Ecology

Photograph of the project area

Caring for the natural environment

Australia's electricity market is in transition to 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.

Queensland is blessed with both renewable energy resources and habitat for a variety of native wildlife. Typically, the wind resource overlaps with vegetation (see map overleaf). Increasing renewable energy capacity and biodiversity conservation are both critically important and compatible objectives, it just requires careful planning and management.

Avoiding and minimising impacts to flora and fauna that might utilise the project area is a priority for Ark Energy. 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 environmental 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 habitat for key species.

Environmental assessment

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

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 management plans. The code aims to ensure wind farms avoid, minimise and mitigate adverse impacts on the natural environment (fauna and flora) and associated ecological processes.

The proposal will also be referred to the Australian Department of Climate Change, Energy, the Environment and Water (DCCEEW) for review under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), which protects matters of national environmental significance (MNES). Based on the referral DCCEEW will determine the pathway for the Commonwealth's environmental assessment.

The environmental assessment will involve years of work by specialist ecologists and survey teams, and include regional ecosystem mapping, field studies, multi-seasonal surveys and targeted investigations for key species. The work will incorporate input from scientists, experts, local resource managers and knowledge holders.

As more findings from the ecological assessment work become available the project's design is refined and modified accordingly to avoid sensitive ecological areas or key habitat.

Location
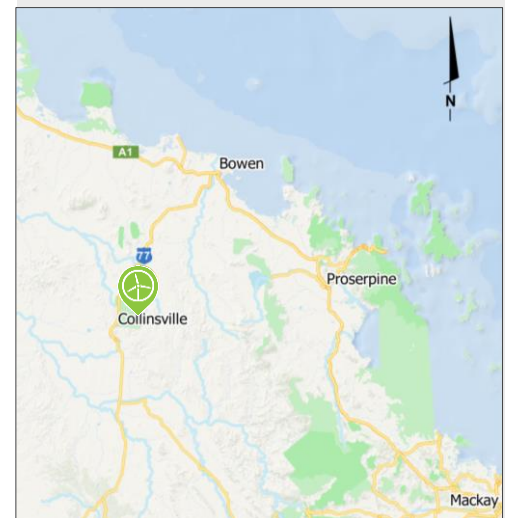
The Collinsville Green Energy Hub project area is made up of large pastoral properties located near Collinsville and about 80 km south-west of Bowen.

Environmental assessment

Queensland Government

1 — Site selection, initial concept and preliminary investigations — **WE ARE HERE**

2 — Pre-lodgment meeting with the State Assessment and Referral Agency (SARA)

3 — Studies and technical assessments (prescribed by SARA State code 23)

4 — Development application and assessments lodged

5 — Request for further information (if required) and response

6 — Assessment

7 — Determination

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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

3 — Assessment work for report

4 — Draft assessment report submitted for adequacy review

5 — Requests from DCCEEW for further information (if required) and response

6 — Assessment accepted by DCCEEW and placed on public exhibition

7 — Response to submissions and lodgment of final assessment

8 — Final assessment submitted

9 — Determination

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's design as more information becomes available, to avoid and minimise environmental impacts to the maximum extent achievable.

- Consult widely with environment stakeholders and workshop solutions where required, to 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 initiatives to increase the quality and size of protected habitat areas and habitat connectivity for key species, such as environmental offsets and tailored management regimes for fire management, feral pest management and weed control.

- Focus on net gain for biodiversity and key species in the project area over the longer term.

Legend:
- Mean Wind Speed (>7m/s @150m)
- Regulated Vegetation – Remnant
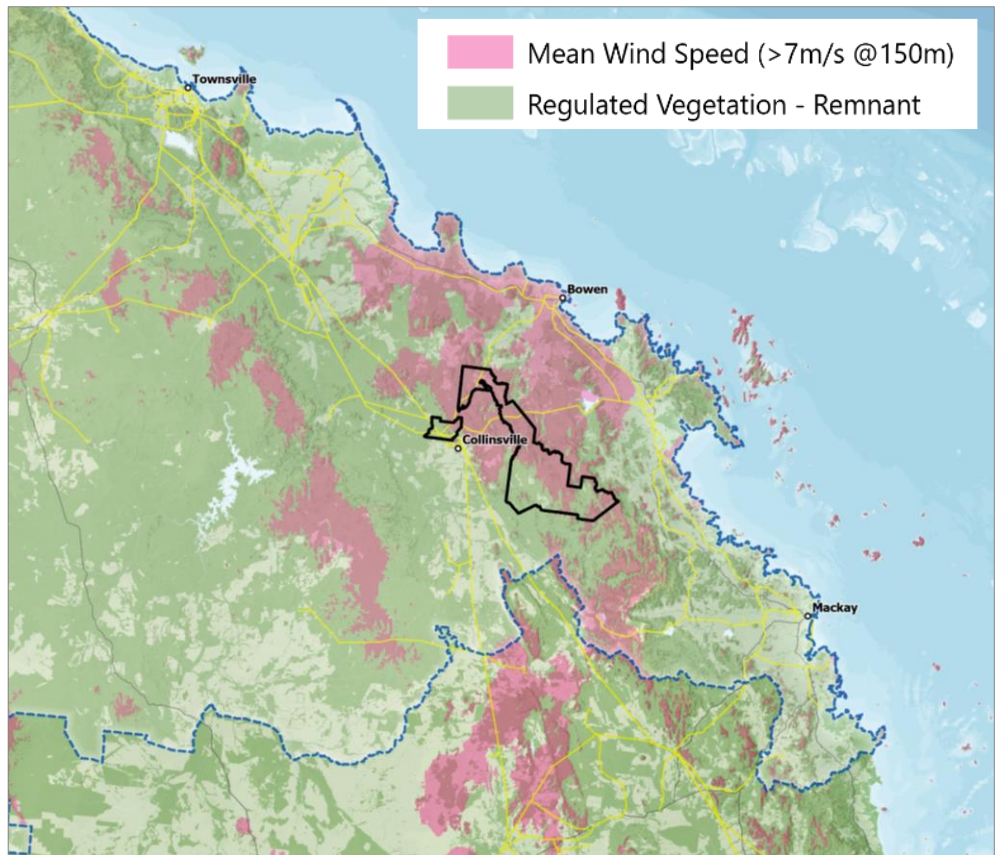
The Collinsville Green Energy Hub project area is near Collinsville and south-west of Bowen in North Queensland. The wind resource overlaps vegetation, making balancing the development with minimising impacts on the natural environment an important focus.

More information

Visit - Collinsville Green Energy Hub Information Centre, 47 Railway Road, Collinsville. Please check the website/window for open times.

Tel - 1800 731 296

Email - info@collinsvillehub.com.au

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

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

Scan QR CODE to visit the website

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