitate impacted areas to promote long term recovery (**Att2-MNES Report-Part B, Section 7.4, pp 206 - 207**)
- Where the Proposed Action will result in significant residual impacts to MNES even with the implementation of the above principles, suitable offsets will be provided where deemed necessary.

Avoid

The avoidance of MNES values has been prioritised throughout the site selection and development phase of the Proposed Action. The Project Area was selected due to its highly disturbed nature and access to nearby transmission infrastructure, resulting in a much reduced MNES impact when compared against other potential development projects under consideration at the time.

Extensive desktop and site-based investigations were undertaken during 2022 to validate these assumptions, which identified the Project Area as an ideal location for a wind farm

Design of the Proposed Action was based on a highly iterative design, with in-excess of 12 primary design iterations that accounted for changes following landowner engagement, technical and environmental assessments, and stakeholder inputs. All design considerations were progressively applied throughout the iterative design and development process.

A key design consideration to minimise the impacts to ecological values, was by siting infrastructure within non-remnant areas / pre-existing disturbed areas, wherever possible. As a result of these design considerations, 92% of the Disturbance Footprint is located within non-remnant / pre-existing disturbed areas.

Across certain areas of the Project Area, full avoidance of MNES values has not been possible to achieve achievable due to competing requirements to avoid existing agricultural and coal seam gas activities, sensitive land uses and other technical considerations such as noise and shadow flicker. Further, certain MNES values where located linearly, e.g. parallel to an existing road, are impossible to fully avoid without complete fragmentation of the Project Area and/or a significant loss of available wind turbines which would render the Proposed Action uneconomic. Where avoidance has not been fully achieved, minimisation measures have been incorporated across the Project Area to reduce impacts on MNES values.

General design optimisation initiatives to further reduce the impacts to remnant vegetation and ecological values include:

- Restriction of land clearing to the minimum required for the feasible construction. Subject to detailed design, geotechnical and land surveys, the expected clearing for the Proposed Action is likely to be less than what is currently proposed.
- Where unable to be avoided, encroachment within Brigalow TEC was reduced, to minimise fragmentation/edge effects.
- Laydowns, site offices, construction stockpiles and facilities, and other temporary activities were placed in disturbed or cleared areas where possible.
- The use of existing tracks and roads were maximised and only widened where necessary, to reduce vegetation clearing, minimise new disturbance, and fragmentation of habitat.
- Design access tracks and OHTL using direct routes where practicable, to minimise clearing.

Following the application of general avoidance principles, specific ecological No-Go Zones were established around SEVT TEC and High Ecological Significance (HES) Wetlands, where the proposed action committed to no direct impacts (**Att2-MNES Report-Part B, Section 7.1.2.2, pp 187-188**).

Minimise

Where impacts on MNES cannot be avoided, all reasonable efforts have and will be made to minimise Proposed Action impacts. The minimisation measures that were incorporated as part of the design process are outlined in **Att2-MNES Report-Part B, Section 7.2, pp 189 - 190**. Vegetation clearing and the subsequent construction of the Proposed Action will occur progressively and in stages. By doing this, only a small subset of the Disturbance Footprint will be impacted at one time, thereby allowing opportunity for fauna that may be impacted by disturbance activities to relocate to adjacent areas that are not subject to disturbance. Indirect impacts resulting from the construction of the Proposed Action will be localised, mostly short-term, and actively managed.

The proposed disturbance footprint may be shifted within the proposed micro-siting corridor at detailed design stage. The micro-siting of final infrastructure locations will aim to avoid or further minimise disturbance to the following, where practicable:

- any identified threatened flora
- habitat features required by threatened fauna species including hollow bearing trees and stags, large hollow logs and complex boulder piles
- breeding habitat for threatened and listed fauna species
- riparian zones, including avoiding placement of turbines within 50 m of waterways.

Further minimisation actions are outlined in Att1-MNES, Section 7.3, pp180-181.

Mitigation and Management

Mitigation and management actions were developed for the Proposed Action, in direct response to the potential direct and indirect impacts that were identified in **Att2-MNES Report-Part B, Section 6.0, pp 167 - 183**, with the intent to reduce residual impacts to ecological values following the implementation of avoidance measures.

