# **Driving positive** environmental outcomes for key species





Addressing climate change is essential to protecting our planet's biodiversity. Reducing Australia's reliance on burning fossil fuels for energy is the clear action we must take to address the compounding threats of climate change.

Australia's energy sector remains the largest source of greenhouse gas emissions. In Queensland alone, electricity generation accounts for around one third the State's net carbon emissions, equating to over 44 million tonnes of CO2 annually.

Windlab understands that the task of decarbonising Australia's energy generation must work in harmony with addressing biodiversity decline.

According to the World Economic Forum's Centre for Nature, conservation alone will not bed the curve of global biodiversity loss and will allow much greater losses overall. At the same time, solutions must also include addressing climate change without causing harm to the ecosystems we aim to protect.

## **About Gawara Baya**

Gawara Baya is a vital early-transition opportunity that can be responsibly developed, grid-connected via existing transmission infrastructure and producing, clean energy within the next few years.



The project will displace more than 1.2 million tonnes of carbon emissions from Australia's power generation profile every year, providing enough clean energy to power more than 250,000 Queensland homes.

The project is located within the In-flight Far North Queensland REZ - home to one of the most reliable and abundant wind resources in the country, which is essential for delivering low-cost renewable energy around the clock.



**400MW** capacity



>300 peak construction jobs



>1.2 tonnes of CO<sub>2</sub> displaced from Australia's energy generation profile every year



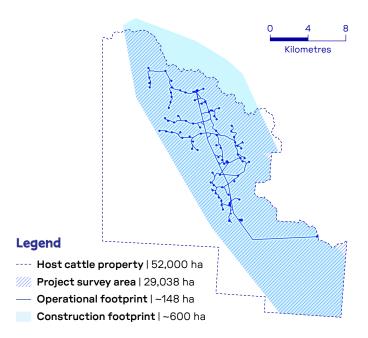
\$200m regional economic contribution through local jobs, supply and contracts



\$200k invested in community initiatives each year

# Responsive design

The project has been shaped by over 8,000 hours of cross-seasonal ecological studies and nearly five years of consultation with Traditional Owners, conservation experts, engineers, and local communities.



The project has been strategically designed to position critical infrastructure away from sensitive areas. Once operational, Gawara Baya will occupy less than 0.3 per cent of its host cattle property location.

Initially, an area over 48 times the construction footprint was established as the project survey area and subjected to almost five years of impact assessments and analysis.

Over five years of iterative design and development, detailed refinements have been made to every aspect of the project, reducing the footprint significantly, while almost halving the number of turbines.

We will initiate progressive rehabilitation and restoration alongside construction. Over the course of the project, 75% of the temporary development footprint will be rehabilitated back to native ecosystems, resulting in a compact operational footprint.

Gawara Baya has a detailed end-of-life decommissioning and rehabilitation plan as a condition of the project's approvals.

# **Biodiversity Net-Gain Strategy**

Windlab is committed to delivering Gawara Baya responsibly, in a way that directly responds to local scale impacts of the project and targets overall improvements for regional ecology through our Biodiversity Net-Gain Strategy. We understand quantifying and delivering biodiversity net-gain is complex. We're committed to ensuring our approach is based on more than assumptions. For us, biodiversity net-gain is not just a platitude. The problems we are solving deserve proper justification.



## Methodology

Publish approach used to determine impacts and net gain, outcome and approaches



## **Targets**

Identifying meaningful targets for net gain and pathways to achieve targets



## Verification

Identifying methods for verifying net gain



## **Delivery**

20+ year
implementation
program in
partnership with
Traditional Owners an
regional conservation
expert

# Managing Matters of National Environmental Significance

Gawara Baya has undergone a rigorous regulatory review process that requires approvals from Local, State and Federal Government authorities.

At the Federal level, Gawara Baya received approval under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) on 17 June 2024. This process ensures developments align with the legislative framework that manages Matters of National Environmental Significance, like nationally and internationally significant flora, fauna, ecological communities, and heritage places.

