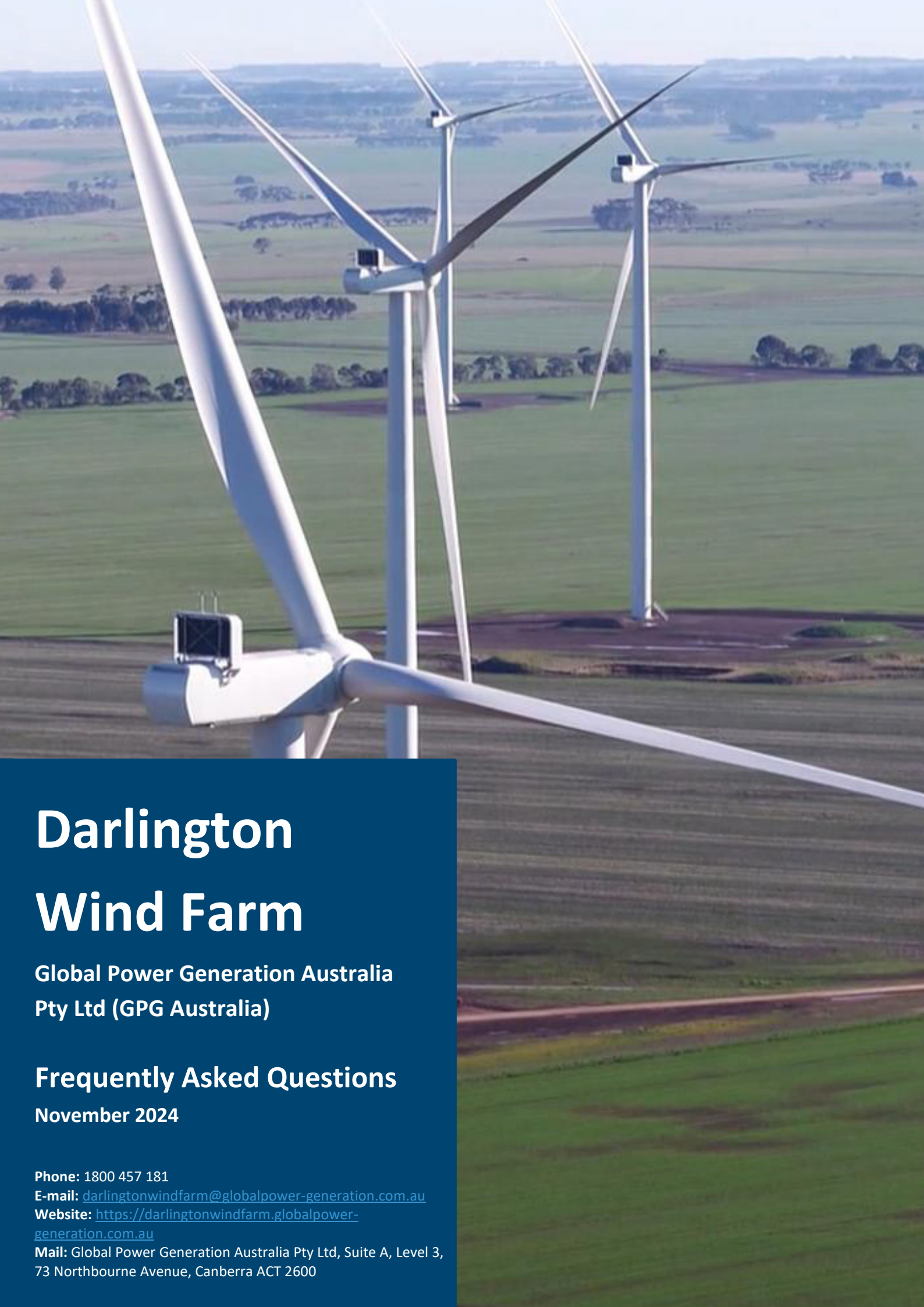




Darlington Wind Farm

**Global Power Generation Australia
Pty Ltd (GPG Australia)**

Frequently Asked Questions
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Darlington Wind Farm

