Ecology

Photograph of the project area

Caring for the natural environment

Australia's electricity market is changing to reduce carbon emissions and mitigate the impacts of climate change, such as rising temperatures and severe weather events, which are among the biggest threats to biodiversity and wildlife.

Increasing renewable energy generation and conserving biodiversity are both critical and can be achieved together with careful planning and management.

The project area is made up of a group of large cattle grazing properties with a mixture of historically cleared pastureland, regrowth and remnant eucalypt woodlands.

Early development has focused on avoiding high value environmental areas, and minimising impacts to the flora and fauna in the project area is a priority.

The project team is committed to collaborating with stakeholders, ecology specialists, Traditional owners and host landowners to implement responsible strategies to avoid, minimise and mitigate the ecological impacts of the development.

An aim of the project will be to achieve net gains for biodiversity and key species in the project area over the longer term. Measures to achieve this could include rehabilitation of the initial construction disturbance, improved management regimes for threatening processes such as feral pests, weeds and fire, and environmental offset areas that present the opportunity to increase and improve habitat for key species.

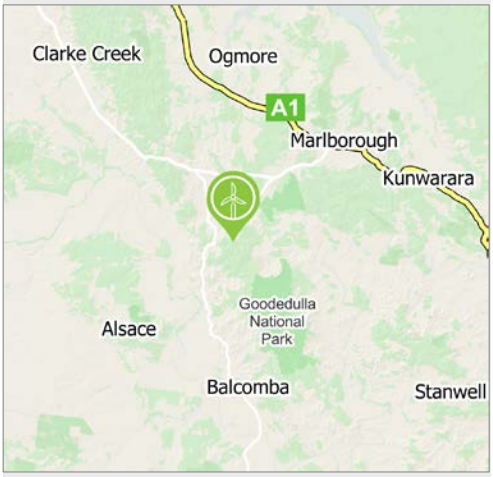
Environmental assessment

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

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

The Australian Department of Climate Change, Energy, the Environment and Water (DCCEEW) has also determined that the proposal must be assessed and approved under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* before it can proceed (Ref 2022/09396). The EPBC Act protects matters of national environmental significance. This assessment requires a thorough and comprehensive Environmental Impact Statement (EIS) that addresses the specific requirements set by DCCEEW. The draft EIS is due to be submitted this year and after it has been accepted by DCCEEW it will be placed on public exhibition.

Location



The Boomer Green Energy Hub project area is made up of a group of large cattle grazing properties about 30 km south-west of Marlborough in Central Queensland. The project area is west of the Eugene State Forest, Develin State Forest and Goodedulla National Park, and east of the 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.

Planning & assessment

Queensland Government

1. Site selection, initial concept, preliminary investigations ✓
2. Pre-lodgement meetings ✓
3. Studies and technical assessments to fulfil requirements (State code 23) — WE ARE HERE
4. Development application and assessments lodged
5. Requests for further information (if required) and response
6. Documents accepted and placed on public exhibition
7. Response to submissions, further information (if required)
8. Final documents submitted
9. Assessment
10. Decision notice issued

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
5. Requests for further information (if required) and response
6. EIS accepted and placed on public exhibition
7. Response to submissions, further information (if required)
8. Final EIS submitted
9. Determination

Work to date

Over the past three years ecological assessment work for the project has been done by ecologists and specialist teams in accordance with prescribed guidelines. It has involved field studies and surveys across the project area over multiple seasons and targeted investigations for key species of flora, birds, amphibians, reptiles, mammals and bats.

To date 22 survey periods have been completed, amounting to more than 4,000 hours on site. As more information has become available the project's design has been refined and modified. The layout has gone through about 80 design iterations to date, including significant changes to avoid sensitive habitats for key species.

Vulnerable and endangered flora species identified within the project area have been avoided and approximately 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*.

Key fauna habitat has been avoided as much as possible. Species considered to use areas within the host property boundaries and that require special attention in the assessment work include the Greater Glider, Koala, Squatter Pigeon, White-throated Needletail and a species of cycad, *Cycas terryana*.

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, Rehabilitation Plan, and Sediment and Erosion Management Plan.

Ark Energy is currently looking at areas for the establishment of biodiversity with a focus on areas that will improve habitat connectivity between host properties and Goodedulla National Park, Eugene State Forest, Develin State Forest and Develin Nature Refuge. The project layout and environmental commitments will continue to evolve taking into consideration further findings and input from stakeholders.

Environmentally responsible development

Avoiding and minimising ecological impacts is a priority during the design and assessment process. Ark Energy's approach during early development is to:

- Iterate the project's design as more information becomes available, to avoid and minimise environmental impacts to the maximum extent achievable.
- Consult widely with environmental stakeholders and workshop solutions where required, to find workable compromises with meaningful benefit.
- Invest and collaborate on strategies and commitments for environmental repair such as rehabilitation of the initial construction disturbance.
- Develop strategic initiatives to improve the quality and size of habitat and habitat connectivity for key species, such as environmental offset management areas with strategic benefits and tailored management regimes for fire, feral pest species and weeds.
- Focus on how to achieve net gains for biodiversity and key species in the project area over the longer term.

Boomer Green Energy Hub

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

Telephone - 1800 731 296

Email - info@boomerhub.com.au

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

Newsletters – register at arkenergy.com.au/mailing-list-details for e-news or send the project team your mail address and a request to be added to the direct mail (post) list.

Scan QR code to visit the project website