The general environmental management and mitigation controls for the proposed action, are outlined in **Att2-MNES Report-Part B, Section 7.3.2, pp 191 - 197**, which relates to:

- Vegetation and Native Flora Management
- Native Fauna Management
- Vehicle and Machinery Management Controls
- Pests, Weeds and Disease Management
- Chemical Use, Fuel Storage and LandContamination Management
- Waste Management
- Stormwater, Soil Erosion and SedimentationManagement
- Bushfire Management
- Dust and Air Quality Management
- Noise and Vibration Management
- Artificial Light Management

Potential impacts on terrestrial ecological values will be managed via project-specific management plans, which includes:

- the Preliminary Bird and Bat Management Plan (Preliminary BBMP) (**Att5-BBMP Report**), which has been developed to address operational impacts along with site-specific and regional considerations of wind farm species interactions. The preliminary BBMP will be reviewed periodically during the period in which the BBMP is actively managing bird and bat impacts within the Project Area.

- the Preliminary Vegetation and Fauna Management Plan (Preliminary VFMP) (**Att10-VFMP Report**), which have been developed to include measures specific to the clearing of vegetation and habitat, including No-Go Zones, clearing methods and survey requirements. The Preliminary VFMP will be reviewed and updated throughout the life of the Proposed Action, to ensure the recommended management measures, remains current and effective for the Proposed Action.
- a Construction Environmental Management Plan (CESP)
- a Erosion and Sediment Control Management Plan (ESCP)
- a Weed and Pest Management Plan
- a Bushfire Management Plan (BMP)
- a Preliminary Rehabilitation Plan (PRP)
- a Decommissioning Management Plan (DMP).

The proposed mitigation measures specific to TECs and Threatened species, including those relevant to Brigalow TEC, Painted Honeyeater, South-Eastern Long eared Bat (Nyctophilus corbeni), Koala (Phascolarctos cinereus), Dunmall's snake (Furina dunmalli), Grey Snake (Hemiaspis damelii), are provided in **Att2-MNES Report-Part B, Section 7.3.3, Table 7.1, pp 197 - 206**.

Decommissioning and Rehabilitation

Decommissioning and Rehabilitation will be undertaken in accordance with a DMP, a PRP, and a Decommissioning Security Plan. In accordance with the management plans, decommissioning activities will be undertaken to ensure that there are no adverse impacts on individuals, communities and the natural environment. This typically involves activities to 'make good' the land and remove infrastructure. Further details regarding activities associated with decommissioning and rehabilitation of impact areas, are provided in **Att2-MNES Report-Part B, Section 7.4, pp 206 - 207**.

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

No offsets are proposed at this stage of the proposed action, however, it is likely that offsets will be required as part of the Proposed Action.

Should offsets be required for the significant residual impacts to TEC and Threatened species as a result of the Proposed Action, the Proponent will work closely with ecologists and offset specialists to develop an appropriate offset delivery package, including any associated management plans. The Proponent has commenced assessments of potential offset locations and is currently working with specialist offset providers to secure offsets.

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
Yes	Yes	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
Yes	Yes	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
Yes	Yes	Hirundapus caudacutus	White-throated Needletail
No	No	Motacilla flava	Yellow Wagtail
Yes	Yes	Plegadis falcinellus	Glossy Ibis

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. *

Activities associated with the Proposed Action are categorised into three phases: construction, operation and maintenance, and decommissioning and rehabilitation. The Proposed Action has potential to cause direct and/or indirect impacts on migratory species during these phases. The direct and indirect impacts associated different phases of the Proposed Action, are described in **Section 4.1.4.2** of this referral form, and assessed in detail within **Att2-MNES Report-Part B, Section 6.0, pp 167-183**.

Based on species records and field survey findings, a detailed likelihood of occurrence assessment was conducted for MNES (**Att4-MNES Report-Part D, Appendix D**). Two migratory species were considered 'known' or have a 'high likelihood' of occurrence in the Project Area. Potential direct and indirect impacts associated with these values are addressed below:

Glossy Ibis (*Plegadis falcinellus*)
The Glossy ibis is known to occur in the Project Area. A total of 27.6 ha of gilgai habitat, accounting for seasonal foraging and roosting habitat may be cleared as part of the Proposed Action (**Att3-MNES Report-Part C, Section 8.5.1.4, Table 8.32, p 368**). Direct impacts as a result of the Proposed Action on the Glossy ibis include, habitat loss and degradation, along with potential mortality from vehicle strike and turbine collision.