PROJECT AT A GLANCE

Project Location	South-west of Darlington and north-east of Mortlake
Ownership of the wind farm assets	Global Power Generation Australia
Project site area	5,645 hectares
Size	Up to 45 Wind Turbines
Capacity	Up to 325MW
Blade tip height	Up to 240 metres
Grid Connection	A new onsite substation connecting to the existing 500KV Haunted Gully-Tarrone transmission line.
Project Status	Environmental Effects Statement (EES) preparation.
Emission Savings	Over 1 million tons of CO ₂ annually
Dwellings powered	Darlington wind farm will deliver renewable, low-cost energy to the national grid, enough to supply over 300,000 average Australian homes per annum.
Construction period	Approx 22 months
Project lifespan	Approx 30 years

Thank you to everyone who has submitted feedback on the proposed Darlington Wind Farm. This document answers some of the most common questions from our community engagement initiatives to date.



1. Who is Global Power Generation Australia?

GPG Australia (GPGA) is the Australian subsidiary of GPG, established to develop, construct, and operate renewable assets in Australia drawing on extensive renewable energy development experience and expertise of its parent company, GPG.

2. Who will build and operate the wind farm?

It is too early to determine who will build the wind farm. However, following the planning and environmental approvals process, GPGA will tender for and appoint a local Head Contractor to undertake plant construction.

GPGA will operate the wind farm for the project's entire life cycle.

3. Considering GPGA's parent company is a Spanish company, where does the money go (Offshore??)

While, like many Australians, GPG Australian has overseas heritage, we are an Australian entity through and through, with significant obligations to the Commonwealth, state and the respective councils in which we operate. This includes taxes, levies, payments to host and neighbouring landholders, community benefits programme, creation of local employment, stimuli for the local and regional economies and more broadly, redistribution of part of the benefits from the future operation of this facility into the Australian economy.

4. Why did GPGA choose this area for a wind farm?

The wind resource in Victoria, particularly south-west Victoria, is very strong. GPGA has been monitoring wind speeds in the area for more than 15 years and this has confirmed a solid, consistent resource. While this is one of the most critical aspects of a good wind farm site, other elements make the area a good location, including supportive landowners, viable road networks, interconnection, minimal community and ecological impacts, etc. The presence of existing transmission lines within the project area will allow generated energy to be dispatched into the national network easily and

efficiently and will avoid the need for new external transmission lines.

5. Why not a solar farm?

There are merits to developing solar farms. GPGA does this in other locations. However, this is only really viable at locations with significant solar resource. It is particularly important for grid operation to deploy complementary energy generation technologies. Wind farms can generate electricity through the night, when the sun is not shining, thereby complementing solar generation. With the strong wind resource in south-west Victoria, it is also more cost-effective to generate electricity from wind than solar.

6. Can renewable energy technologies provide a reliable supply of electricity?

Renewable energy technologies generate electricity intermittently. The sun does not always shine, and the wind does not always blow. However, a critical part of development involves analysing a site's historical and current weather patterns to obtain reliable resource estimates (i.e. when, how long, how strong and in what direction the wind blows or the sun shines). This information is used to work out the plant's expected energy output, which is then shared with the network operator for dispatch management. So, while the wind won't always blow and the sun won't always shine, the grid operator knows, within reasonable tolerance limits, when to expect output from renewable plants (subject to their dispatch ranking). To that extent, solar and wind energy facilities are reliable. Also, there have been significant advancements in prediction and dispatch technology over the years to the point where the Denmark and South Australia grids have been able to run on over 70% renewable energy for more than half the calendar year.

7. Who makes sure the wind farm company is adhering to the conditions on their planning permit?

Moyne Shire Council is the responsible authority for enforcement, and therefore, for ensuring wind farms operators adhere to their permit conditions. Moyne Shire Council's Energy Projects Compliance

Officer works pro-actively and re-actively (complaints and investigations) ensuring wind farms are meeting their obligations under their planning permit.