Windlab is delivering evidence-based ecological restoration and threat abatement programs at Gawara Baya targeting overall improved outcomes for species in the region.

John Martin, CEO Windlab





Gawara Baya has also received a development permit under the Queensland planning legislation to construct, operate and decommission the project.

Windlab prioritised avoiding impacts wherever possible, then minimising or mitigating impacts. For unavoidable impacts on five listed species compensatory offsets will be required for these species under the EPBC Act.

These target species will be a critical focus for Windlab's Biodiversity Net-Gain Strategy. This involves leading best-practice methods to restore ecosystems and reduce threats, focusing on better outcomes for target species across the region.

## **Offsets**

The offset strategy for Gawara Baya focuses on creating legally protected areas to improve habitat for target species.



## ~3,000ha

for compensatory offsets, required under the EPBC Act.



Large parcels of neighbouring land for additional ecological restoration and recovery initiatives.

To ensure the best possible outcomes, Windlab prioritises avoidance and mitigation strategies throughout the project planning and development process. Our offset calculations are based on conservative estimates of the maximum temporary development footprint during construction activities, ensuring measures are in place to protect and enhance biodiversity.

We are securing almost 3,000 hectares of offset land – around five times the area temporarily disturbed during construction. This land, located near the project, has been carefully assessed for habitat suitability and the presence of target species.

Offsets will be actively managed in partnership with Traditional Owners, landowners and ecology experts to ensure long-term benefits for biodiversity. Planned rehabilitation is treated as an additional benefit beyond these offset requirements. Windlab is also securing large parcels of land nearby land suitable for ecological restoration and species recovery.

This initiative is part of our 100 per cent voluntary Biodiversity Net-Gain Strategy, going beyond compliance to ensure a deeper understanding and positive impact on the environment.

# **Key species**

Windlab is committed to protecting the unique wildlife surrounding the Gawara Baya project by prioritising habitat conservation and minimising impacts, in line with the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

Windlab's approach is guided by careful planning, rigorous ecological studies, and innovative solutions to ensure the Gawara Baya project contributes to the conservation of these species. By balancing renewable energy development with a strong commitment to biodiversity, we are working to protect and enhance the environment for generations to come.

# Sharman's rock wallaby

Sharman's rock wallaby colonies have been identified within the Gawara Baya site.

Almost 97 per cent of the Sharman's rock wallaby connecting habitat areas will remain untouched, and no confirmed breeding or foraging areas will be cleared.

Gawara Baya will impact a total of 0.8 per cent of the total available habitat within the project area during operation.

During construction, a maximum of 3.3 per cent of the total available habitat may be temporarily disturbed, noting this calculation is highly conservative. Actual disturbance is likely to be significantly less, and these areas will be progressively rehabilitated once activity in these areas allows.

Sharman's rock wallabies are vulnerable to predation by cats, and the presence of feral cats across the project site poses a significant threat to the species. Controlling predatory pests like feral cats and dogs will be a priority of the integrated management response delivered through Gawara Baya, as well as re-introduction of ecologically beneficial fire regimes to improve habitat across the project area and offsets.

## Key integrated management initiatives:

Avoid	Final development footprint  Around 3,000 hours of targeted surveys were completed post-EPBC approval to identify and avoid confirmed, rock piles used for breeding and shelter by the Sharman's rock wallaby across the project area.		
Minimise	Construction scheduling Construction near rock piles will be scheduled outside of dusk hours to minimise disturbance, with consideration for safety requirements.  Rehabilitation Leading-practice rehabilitation and restoration delivered to restore vegetation communities and benefit ecosystem function.		
Improve	Predatory pest management Intensive pest program established to control predatory threat from feral cats and dogs.  Monitoring and knowledge sharing Detailed monitoring of species and habitat for adaptive management. Data shared with experts and relevant species recovery groups.		
Offset	~2,800 ha of known Sharman's rock wallaby habitat to offset potential impacts.		

## Koala

Climate change is a critical threat to koala survival, emphasising the need for clean energy alternatives that balance impacts to habit.

Almost 98 per cent of koala habitat within the project will be preserved, with only a very small area temporarily disturbed during construction.