Indirect impacts on this species may include increased soil erosion and sedimentation reducing water quality and degrading aquatic habitats, contamination risks from refuelling or chemical storage, temporary hydrological changes from infrastructure installation affecting surface flow and runoff, disturbance from elevated noise levels, and increased pest activity, particularly from potential predators. Vegetation clearing and particularly the loss of fringing aquatic vegetation may result in further degradation of potential habitat within the Project Area.

Further details regarding the potential impacts on this species, is provided in **Att3-MNES Report-Part C, Section 8.5.1.6, pp. 369.**

Fork-tailed Swift (*Apus pacificus*)
Despite a high likelihood of occurring in the Project Area and significant survey effort, Fork-tailed swift has not been recorded within the Project Area. Significant survey effort, including bird utilisation vantage point surveys, were conducted during peak activity periods to detect this species, providing adequate survey effort in accordance with the guidelines.

Vegetation clearing required for the construction of the Project will result in direct impacts to up to 1,240.2 ha of non-breeding foraging and dispersal habitat (**Att3-MNES Report-Part C, Section 8.5.2.4, Table 8.34, pp. 373**). However, the species is exclusively aerial and highly mobile, constantly moving in search of food. Potential habitat within the Disturbance Footprint is unlikely to be regularly utilised or necessary for supporting any part of the species lifecycle. This loss of habitat is likely to be inconsequential to the species success within Queensland and Australia more broadly. An additional direct impact is potential during the operational phase, via turbine collision/mortality.

Indirect impacts on this species may include the exacerbation of pest species that exert predation pressure or degrade habitat. Potential pest predators such as foxes, wild dogs and feral cats, along with habitat-degrading species such as rabbits and feral pigs, are already well established within the Project Area.

Further details regarding the potential impacts on this species, is provided in **Att3-MNES Report-Part C, Section 8.5.2.6, pp. 374-375.**

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. *

Significant impact assessments (SIAs) were undertaken for two MNES values (migratory species) that are ‘known’ to occur, or have a 'high' likelihood of occurrence. The SIAs were conducted in accordance with the Significant Impact Guidelines 1.1-Matters of National Environmental Significance using the migratory species criteria, which determined the outcomes of potential significant impacts on migratory species, as follows:

Glossy Ibis (*Plegadis falcinellus*)
The SIA determined that the Proposed Action is unlikely to have a significant impact on glossy ibis (**Att3-MNES Report-Part C, Section 8.5.1.7, pp 349)**. A total of 615.5 ha of habitat suitable for roosting and foraging occurs within the Project Area, which comprises of palustrine wetlands, modified farm dams and gilgai formations. However, these are not considered to be important habitat for the species, and only 27.6 ha of gilgai habitat, accounting for seasonal roosting and foraging habitat, is proposed to be cleared as part of the Proposed Action. The Project Area does not provide sufficient foraging resources to sustain an ecologically significant proportion of the population, and this species is likely to be an occasional visitor to the Project Area. Furthermore, a qualitative risk assessment (**Att4-MNES Report-Part D, Appendix H)** identified the glossy ibis to have an overall moderate risk rating from collision-based impacts.

Existing cleared areas are common within the Project Area and invasive species (feral animals) were recorded throughout the field survey program. As such, significant opportunities for pest movement already occurs across the landscape. With the implementation of suitable measures, the Proposed Action is therefore unlikely to further facilitate the movement of any pests.

The full SIA for this species is provided in **Att3-MNES Report-Part C, Section 8.5.1.7, Table 8.33, pp 370-371.**

Fork-tailed swift (*Apus pacificus*)
The SIA determined that the Proposed Action is unlikely to have a significant impact on the fork-tailed swift (*Apus pacificus*) (**Att4-MNES Report-Part C, Section 8.5.2.7, pp 375**). Although up to 1,240.2 ha of foraging and dispersal habitat will be directly impacted via vegetation clearing for construction of the Proposed Action, this species has a large distribution in Australia, and is exclusively aerial and highly mobile. Therefore, the loss of habitat as a result of the Proposed Action is likely to be inconsequential to the species. Potential habitat within the Disturbance Footprint and wider Project Area is unlikely to be regularly inhabited, or necessary for supporting any part of the species' lifecycle. Habitat loss as a result of the Proposed Action is therefore considered inconsequential to the species' success within Queensland and Australia more broadly. A qualitative risk assessment (**Att4-MNES Report-Part D, Appendix H)** identified the species to have an overall high risk rating for collision-based impacts. However, with the implementation of the Preliminary BBMP (which will be refined and finalised prior to construction), it is considered unlikely that the Project will result in adverse impacts to the species.