If Council identifies non-compliance, it will work with the wind farm operators to rectify any problems.

In addition, the Environment Protection Authority manages noise complaints. The Australian Energy Infrastructure Commissioner also handles complaints from residents who live in proximity to proposed or operating wind farms. For the most serious non-compliance breaches, enforcement action is available which includes a ladder of options starting with formal warnings, then fines, to ultimately resorting to VCAT.

8. How many jobs will the project provide?

The Darlington wind farm will create more than 300 direct jobs during the construction phase, and at least eight permanent jobs will be created to support the ongoing operations of the wind farm. Our experience with other projects locally is that it is easily possible to source up to 50% of the workforce from within Moyne Shire and neighbouring councils.

9. Do wind farms cause fires? What fire prevention measures will be in place?

The development of wind farms involves several detailed studies, one of which is the assessment of bushfire risk. Such a study will seek to establish the site's residual bushfire risk as well as determine if the wind farm contributes to increasing this in any way. Bushfire assessments are usually done in consultation with the Country Fire Authority and will detail protocols and mitigation measures in the event of a fire. Wind farm access tracks and on-site firefighting equipment (including dedicated water storage tanks) often prove helpful in combating nearby fires. In addition to mandatory Asset Protection Zones (APZs), turbines possess fire suppression capabilities, responsive to both heat and smoke. Wind farm access tracks create natural firebreaks that firefighters can use to reach otherwise

inaccessible areas. Additionally, all high-voltage connections between turbines are underground, significantly reducing the risk of electrical fires. In the event of a fire, project owners can remotely shut down the turbines within minutes.

10. What about aerial firefighting?

The Country Fire Authority's 2023 Guidelines for Renewable Energy Installations state that wind turbines must be located no less than 300 metres or more apart, and that there is 'adequate distance for aircraft to operate around a wind energy facility, given the appropriate weather and terrain conditions'. Wind turbines are typically placed several rotor diameters (well over 300m) apart, to enable the 'recovery' of wind between turbines. Wind farms adhere to very strict firefighting protocols, including active communication and cooperation with the CFA.

11. What about aerial spraying after wind farms are in operation?

Civil aviation regulations do not impose height or distance limits for aerial spraying aircraft flying over their work areas or during travel to landing or refuelling sites. However, pilots must consider obstacles such as trees, power lines, transmission towers, and wind turbines in their safety assessments before each flight. Aerial spraying takes place at low wind speeds to avoid excessive spray drift onto neighbouring properties. Generally, aerial spraying is conducted at wind speeds under 8 knots, or approximately 4m/s, which is about the cut-in speed (~3m/s) of many recent turbine models, below which point there's not enough wind to turn the blades. It is likely that wind turbines will not be turning during ideal conditions for aerial spraying. However, it is generally prudent practice to maintain communication between the wind farm and aerial spraying operators in its immediate vicinity.

12. How shadow flicker is assessed and what potential impacts are to be mitigated?

A Shadow Flicker assessment will be required as part of the environmental and planning assessment of wind energy development. This assessment typically measures how much shadow

flicker a particular receptor (or dwelling) experience on an annual basis. The complex modelling typically considers the receptor's relative location to individual turbines, the sun's path and the direction of the wind (which affects where the blades face). It is standard practice to limit shadow flicker to involved dwellings and enter into agreements with occupants of the dwelling for any exposure beyond the stipulated upper limit of 30 annual hours. The Shadow Flicker assessment for this project will be made publicly available during the environmental and planning assessment process.

13. How visual impact will be mitigated?

A landscape and visual impact assessment (LVIA) will be undertaken as part of the preparation of the Environmental Effects Statement (EES) for the project.

Moir Landscape Architects has commenced preparing an LVIA for the project. The primary objectives of this LVIA is to identify and quantify any potential landscape and visual impact resulting from the project on nearby dwellings and to identify and describe any mitigation measures. An off-site landscape program will be available when the wind farm is operational.

