



Chamberlain Wind Farm

Acknowledgement of Country

Zeff Energy acknowledges the Traditional Owners of this land, the Yamatji and Yued people and their continuing connection to the land, water and community. We pay our respects to all Aboriginal and Torres Strait Islander communities, their cultures and to Elders past, present and emerging.



A peek at what’s inside

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About Zeff Energy

Zeff Energy is a locally founded and operated West Australian company developing a portfolio of renewable energy projects across the Wheatbelt.

With deep expertise in renewable energy and large-scale infrastructure, we're focused on delivering responsible, commercially viable projects that contribute to decarbonising our energy system.

At the heart of everything we do are strong partnerships. With landowners, communities, and government, to ensure each project is built with trust, transparency and long-term value for the region.

Driving a Low-Carbon Future

At Zeff Energy, we're committed to a cleaner, more climate-resilient future; one that benefits both our communities and the generations to come.

By developing renewable energy projects across regional WA, we're proud to support the State Government's emissions reduction goals. As the energy landscape evolves, we'll continue exploring smarter, more sustainable ways to generate, store and share power — helping shape a reliable, lower-carbon future for us all.

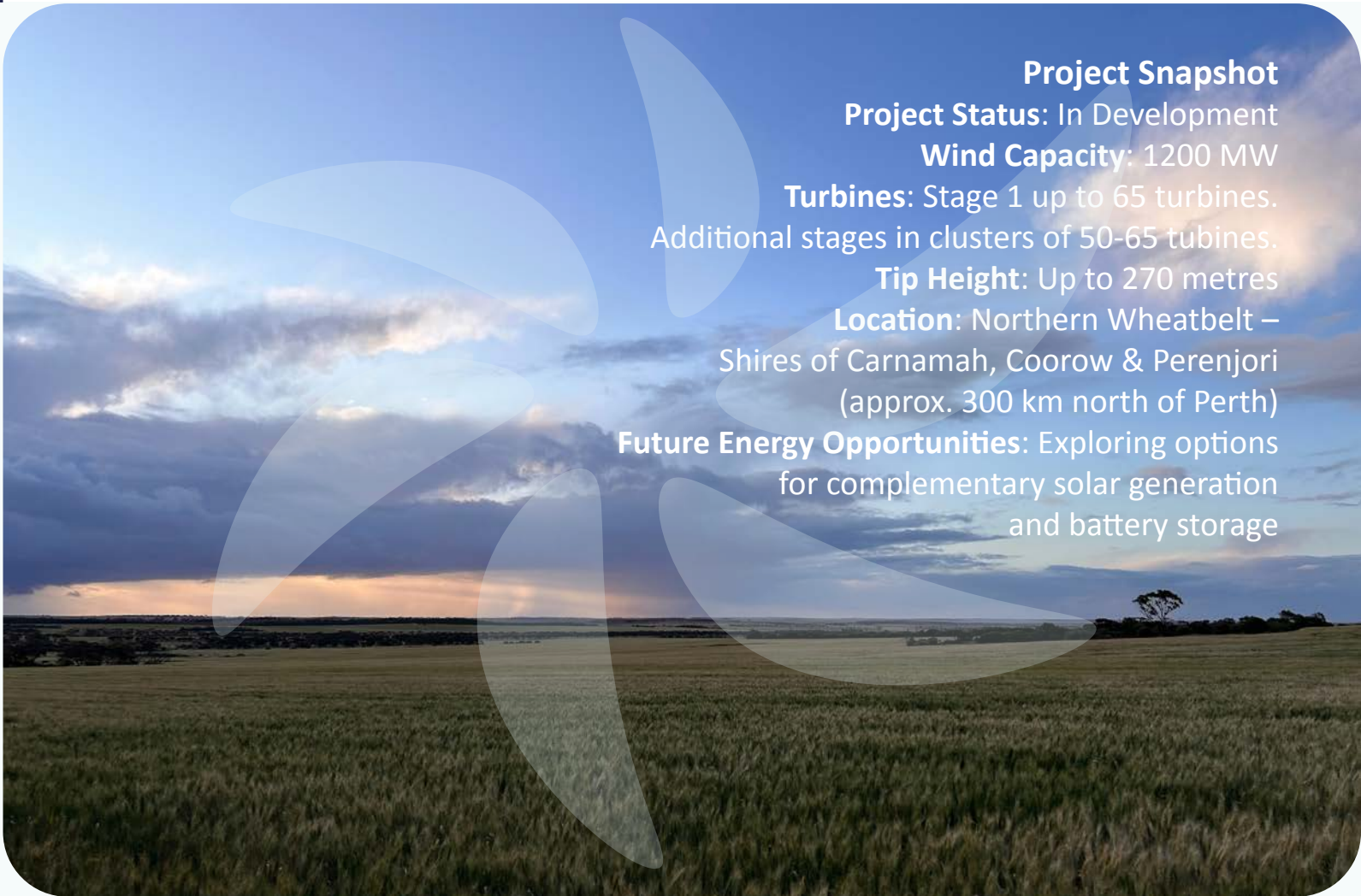
Proposed Chamberlain Wind Farm

Located in Western Australia’s Mid West, the Chamberlain Wind Farm is being developed in a region known for both its strong farming history and its natural environmental diversity. This makes it an ideal place for renewable energy — where clean power generation can work alongside agriculture to support long-term sustainability and regional growth.