Feral animal populations are considered a potential threat to the fork-tailed swift. However, the scope and severity of this threat is low given the species is almost exclusively aerial. Given the existing agricultural land use and presence of cleared areas which may act as conduits for movement, pest fauna populations are expected to be well established within the Project Area. Notwithstanding, with the implementation of suitable measures, it is considered unlikely that pests will be exacerbated beyond existing levels.

The full SIA for this species is provided in **Att4-MNES Report-Part C, Section 8.5.2.7, Table 8.35, pp 375-376.**

Latham’s snipe (Gallinago hardwickii) and the White-throated needletail (Hirundapus caudacutus)

There are two migratory species, the Latham's snipe (*Gallinago hardwickii)* and the white-throated needletail (*Hirundapus caudacutus*), which are also listed as threatened under the EPBC Act. It is acknowledged that these species should be assessed in accordance with their status as a threatened species. Therefore, SIAs for the Latham's snipe (*Gallinago hardwickii)* and the white-throated needletail (*Hirundapus caudacutus*), were conducted in accordance with the threatened species and communities criteria, under the Significant Impact Guidelines 1.1-Matters of National Environmental Significance.

Outcomes of the SIAs determined that the Proposed Action is unlikely to have a significant impact on Latham's snipe (as outlined in **Att4-MNES Report-Part C, Section 8.4.12.8, pp 361-365**), and unlikely to result in a significant impact on the white-throated needletail (*Hirundapus caudacutus*) (as outlined in **Att4-MNES Report-Part C, Section 8.4.4.8, pp 279-282**). The assessment of these two species is further discussed in **Section 4.1.4.5** of this referral form.

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. *

As outlined in the response to questions 4.1.4.7 and 4.1.4.8 of this referral form, the Proposed Action is likely to be a controlled action due to the potential for significant impacts on threatened species and threatened ecological communities.

However, based on outcomes of the SIA, the Proposed Action is unlikely to have a significant impact on the two migratory species, Glossy Ibis (*Plegadis falcinellus*) and Fork-tailed swift (*Apus pacificus*). Therefore, the Proposed Action is not considered a controlled action for migratory species.

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. *

As outlined in Section 4.1.4.10 of this referral form, a hierarchy of management principles were applied throughout planning and development of the Proposed Action. Design optimisation will continue throughout the detailed design phase of the Project, and mitigation measures will be refined or new measures developed, to further minimise potential direct and indirect impacts to migratory species.

Avoidance and Minimisation Measures

The proposed avoidance measures which are relevant to migratory species, are outlined in **Att2-MNES Report-Part B, Section 7.1, pp 184-188.** Measures to minimise impacts of the Proposed Action, on migratory species are outlined in **Att2-MNES Report-Part B, Section 7.2, pp 189-190**.

MNES-Specific Mitigation Measures

The recommended management plans, and general measures to mitigate potential impacts on migratory species are outlined in (**Att2-MNES Report-Part B, Section 7.3.3, pp 197-206**).

Specific measures that are also proposed to further avoid, minimise and manage the impacts specific to all known, and potentially occurring threatened bird species and migratory species. These are outlined in **Att2-MNES Report-Part B, Section 7.3.3, Table 7.1, pp 198-204** which includes the following:

- Applying proposed trigger thresholds (in the Preliminary BBMP) for listed threatened and migratory species and present the adaptive management framework, in the event that a trigger threshold is reached or exceeded.
- Conduct post-commissioning Bird and Bat Utilisation Surveys (BBUS) for the first two years of operation and conducted twice annually to coincide with the seasonal migration of EPBC Act and NC Act listed birds, including the Fork-tailed swift (*Apus pacificus*). Full details of the BBUS monitoring are provided in the BBAMP (**Att5-BBMP Report, Section 6.0, pp 47 - 69**)
- Undertake surveys for carcasses at all operational turbines, as detailed in the BBAMP (**Att5-BBMP Report, Section 9.0, Table 9.1, pp79-80**)
- Implement all requirements within a Weed and Pest Management Plan (developed post-approval), to minimise the introduction and spread of pest and weed species within areas of habitat, including habitat for migratory species.
- Report incidents of all death resulting from operations associated with the proposed action, to DCCEEW.
- For the Glossy ibis (*Plegadis falcinellus*):
    - Report incidents of all wetland migratory bird death resulting from operations associated with the proposed action, to DCCEEW.
    - Do not undertake clearing within 100m of the identified HES Palustrine Wetlands and ensure no dams are completely drained as a result of the Proposed Action.
    - Implement all requirements within the Weed and Pest Management Pla, to minimise the introduction and spread of pest and weed species within areas of habitat.
    - Ensure speed limits (in private areas) are reduced to 40 km/hr or less, to minimise the chances of a collision.
- An adaptive response protocol will be implemented, which may result in additional mitigation measures (**Att5-BBMP Report, Section 9.2, pp 80**. Any additional mitigation measures that are determined to be necessary, will be compliant with the requirements of the State and Commonwealth approvals.

Decommissioning and Rehabilitation

Decommissioning and Rehabilitation will be undertaken in accordance with a DMP, a PRP, and a Decommissioning Security Plan. In accordance with the management plans, decommissioning activities will be undertaken to ensure that there are no adverse impacts on individuals, communities and the natural

environment. This typically involves activities to ‘make good’ the land and remove infrastructure. Further details regarding activities associated with decommissioning and rehabilitation of impact areas, are provided in **Att2-MNES Report-Part B, Section 7.4, pp 206-207**.

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

No offsets are proposed at this stage of the proposed action. Should offsets be required for the significant residual impacts to TEC and Threatened species as a result of the Proposed Action, the Proponent will work closely with ecologists and offset specialists to develop an appropriate offset delivery package, including any associated management plans.

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 does not involve 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 Proposed Action is not located within, adjoining or nearby a Commonwealth marine area. The Proposed Action will not impact any 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 Great Barrier Reef Marine Park is not located within or adjacent to the Project Area. The Great Barrier Reef is approximately 310 km north-east of the Proposed Action. The Proposed Action will not impact the Great Barrier Reef.

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 is a renewable energy project and is not located within or adjoining a water resource in relation to large coal mining development or coal seam gas. The Proposed Action will not impact a water resource in relation to large coal mining development or coal seam gas.

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 Proposed Action will not be impacting any 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 Proposed Action will not impact any 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. *

No alternatives to the Proposed Action were considered possible, due to the following:

1. No Viable Alternatives to Timing

- The Proposed Action will involve the construction, operation, maintenance and decommissioning of a proposed wind farm, with up to 107 wind turbines and ancillary infrastructure, which will deliver approximately 800 megawatts (MW) of power to the National Energy Market (NEM). The Proposed Action is uniquely located, whereby the proposed wind farm will have direct connection to an existing large-scale transmission infrastructure. The Proposed Action will be responsibly developed, and will contribute to making energy cheaper, cleaner and more reliable. It is estimated that the Project will be producing power by 2030.
- The Project strongly aligns with the intent of the Queensland Renewable Energy Roadmap (Energy Roadmap 2025), by delivering new infrastructure that meets the needs of Queensland's energy system. The Proposed Action will contribute to the State's energy transition goals, which is currently targeting an additional generation capacity of up to 6.8 GW of wind and large-scale solar in Queensland by 2030.
- Advancement of the Project further advances Queensland's commitment to climate action, contributes to the decarbonisation of the energy sector in Queensland, and will also benefit the health and wellbeing of the community through the reduction of emission-related amenity impacts. The Project will provide opportunities for the local community through contracting and direct employment, as well as providing ongoing community benefit programs.