14. Will the electromagnetic interference affect my TV or my livestock?

All television broadcasts in Australia are now digital. Digital TV signals are generally less susceptible to interference from wind farms than analogue signals, although issues can arise in areas with low signal strength. As part of the EES process, an EMI assessment will be undertaken, which will assess the existing television and radio reception in the area to determine if the wind farm will cause any interference and if necessary, propose suitable mitigation measures.

15. I want to build a dwelling on my farm, can I still do this?

The construction of any new dwelling is subject to obtaining relevant building permits and/or planning permits.

Within the Farming Zone, a planning permit is required for a proposed new dwelling which would be located within 1km of the nearest title boundary of land subject to:

- A permit for a wind energy facility; or
- An application for a permit for a wind energy facility; or
- An incorporated document approving a wind energy facility; or
- A proposed wind energy facility for which an action has been taken under section 8(1), 8(2), 8(3) or 8(4) of the Environment Effects Act 1978.

As the Darlington Wind Farm is being considered under the Environmental Effects Act 1978, the above planning permit trigger would apply.

This permit trigger does not apply to proposed new dwellings located more than 1km from the boundary of the wind farm.

Within the Farming Zone, a planning permit is also required to construct an additional dwelling on the lot (i.e. a second dwelling).

Importantly, the wind farm does not prohibit proposals for new dwellings.

16. What will happen to the neighbouring property value? Will it decrease?

Research indicates that wind farms do not negatively impact property prices. Over the past decade, multiple major studies by respected and independent organizations in countries across the world have failed to find any correlation between wind turbines and declining property values. Some of these studies found positive impacts. A separate study by the NSW Department of Lands in the second half of 2009 looked at properties located near eight wind farms and found no evidence that wind turbines caused property values to drop.

17. Can we use some of the electricity generated by the Darlington Wind Farm to power our dwellings?

While this is a great idea in theory, in reality it is unfortunately not possible. The Australian

electricity network consists of transmission lines that transmit large amounts of electricity at high voltages. These transmission lines are supported by distribution lines that deliver this electricity to households and dwellings at a usable voltage. All the electricity generated by the proposed Darlington Wind Farm project would be fed into the national electricity transmission network, where it is mixed with electricity from a variety of sources. We are planning to develop an Energy Cost Offset Plan as part of the Community Benefit Sharing Program, to assist qualifying residents with the cost of energy at their dwellings.

18. Is there any benefit-sharing program except for host landowners?

GPGA is proposing the following benefit-sharing programs:

- **The Neighbour Benefit Sharing Program** is intended to provide an annual financial benefit to neighbours who have a property near to operational wind turbines. This program would begin at the commencement of construction and continue for the life of the project.
- **Community Benefit Fund:** will be implemented during the operation phase of the wind farm to develop priority local community projects.
- **Other benefits:** Energy offset, Scholarships, Sponsorships & donations, and many more to be done in consultation with the community during the life cycle of the project.

19. Is the benefit-sharing program 'buying us off'?

No. Neighbour Benefit Sharing programs are offered to all eligible homes, regardless of residents' or owners' views on the wind farm. These annual payments aim to share the financial benefits in a more targeted manner with the host community.

20. How noisy will the wind farm be?

Noise regulations applicable in Victoria are among the most stringent with regard to both noise limits and ongoing obligations for the operators. For Darlington, the noise limit is

defined as a base noise level of 40 dB LA90 or background (LA90) + 5dB, whichever is greater. At distances typical to the nearest dwellings in the vicinity of wind farms (1-2 km), wind turbine noise levels tend to be around 30-40 dB on average, depending on the wind farm. For comparison, in rural environments, background noise levels would typically be measured around 20-40 dB during the evening and night periods.

The perception of noise is subjective and varies between individuals. For wind farm noise, it is dependent on a range of factors, including distance to the wind farm and the background noise environment.

