Ecology

Photograph of the project area

Caring for the natural environment

Australia's electricity market is in transition to clean, renewable sources of energy to reduce carbon emissions and mitigate the impacts of climate change. The impacts of climate change, including rising temperatures and severe weather events, are among the greatest threats to biodiversity, threatened species and other wildlife.

Increasing renewable energy capacity and biodiversity conservation are both critically important and compatible objectives, with careful planning and management.

Avoiding and minimising impacts to flora and fauna species that might utilise the project area is a priority. The project team is committed to collaborating with environment stakeholders, ecology specialists, local knowledge holders and host landowners to implement responsible strategies to avoid and mitigate ecological and biodiversity impacts of the development.

An aim of the project will be to achieve net positive outcomes for biodiversity and key species in the project area over the longer term. Measures to achieve this and improve the area's habitat values may include rehabilitation of the initial construction disturbance, management regimes for threatening processes such as feral pests, weed control and fire management, and offset areas that present the opportunity to increase and improve available local habitat for key species.

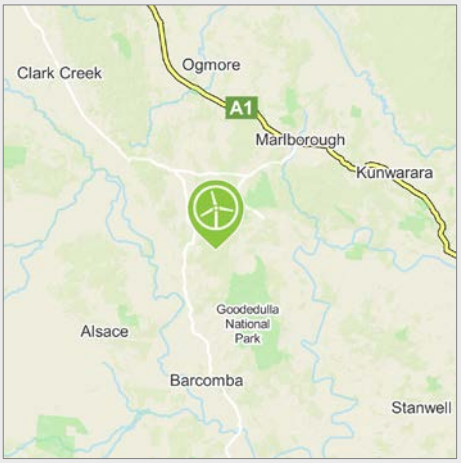
Environmental assessment

Comprehensive and rigorous assessment of the project's potential environmental impacts within the project boundary and downstream of the project area is required by both the Queensland and Australian Governments.

Queensland's *State code 23: Wind farm development* requires assessment of potential impacts on vegetation, habitat for threatened species, biodiversity corridors and avifauna (birds and bats). Requirements include field surveys, species-specific studies, strategies to minimise and mitigate impacts, and preparation of technical reports and preliminary vegetation, fauna, bird and bat management plans. The code aims to ensure wind farms avoid, or minimise and mitigate, adverse impacts on the natural environment (fauna and flora) and associated ecological processes.

The Australian Department of Climate Change, Energy, the Environment and Water (DCCEEW) has determined that the proposal will also require assessment and approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (EBPC no 2022/09396). DCCEEW will do this through an Environmental Impact Statement (EIS), which must respond to specific guidelines issued for the EIS by DCCEEW. The draft EIS is due to be submitted later this year and after it has been accepted it will be placed on public exhibition.

Location



The Boomer Green Energy Hub project area is made up of large cattle grazing properties in the Central Highlands region of Central Queensland. It is about 100 km north-east of Rockhampton and 30 km south-west of Marlborough.

The project area is west of Eugene State Forest, Develin State Forest and Goodedulla National Park, and east of Moultrie State Forest. The project will not impact on these protected areas however the environmental impact assessment will take into consideration any key species that use these areas as habitat and might also use parts of the host properties.

With ambitious renewable energy targets to meet carbon emissions reduction targets, an existing 275 kV overhead transmission line that crosses the project area offers the opportunity for comparatively faster connection to the national grid.

Planning & assessment

Queensland Government (wind) Local councils (solar - tbc)

1. Site selection, initial concept and preliminary investigations ✓
2. Pre-lodgment meeting ✓
3. Studies and technical assessments — WE ARE HERE
4. Development application and assessments lodged — Est Q2 2024
5. Requests for further information (if required) and response
6. Assessment
7. Determination

+

Australian Government

1. Referral to the Department of Climate Change, Energy, the Environment and Water (DCCEEW) for review under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) ✓
2. Decision and advice on assessment pathway: *Determined a controlled action with assessment by Environmental Impact Statement (EIS). EBPC no 2022/09396.* ✓
3. Assessment work for the EIS — WE ARE HERE
4. Draft EIS submitted for adequacy review — Est Q2 2024
5. Requests for further information (if required) and responses
6. EIS accepted by DCCEEW and placed on public exhibition
7. Response to submissions and updates to EIS (if required)
8. Final EIS submitted
9. Determination

Findings to date

Over the past two years ecological assessment work for the project has been done by ecologists and specialist teams in accordance with the relevant methodologies and guidelines. It has involved field studies and surveys across the project area over multiple seasons and targeted investigations for key species.

Surveys have been done for threatened species of flora, birds, amphibians, reptiles, mammals and bats. To date 16 survey periods have been completed amounting to a survey effort of more than 300 person days. To date they have included surveys of 803 vegetation sites, six seasonal bird and bat utilisation surveys, and targeted fauna surveys.

Almost one third of the proposed footprint area is comprised of non-remnant vegetation that has been largely cleared for grazing. The most common remnant vegetation communities are listed as Least Concern under the *Vegetation Management Act 1999* and consist mostly of woodland made up of narrow-leaved ironbark, rosewood and variable-barked bloodwood on slopes and ridges.

Riparian corridors in the project area support fringing woodland dominated by forest red gum, river she-oak and paperbark trees, although most are heavily degraded with rubber vine, listed as an invasive species under the *Biosecurity Act 2014*.

Threatened listed species that have been recorded within the site boundary are two types of cycad, black ironbox, greater glider, squatter pigeon, white-throated needletail, rufous fantail and one koala has been found outside of the project area.

As more information from surveys has become available the project's design has been refined and modified. Results of field surveys to date have led to significant design changes, including the relocation of a number of project facilities to avoid sensitive habitats for key listed threatened fauna. The project layout will continue to evolve throughout the assessment process, taking into consideration further findings and input from stakeholders.

The EIS is required to detail mitigation strategies for each protected species known or likely to occur within the project area, and provide a range of preliminary management plans, including a Bird and Bat Management Plan, Vegetation and Fauna Management Plan, Weed and Pest Management Plan, Rehabilitation Plan, and Sediment and Erosion Management Plan.

Environmentally responsible development

Avoiding and minimising ecological impacts is an important focus during the planning and assessment phase. Ark Energy's approach is to:

- Iterate the project design as more information becomes available, to avoid and minimise environmental impacts to the maximum extent achievable.
- Consult with ecology stakeholders and workshop solutions where required.
- Find workable compromises with meaningful benefit.
- Invest and collaborate on strategies and commitments for repair such as rehabilitation of the initial construction disturbance.
- Develop strategic environmental offsets where required, with tailored management regimes such as for fire management and weed control, to improve habitat values.
- Focus on nature positive outcomes.

More information

Visit – Boomer Green Energy Hub Office & Information Centre, 1/24 William Street, Rockhampton CBD.

Tel - 1800 731 296

Email - info@boomerhub.com.au

Newsletters – register at arkenergy.com.au/mailing-list-details

Website - boomerhub.com.au or scan QR code right

Scan QR code to visit the project website