2. No Viable Alternatives to Location

- Extensive desktop and site-based investigations have been undertaken since 2022, which identified the Project Area as an ideal location for the Proposed Action based on environmental values, wind resource, transport access, topography, existing land use, grid connection, capacity and proximity. The Project Area has undergone extensive historical clearing and 92% of the Disturbance Footprint is to be located on non-remnant of existing cleared land. The site selection process is described in **Att2-MNES Report-Part B, Section 7.1.1 pp176-177**.
- The Proponent has worked extensively through a highly iterative design process to produce a Project design that avoids MNES to the maximum extent that is practicable given the dispersed nature of MNES values across parts of the Project Area, and which maintains an economically viable Project. If all MNES were to be avoided, the Project would not be viable, and the associated benefits of the Project with regards to the production of clean, renewable energy would not be realised.
- The Proponent has worked collaboratively with design engineers and stakeholders through a highly iterative design process to produce a Project design that aims to minimise impacts to environmental, heritage and social values whilst maintaining an economically viable Project and complying with necessary engineering and design criteria.
- More than 12 primary design iterations were produced for the Project, to accommodate various changes such as technical assessment findings, stakeholder consultation outcomes, and landowner requirements, all of which were progressively incorporated into the design process.
- As part of future detailed design, geotechnical and land surveys the Proposed Action will be subject to further refinements that will ultimately reduce the current proposed extent of impacts associated with the proposed action.

3. No Viable Alternative to Activities

- Activities associated with the proposed development components, construction approach, materials, operations and maintenance, and decommissioning activities, are considered best practice in the development, construction, operation and decommissioning of wind farms in Australia **(Att1-MNES Report-Part A, Section 1.4, pp8-10)**.

- The Proponent has adopted a hierarchy of management principles throughout the planning and design of the Project. Potential impacts as a result of the Proposed Action will be suitably managed through an overarching framework for management plans that will be developed for at subsequent detailed design stage, to ensure that potential impacts on MNES values will be minimised to the greatest extent possible.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-MNES Report-Part A.pdf Goombi Renewable Energy Hub MNES Report Part A (Title page - Page 153)	16/12/2025	No	High
#2.	Document	Att2-MNES Report-Part B.pdf Goombi Renewable Energy Hub MNES Report Part B (Pages 154-207)	16/12/2025	No	High

1.3.2.16 (Person proposing to take the action) Nature of the trust arrangement in relation to the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att9-GEH_Unit Trust Deed.pdf	02/05/2023	Yes	

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	Att6-GEH_Community and Environment Engagement Charter.pdf This document outlines GEH's commitments when engaging with the communities in which the Proposed Action intends to operate within.	28/02/2024	No	High
#2.	Document	Att7-TagEnergy_Environmental and Social Management System_NonRedacted.pdf This document describes the management system that TagEnergy implements to manage ESG risks and impacts associated with projects developed, built and operated by the company	26/01/2024	Yes	High
#3.	Document	Att7-TagEnergy_Environmental and Social Management System_Redacted.pdf This document describes the management system that TagEnergy implements to manage ESG risks and impacts associated with projects developed, built and operated by the company	26/01/2024	No	High
#4.	Document	Att8-TagEnergy_Sustainability Policy_NonRedacted.pdf This document outlines TagEnergy's commitments to developing the projects it operates in a sustainable manner.	01/09/2024	Yes	High

#5.	Document	Att8-TagEnergy_Sustainability Policy_Redacted.pdf This document outlines TagEnergy's commitments to developing the projects it operates in a sustainable manner.	01/09/2024	No	High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-MNES Report-Part A.pdf Goombi Renewable Energy Hub MNES Report Part A (Title page - Page 153)	15/12/2025	No	High

3.1.2 Existing or proposed uses for the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-MNES Report-Part A.pdf Goombi Renewable Energy Hub MNES Report Part A (Title page - Page 153)	15/12/2025	No	High

3.1.3 Natural features, important or unique values that applies to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-MNES Report-Part A.pdf Goombi Renewable Energy Hub MNES Report Part A (Title page - Page 153)	15/12/2025	No	High

3.1.4 Gradient relevant to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-MNES Report-Part A.pdf Goombi Renewable Energy Hub MNES Report Part A (Title page - Page 153)	15/12/2025	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-MNES Report-Part A.pdf Goombi Renewable Energy Hub MNES Report Part A (Title page - Page 153)	15/12/2025	No	High
#2.	Document	Att2-MNES Report-Part B.pdf Goombi Renewable Energy Hub MNES Report Part B (Pages 154-207)	15/12/2025		High
#3.	Document	Att4-MNES Report-Part D.pdf Goombi Renewable Energy Hub MNES Report Part D (Page 378-Appendices)	16/12/2025	No	High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-MNES Report-Part A.pdf Goombi Renewable Energy Hub MNES Report Part A (Title page - Page 153)	15/12/2025	No	High