Once operational, Gawara Baya will impact about 0.5 per cent of the total available koala habitat within the project area. A maximum of 2.1 per cent of the total habitat available to koalas within the project area will be temporarily disturbed during construction, and around three-quarters of this will be progressively rehabilitated.

Eliminating existing threats is one of the ways Gawara Baya will target overall improved outcomes for koala. Dog attack is identified in the National Koala Recovery Plan and intensive pest management forms part of Windlab's integrated management response for the species.

Windlab has voluntarily committed Gawara Baya as a Tier 1 monitoring site for the Australian Government's National Koala Monitoring Program. This \$10 million program delivered by the CSIRO supports nationwide koala protection and recovery planning by increasing reliable data on koala populations and distribution. As a Tier 1 site, Gawara Baya will be subjected to the most intensive level of monitoring by CSIRO scientists.

## Key integrated management initiatives:

Avoid	Avoid riparian areas  Development near riparian corridors avoided where possible. Where major riparian areas need to be crossed, Windlab will work to maintain all vegetation, including canopy trees wherever possible.		
Minimise	Turbines eliminated The project footprint has been reduced by over 50% by decreasing the number of turbines from 80 to 69. Additionally, turbines have been positioned closer together to reduce habitat disturbance.	Rehabilitation Leading-practice rehabilitation and restoration delivered to restore vegetation communities and benefit ecosystem function.	
Improve	Feral predator control Comprehensive feral dog management program established.  CSIRO National Koala Monitoring Program partnership Project area committed as Tier 1 Monitoring site.	Fire management Fire management regimes introduced to maintain habitat structure and reduce risk of late season wildfires.  Weed management Weed management plan established to control invasive weeds that threaten habitat structure.	

Offset

~3,000 ha of known koala habitat to offset potential impacts.

# **Greater glider**

Given their modest home range, the availability of suitable habitat across the project site and sightings during surveys, greater gliders are known to exist across the project area.

Around 98 per cent of total greater glider habitat across the project area will remain untouched for the life of the project, with measure like installing nest boxes and glider poles ensuring safe movement and nesting options

Gawara Baya will impact a total of 0.6 per cent of the total available greater glider habitat within the project area during operations. During construction, a maximum of 2.1 per cent of total habitat suitable for greater gliders available across the entire project area will be temporarily disturbed.

Since the draft PER was lodged in February 2023, Windlab has further eliminated impacts to 128 hectares of greater glider habitat, including avoiding about 80 hectares of denning and foraging habitat.

Rehabilitation efforts will focus on restoring canopy vegetation and maintaining essential connectivity throughout the project area.

A responsive Greater Glider Monitoring and Management Plan developed for the project will track and address potential impacts, as well as avoid the creation of isolated habitat patches and narrowing of roads and will replace hollows with ecologically appropriate nest boxes.

## Key integrated management initiatives:

#### Avoid

#### Avoid riparian areas

Development near riparian corridors avoided where possible. Where major riparian areas need to be crossed, Windlab will work to maintain all vegetation, including canopy trees wherever possible.

#### **Turbines** removed

19 turbines removed or relocated to minimise impact to key habitat.

#### Relocating infrastructure

Infrastructure and turbines impacting greater glider denning habitat in north of site relocated.

#### Minimise

#### Retention of denning habitat

Where avoidance is not possible, hollowbearing trees retained and relocated wherever possible by species experts prior to any disturbance.

Three nest boxes providing alternative nesting sites installed when disturbance to a potential den tree can't be eliminated.

#### Glider poles and nest boxes

Glider poles installed to provide refuge from predators and maintain connectivity corridors.

Glider nest boxes installed to provide essential alternative nesting sites.

#### Rehabilitation

Leading-practice rehabilitation and restoration to renew existing vegetation communities and to benefit ecosystem function.

#### **Improve**

#### Feral predator control

Comprehensive feral dog management program established.

CSIRO National Koala Monitoring Program partnership

Project area committed as Tier 1 Monitoring site.

