



Middlebrook Solar Farm

Project refinement



The Project

- The proposed Middlebrook Solar Farm and BESS project is located approximately 22km south of Tamworth within the Tamworth Regional Council
- The solar farm has a generating capacity of 320 MW
- The BESS has a capacity of up to 780 MWh
- The Project will connect to the National Electricity Market (NEM) Grid via the existing Transgrid's 330kV transmission line traversing the site

Middlebrook Solar Farm Footprint refinement



Land Use Compatibility

- > The project commitments and lease agreements with landholders allow for:
 - 1. Managed sheep grazing during operations
 - 2. Monitoring and managing the soil and pasture health during operations
 - 3. The restoration of land capability at the end of the project life





Land Use Compatibility



> The Project will maintain the value of the agricultural resource by:

- Ensuring solar module spacing and heights allow for grazing to continue.
- Rehabilitating all areas of disturbance after construction.
- Monitoring the soil conditions, pasture and managing weeds during operation.
- There is high confidence that existing land capability can be maintained or improved because of:
 - The light footprint of the project modules are the majority of the impact area and driving / drilling in mounts causes minimal soil disturbance.
 - Less intensive grazing than current use during operation particularly in droughts.
 - Overseas examples these point to improved soil and pasture health due to microclimate effect of panels.

Diversification adds resilience

- While agriculture has been the traditional land use in the region,
- Solar provides an important diversification,
- That is particularly relevant in droughts, flooding, expected climate extremes.



Traffic and dust



- > Key changes to the project following consultation with the Council and Community:
 - Adding a second access east of the primary site Ο access on Middlebrook Road
 - Restrict traffic to Middlebrook Road's first and Ο second accesses only (not the east-west crossings of Middlebrook Road)
 - Upgrade Middlebrook road from near the New England Highway to the second site access
 - Seal the upgraded portion of Middlebrook Road up Ο to a 440m past the first site access to minimise dust and increase safety during construction (about 4km)

Roads and bridges - current and proposed upgrades

Existing transmission lines _____ Solar Area

ALE



Site Boundary Substation Substation

Social benefits

Community Benefit Fund



(an annual/bi-annual grants round-making contributions towards local initiatives, based on the following selection criteria)

- o Contributes to increased resilience for the Loomberah and surrounding communities and addresses a specific local issue
- o Demonstrates strategic alignment with TRC Council Plans and Strategies
- Supports development of local skills and capabilities
- o Supports the conservation of the local environment
- Supports a transition to a more sustainable region
- Priority will be given to funding initiatives that are focused on the areas surrounding the project area, to ensure the funding is more closely benefiting the local community near the project, i.e. primarily within a 10km radius of the project, with secondary consideration given to initiatives within the 15km–20km range

> Neighbour Benefit Fund (based on community feedback)

Any neighbouring residence within 3km is eligible for the Neighbour Benefit Fund on offer as an annual payment for the life of the project (no-strings attached)

> VPA

(The most recent VPA proposal is in line with recommendations in the current Large-Scale Solar Energy Guidelines published by NSW Department of Planning and Environment (dated August 2020))

- An annual payment of \$82,070 (CPI adjusted) from commencement of operations for the operational life of the project to be paid to Council
- An annual payment of \$32,000 from commencement of operations for the operational life of the project to be paid into the community benefit fund
- Sealing the surface of Middlebrook Road (as per agreed area) to the approximate value of \$321,550

Biodiversity



The Project has selected a site which has already been extensively cleared

> The Project commits to management actions including:

- Timing clearing to avoid breeding impacts
- Relocating habitat features, such as hollows
- Weed and hygiene management
- Fencing to protect better areas of habitat
- Adaptive management (a feedback loop to check and improve on results based on actual results)
- A Commonwealth approval has been avoided by avoiding better quality Box Gum Woodland remnants









- The project has been refined several times during its development phase to adhere to guidelines and recommendations from various governmental agencies and address important community concerns.
- The project has significantly reduced its development footprint, altered the design to incorporate the requested recommendations, including biodiversity and land use considerations, added a second site entry, and sealed the road to address traffic and dust concerns.
- Consultation has been ongoing and has incorporated feedback received to improve the project design where appropriate. As a result of the consultation with the Council and the local community, a neighbour benefit offer was also established for neighbouring residences within 3km of the project.
- This project will contribute towards achieving net zero emissions by 2050, assist in meeting the increase in electricity demand during the transition to cleaner energy, and bring economic benefit to the area and region through the construction and operational phases of the project.







Thank you