3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-MNES Report-Part A.pdf Goombi Renewable Energy Hub MNES Report Part A (Title page - Page 153)	15/12/2025	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	Att1-MNES Report-Part A.pdf Goombi Renewable Energy Hub MNES Report Part A (Title page - Page 153)	15/12/2025	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	Att2-MNES Report-Part B.pdf Goombi Renewable Energy Hub MNES Report Part B (Pages 154-207)	15/12/2025	No	High
#2.	Document	Att3-MNES Report-Part C.pdf Goombi Renewable Energy Hub MNES Report Part C (Pages 208-377)	16/12/2025	No	High
#3.	Document	Att4-MNES Report-Part D.pdf Goombi Renewable Energy Hub MNES Report Part D (Page 378-Appendices)	15/12/2025	No	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	Att3-MNES Report-Part C.pdf Goombi Renewable Energy Hub MNES Report Part C (Pages 208-377)	15/12/2025	No	High

4.1.4.8 (Threatened Species and Ecological Communities) Why you think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document				

Att3-MNES Report-Part C.pdf Goombi Renewable Energy Hub MNES Report Part C (Pages 208-377)	15/12/2025	No	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att10-VFMP Report.pdf This document outlines the mitigation and management measures that will be implemented throughout all phases of the Proposed Action to reduce potential impacts on flora, fauna and vegetation communities within the Project Area.	01/09/2025	No	High
#2.	Document	Att2-MNES Report-Part B.pdf Goombi Renewable Energy Hub MNES Report Part B (Pages 154-207)	15/12/2025	No	High
#3.	Document	Att5-BBMP Report.pdf This document outlines the management processes, programs, measures and requirements to avoid and/or mitigate impacts to all bird and bat species from the Proposed Action.	01/10/2025	No	High

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	Att2-MNES Report-Part B.pdf Goombi Renewable Energy Hub MNES Report Part B (Pages 154-207)	15/12/2025	No	High
#2.	Document	Att3-MNES Report-Part C.pdf Goombi Renewable Energy Hub MNES Report Part C (Pages 208-377)	15/12/2025	No	High

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	Att3-MNES Report-Part C.pdf Goombi Renewable Energy Hub MNES Report Part C (Pages 208-377)	15/12/2025	No	High
#2.	Document	Att4-MNES Report-Part D.pdf Goombi Renewable Energy Hub MNES Report Part D (Page 378-Appendices)	15/12/2025	No	High

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

	Type	Name	Date	Sensitivity	Confidence

#1.	Document	Att2-MNES Report-Part B.pdf Goombi Renewable Energy Hub MNES Report Part B (Pages 154-207)	15/12/2025	No	High
#2.	Document	Att5-BBMP Report.pdf This document outlines the management processes, programs, measures and requirements to avoid and/or mitigate impacts to all bird and bat species from the Proposed Action.	30/09/2025	No	High

4.3.8 Why alternatives for your proposed action were not possible

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-MNES Report-Part A.pdf Goombi Renewable Energy Hub MNES Report Part A (Title page - Page 153)	15/12/2025	No	High
#2.	Document	Att2-MNES Report-Part B.pdf Goombi Renewable Energy Hub MNES Report Part B (Pages 154-207)	15/12/2025	No	High

5.2 Declarations

Completed Referring party's declaration

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

ABN/ACN	18059519041
Organisation name	UMWELT (AUSTRALIA) PTY. LTD.
Organisation address	2284 NSW
Representative's name	Becca McBride
Representative's job title	Environmental Consultant
Phone	1300 793 267
Email	rebecca.mcbride@umwelt.com.au
Address	Level 20/145 Ann Street, Brisbane City Queensland 4000

☑ 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, **Becca McBride of UMWELT (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	667531928
Organisation name	Goombi Energy Holdings Pty Ltd as trustee for the Goombi Energy Holdings Unit Trust
Organisation address	Suite 6, 618 Ruthven Street, Toowoomba, QLD 4530
Representative's name	Llion Parry

Representative's job title	Director
Phone	0422 232 538
Email	llion@lprp.net
Address	Suite 6, 618 Ruthven Street, Toowoomba, QLD 4530

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

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

☑ I, **Llion Parry of Goombi Energy Holdings Pty Ltd as trustee for the Goombi Energy Holdings Unit Trust**, 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, **Llion Parry of Goombi Energy Holdings Pty Ltd as trustee for the Goombi Energy Holdings Unit Trust**, 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.