#### Fire management

Fire management regimes introduced to maintain habitat structure and reduce risk of late season wildfires.

#### Weed management

Weed management plan established to control invasive weeds that threaten habitat structure.

#### Offset

~3,000 ha of known greater glider habitat to offset potential impacts.

# Red goshawk

Over more than three years of in-depth, crossseasonal ecology surveys two red goshawks were spotted from within the project survey area, however no nests have been discovered.

A potential red goshawk nest has been identified within the proposed offsite location, which will be protected for the life of the project.

Given the overall national status of the species, Windlab is taking a cautious approach which includes ongoing monitoring, additional avoidance measures during detailed design and delivery of significant offsets.

Around 98 per cent of its potential habitat within the project area will remain undisturbed throughout the life of the project.

Gawara Baya will impact a total of 0.5 per cent of the total available red goshawk habitat within the project area during operations. During construction, a maximum of 2.1 per cent of total habitat suitable for red goshawk available across the entire project area will be temporarily disturbed.

Habitat enhancement measures, including offsets, will provide long-term improvements for the species. Additionally, strict operational protocols are in place to immediately address any potential harm, with detailed adaptive management plans ensuring ongoing protection.

## Key integrated management initiatives:

Avoid	Avoid riparian areas  Development near riparian corridors avoided where possible. Where major riparian areas need to be crossed, Windlab will work to maintain all vegetation, including canopy trees wherever possible.	Exclusion zones  If a nest is found during pre-clearance survey, permanent exclusion zone applied for wind turbine placement. To date, detailed development survey work has identified no nests within the 400m buffer of each turbine.
Minimise	Minimal-impact layout  97% of total available nesting and foraging habitat undisturbed through life of project.  Nest sites protected  If a nest is found, minimum 75 per cent of vegetation retained within 4km radius. To date, detailed development survey work has identified no nests within the 400m buffer of each turbine.	Rehabilitation Leading-practice rehabilitation and restoration to renew existing vegetation communities and to benefit ecosystem function.  Bird and Bat Management Plan Adaptive mitigation and management measures and procedures to monitor and, where required, protect movements throughout the project area proposed.
Improve	Fire management Fire management regimes introduced to maintain habitat structure and reduce risk of late season wildfires.	Weed management Weed management plan established to control invasive weeds that threaten habitat structure.
Offset	~3,000 ha of known red goshawk habitat to offset potential impacts.	

# Masked owl (northern)

The masked owl's inclusion as a target species for Gawara Baya represents an ultra-conservative approach designed to ensure the best possible outcomes for the species.

More than 97 per cent of the total habitat across the project survey area will be preserved throughout the life of the project.

Gawara Baya will impact a total of **0.6 per cent** of the total available masked owl habitat within the project area during operations. No more than 2.5 per cent of available masked owl habitat will be temporarily disturbed during construction.

Careful planning has guided the relocation of infrastructure to avoid key habitats, and hollow-bearing trees will be retained or relocated by ecological experts to support nesting. Habitat offsets will further improve conditions, ensuring the long-term sustainability of the species.

These measures reflect Windlab's commitment to going beyond compliance to protect this bird.

## Key integrated management initiatives:

Avoid	Eliminating turbines  14 turbines eliminated or relocated from areas of habitat suitable for masked owl denning and breeding in the north of the site.	Relocating infrastructure Infrastructure impacting key potential masked owl habitat relocated where possible
Minimise	Retention of denning habitat  Hollow-bearing trees that cannot be avoided retained and relocated by species experts wherever possible prior to any disturbance.  Bird and Bat Management Plan  Adaptive mitigation and management measures and procedures to monitor and, where required, protect movements throughout the project area proposed.	Rehabilitation  Leading-practice rehabilitation and restoration to renew existing vegetation communities and to benefit ecosystem function.
Improve	Fire management Fire management regimes introduced to maintain habitat structure and reduce risk of late season wildfires.	Weed management Weed management plan established to control invasive weeds that threaten habitat structure.
Offset	~3,000 ha of known masked owl (northern) habitat to offset potential impacts.	

# Gawara Baya Integrated management responses