Farming has been the backbone of this region for over a century, and that proud legacy continues today. The area’s strength in agriculture, combined with its capacity for innovation, creates the perfect setting for a wind farm that complements the land, supports local industries, and helps diversify the economy.

Chamberlain also benefits from its location near planned upgrades to the South West Interconnected System (SWIS) — WA’s main electricity network. These upgrades will make it easier to deliver renewable energy to the grid and ensure the energy we generate goes where it’s needed most.

By working closely with landowners and the local community, Zeff Energy is aiming to deliver real, long-term benefits — cleaner energy, regional investment, and a future that builds on the strengths of the past.



Project Snapshot
Project Status: In Development
Wind Capacity: 1200 MW
Turbines: Stage 1 up to 65 turbines.
Additional stages in clusters of 50-65 turbines.
Tip Height: Up to 270 metres
Location: Northern Wheatbelt –
Shires of Carnamah, Coorow & Perenjori
(approx. 300 km north of Perth)
Future Energy Opportunities: Exploring options
for complementary solar generation
and battery storage



We are here

Wind farm development stages



Feasibility Assessment

What is a feasibility assessment?

Before any wind farm can be built, a detailed feasibility assessment is carried out to determine whether the site is suitable for development.

This process involves a thorough review of technical, environmental, and social factors, as well as early and ongoing engagement with landowners, Traditional Owners, neighbours, and the broader community.

Feasibility assessments are just one of many steps in the development process. Even once complete, additional studies and government approvals are required before any final investment decisions are made.

What do we assess?

We investigate a wide range of factors, including:

- Transport routes and road upgrades
- Wind resource mapping
- Aboriginal heritage and cultural values
- Flora and fauna
- Bird and bat activity
- Noise and shadow flicker
- Visual amenity
- Bushfire risk
- Electromagnetic interference (EMI), radio and broadcast signals
- Aviation pathways
- Traffic impacts
- Preliminary geotechnical studies (soils, hydrology, hydrogeology)
- Social and environmental considerations

Location

The proposed Chamberlain Wind farm is located in the Shires of Carnamah and Coorow, approximately 10km east of Carnamah town.

General Information on Wind Farms

How are wind farm locations chosen?

We assess wind resource data, land availability, distance to transmission infrastructure, and environmental and cultural considerations. We work closely with landowners and local councils to ensure the site is suitable and well-supported.

How is a wind farm constructed?

Construction involves upgrading roads, laying underground cables, building turbine foundations, installing turbines and connecting to the power grid. Construction typically takes 18–30 months, with most activity focused during daylight hours.

What is the lifespan of a wind farm?

Modern wind farms are typically designed to operate for 30 to 35 years. Throughout that time, they're maintained to ensure efficient and safe performance. In areas of low turbulence, such as here, the infrastructure tends to have a longer lifespan.

What happens at the end of a wind farm's life? (Decommissioning)

When a wind farm reaches the end of its operational life, usually 30 to 35 years, it is either decommissioned or repowered with new technology.

Decommissioning involves removing turbines, dismantling supporting infrastructure (like overhead lines and buildings), and rehabilitating the site, including revegetating roads and turbine foundations.

In some cases, landholders may choose to keep certain infrastructure in place, such as access tracks, if they are still useful.

The wind farm owner is responsible for the cost and process of decommissioning. This is set out in landholder agreements and planning approvals. Importantly, financial planning for decommissioning is factored into the project from the beginning to ensure the land can be restored to its original or agreed condition.

As wind farms across Australia begin reaching the end of their life, the industry is also investing in better ways to recycle and repurpose turbine components, particularly blades, to minimise waste and maximise recovery.

Can turbines be recycled?

A key part of decommissioning is recycling. Around 85–94% of a wind turbine (by mass) is made from recyclable materials, including steel, aluminium, copper and cast iron — all of which can be processed within Australia.

As Australia’s first generation of wind farms approach the end of their operational life, the industry is continuing to invest in new ways to repurpose turbine components — including blade recycling — to reduce waste and maximise resource recovery.

What is shadow flicker and how is it managed?

Shadow flicker occurs when the sun casts a turbine’s moving blades onto a nearby building. We model and manage this through careful turbine placement and by meeting required setback distances.

What about noise and infrasound?