21. How do we know the noise modelling will reflect reality?

Noise propagation is calculated using methods set out in an international standard, together with adjustments specific to wind turbine noise, based on extensive research by the UK Institute of Acoustics.

The noise model assumes meteorological conditions that would result in enhanced propagation of wind farm noise. For example, the model assumes that a receiver is downwind (where the wind blows from the turbines towards the receiver, somewhat increasing noise levels at the receiver) of all wind turbines at once.

For receivers located near to the wind farm, this downwind condition would not typically happen for all wind turbines in practice. Therefore, this aspect of the noise modelling is conservative, as noise levels at these receivers would be over-predicted (higher) compared to typical real world propagation conditions.

22. What are the operator's noise requirements after construction and what will happen if the wind farm exceeds noise limits?

In Victoria, the Environment Protection Regulations 2017 specifies noise limits

applicable to wind turbine noise at receivers and a range of measures to be implemented by the operator. These measures include the preparation of a Noise Management Plan which would specify requirements for post-construction noise monitoring, noise complaint handling and mitigation measures that would need to be implemented in the event that wind turbine noise levels are demonstrated to exceed the applicable noise limits. The most common mitigation measure is the application of noise reduction modes (limiting the power output) for selected turbines and for a selected range of time periods and wind conditions.

23. What will happen at the end of the wind farm's lifetime?

The design life of modern wind turbines is generally 25-30 years. After this period, it is possible but unlikely, the wind farm will continue operating in its current form, and one of the following two options will be chosen:

- **Decommission the wind farm and rehabilitate the Site**, at the cost of the wind farm owner/developer. Above-ground infrastructure must be removed, and the land must be returned to its previous state, unless the landholder wants some of the infrastructure to remain in place. Keeping the access tracks can be a positive for landholders who find them useful for access around their farm.
- **Recommission the wind farm, with more modern technology.**

This process would likely involve “upgrading” the wind farm to integrate the latest technology, necessitating a redesign and the pursuit of a new planning permit. Each option will be explored in consultation with the landholders. Although no wind farm in Australia has yet reached the end of its lifespan, several in Europe have been operating for over 25 years and have undergone similar upgrades. Decommissioning requirements are included as conditions in both the planning permits and the contracts with landholders.

24. What should I expect during construction?

Traffic and Roads

During the construction phase for the wind farm, there will be an increase in traffic associated with the delivery of material and machinery to Site. A Traffic Management Plan (TMP) will be prepared in consultation with local council, state government and road authorities to ensure construction traffic uses approved haulage routes, mainly on highways and upgraded local roads. Deliveries will be scheduled to minimize disruptions, especially during school time with oversized items often moved at night.

Noise

A construction management plan (CMP) will be required to be prepared for the project, which will include measures to mitigate noise impacts (such as scheduling noisy tasks at less disruptive times; using well-maintained equipment; and prescribing limitations on construction workdays and hours).

Dust

A dust management plan will be prepared as part of pre-construction compliance for the project to manage dust emissions generated within the project area so that the appropriate dust criteria are met during both the construction and operational stages of the project.

Social and Economic Impact

A Social Impact Assessment and Economic Impact Assessment are being prepared as part of the EES for the project. Through these assessments, GPGA will identify prospective social and economic impacts. Through these assessments, GPGA will seek to mitigate negative impact and maximise benefits to the local community. It is acknowledged that construction may increase local traffic and impact on accommodation occupancy. GPGA works with communities to minimize inconvenience while ensuring local businesses benefit from increased spending.

Safety

Safety is our priority throughout all stages of the project. We develop Health and Safety Management Plans with contractors and provide mandatory safety training for all workers before they start on-site.

25. How can I get to work on the project?

As we move closer to the start of construction, we will put a process in place for interested people to register for employment. However, a local Head Contractor appointed to construct the project will ultimately be directly responsible for sourcing labour in line with the project's accommodation and employment strategy.

Get in Touch

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