Wind farms in Australia must meet strict noise regulations, and this project is no exception. As you move away from a turbine, the sound quickly reduces, and regular monitoring is carried out to ensure compliance with all standards.

Before construction begins, we’ll undertake a detailed noise assessment to understand any potential impacts on nearby homes. This will be done in line with the following guidelines:

- WA Environmental Protection (Noise) Regulations 1997
- SA EPA Wind Farm Environmental Noise Guidelines (2021)
- WA Planning Commission’s Position Statement: Renewable Energy Facilities (2020)

If the wind farm goes ahead, we’ll also carry out noise monitoring once it’s up and running to make sure it continues to meet all requirements.

What is infrasound in relation to a wind farm?

Infrasound refers to very low-frequency sound — below 20Hz — which sits beneath the range of human hearing. It’s a natural part of our environment, produced by things like ocean waves, wind, and even trees moving in a forest. Everyday human activities, such as traffic and household appliances, also create infrasound.

Today’s wind turbines use modern designs with blades positioned upwind of the tower, which helps minimise infrasound. This is a significant improvement from older turbine models that placed blades downwind, which tended to generate more low-frequency sound.

Infrasound levels from modern wind farms remain well below thresholds known to cause any harm.

Environment & Agriculture

Do wind turbines impact birds or bats?

Potential impacts on birds and bats are carefully assessed through detailed environmental studies as part of the project’s planning and approvals process.

These studies look at local species and flight patterns, with a particular focus on any threatened or migratory species that may fly within the height range of wind turbine blades. If any risks are identified, mitigation measures, such as adjustments to turbine layout or operational controls, are considered to reduce potential impacts.

What is the impact on the environment?

All environmental factors, including flora, fauna, water, and land, are assessed thoroughly as part of the approvals process. Wind energy produces zero emissions during operation, helping reduce overall environmental impact from electricity generation.

Are wind farms compatible with farming?

Yes. Wind farms are designed to operate alongside active farming. The footprint of each turbine is small, so cropping or grazing can continue right up to the base of the towers. That’s why every element, from turbine placement to the alignment of access tracks, is carefully planned in consultation with landowners, ensuring the wind farm can work as seamlessly as possible with existing farming practices.

How are bushfire risks managed?

Wind farms are designed with strict bushfire mitigation measures. We consult with fire authorities and landowners to ensure access, response plans, and construction materials meet fire safety standards. DFES and the local fire authority are key stakeholders in the approvals process.

How is cultural heritage protected?

We consult with Traditional Owners as part of our early planning to understand any cultural heritage values that exist on the land. As the project planning progresses and the development envelope is confirmed, we will work closely with Traditional Owners to undertake further Aboriginal cultural heritage surveys and ensure culturally significant areas are appropriately recognised and protected.

Energy & Grid

How do you know there's enough wind?

Wind resource is measured using on-site monitoring equipment over multiple years. This data ensures we can design a wind farm that is both technically and financially viable.

How does a wind farm connect to the electricity grid?

The energy generated is sent through underground cables to a nearby substation, then into the grid. For Chamberlain, we're planning to connect to upgrades on the South West Interconnected System (SWIS) - which will be replacement transmission to the 'Cricket Wicket Line'.

Where does the electricity go?

Once connected to the SWIS, the electricity generated will help power homes, businesses and industries across Western Australia.

Will there be energy storage (like batteries)?

At this stage, the Chamberlain Wind Farm will likely include battery storage.

Wind Resource

Zeff Energy has been measuring the wind resource at the Chamberlain Wind Farm site since mid-2024. Wind speeds are recorded using a combination of SoDAR, LiDAR and meteorological masts positioned across the project area. Several SoDAR and LiDAR units are already in place.

Accurate wind measurement is essential to the successful design and operation of a wind farm. The data helps determine the most suitable turbine locations, the optimal turbine type and size, and predicts the project's future energy output. It also identifies the times of day when generation is highest. Chamberlain has a steady wind resource, being strongest overnight, perfectly complementing solar generation by producing more power when the sun goes down.

Community & Project Development

What benefits will the community see?

Wind farms create local jobs, upgrade roads, and generate new income streams for participating landowners. Zeff also supports regional communities through sponsorships, partnerships and local contracting where possible. Zeff is committed to the establishment of a community contribution program. This financial contribution will be required to be allocated to local projects and organisations to support community development.

Will there be more traffic during construction?

Yes - during construction, there will be a temporary increase in heavy vehicle movements. We plan transport routes in consultation with local authorities and landowners to ensure safety and minimise disruption.



Have Your Say

At Zeff Energy, we put landowners and the local community at the heart of everything we do.

Now that we've shared more about our proposed wind farm, we'd love to hear from you. Your ideas, concerns and local knowledge are essential in helping us shape a project that fits the needs and values of your community.

You can share your feedback by emailing us at info@zeffenergy.com.au or by scanning the QR code below.



For more information
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