Palmer Wind Farm

Environment

This factsheet summarises the environmental effects of the wind farm during operations.

The Palmer Wind Farm (the Project) will reduce Australia's carbon footprint by generating up to 288MW of clean energy.

This equates to approximately 212,000 tonnes of carbon emissions reduced a year.

Overall, this will have a positive impact on the environment, but during construction and operations there will be some impacts on the local environment.

What environmental studies and approvals has the project completed?

Assessment and approval under the *Environment Protection and Biodiversity Conservation Act 1999* from the Federal Government

The Federal Department of Climate Change, Energy, Environment and Water (DCCEEW) assesses projects that may have an impact on Matters of National Environmental Significance, including nationally listed threatened species and ecological communities.

In early 2024, Tilt Renewables submitted an *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) referral to DCCEEW for the Varied Project. DCCEEW reviewed this information and decided that the Project is a 'not controlled action'. This means the Project requires no further assessment or approval under the EPBC Act.

DCCEEW is confident that impacts to Matters of National Environmental Significance have been avoided and minimised, and that the Project demonstrates good site selection and design.

Native Vegetation Clearance Approval from the Native Vegetation Council

In August 2025, Tilt Renewables submitted a Native Vegetation Clearance Approval (NVCA) application to the Native Vegetation Council (NVC). The application sought approval for the Project to clear native vegetation for the construction and operation of the Palmer Wind Farm.

Prior to approving a NVCA application, the NVC must be satisfied that the project will take action to create a Significant Environmental Benefit that is over and above the negative impact of the clearance. To achieve this for the Project, Tilt Renewables has secured an area to offset the native vegetation clearance associated with the Project.

On 27 November 2025, the Native Vegetation Assessment Panel approved the NVCA application for the Project.

How much land is being cleared to construct the wind farm?

The project area is approximately 6,000 hectares, of which 302.6 (5%) hectares will be cleared, including 8 scattered trees. Almost 95 per cent of the land to be cleared is considered poor or very poor grassland habitat or non-native vegetation.

What environmental offsets have you done for the project?

To meet our Significant Environmental Benefit obligations under the *Native Vegetation Act 1991*, Tilt secured an on-ground offset site. This means we are protecting an area of native vegetation near the Project, by placing a Heritage Agreement on a property title and providing support to the owner to protect the site. This on-ground offset site fully satisfies the Project's offset obligations.

What is the carbon payback period for a wind farm?

The carbon payback period is the length of time it takes a turbine to produce enough clean electricity to make up for the carbon emissions generated during construction. The payback time for a wind farm is between six and twelve months.

How has the project protected cultural heritage?

The project was designed to avoid cultural heritage and we intend to have no impacts during construction and operations. To ensure this, we are working with Peramangk representatives to design protections for the area.

How much water is used to operate the wind farm?

During operations water usage is largely limited to maintenance of access tracks and staff facilities.

How will the wind farm impact birds?

Climate change is a key threat to many threatened bird and bat species and the benefit of renewable energy provides an opportunity to reduce the impacts of climate change to the overall population of these species.

Wind farms have the potential to affect birds and bats through vegetation clearing and habitat loss. Birds and bats can also be struck by the turbine blades and affected by low air pressure zones caused by the blades. The potential impacts from wind farms are considered significantly less than other human-related sources, such as collisions with buildings and cars or being killed by cats.

To reduce impacts on local birds, the project was designed to avoid raptor nests, including Wedge-Tailed Eagles and Peregrine Falcons. As part of the design, a 1km buffer was placed around each known raptor nest and turbine locations were chosen to avoid these buffer areas. In the future, raptors may build nests closer to the turbines, which we cannot control.

During operations, we monitor impacts to birds and bats from the wind farm, including using qualified ecologists and conservation dogs to detect bird carcasses in accordance with a Bird and Bat Management Plan (currently in draft). If we have a greater impact on the local bird population than expected in our planning approvals, we must implement additional management and mitigation actions.

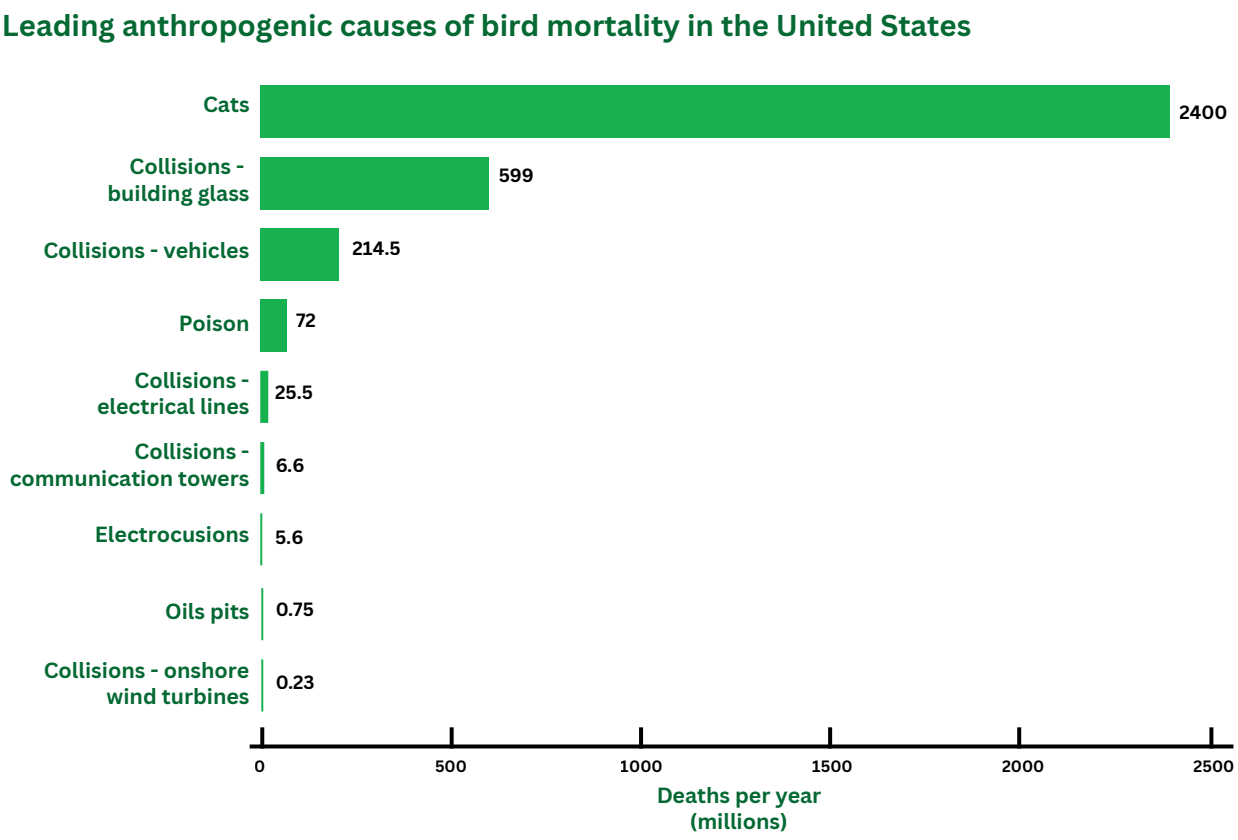


Figure 1: Leading anthropogenic (human related) causes of bird mortality in the United States. (Source: US Fish and Wildlife Service, 2017)

What impact will the project have on local fire management?

Wind farms pose a low fire risk due to:

- The location of turbines in relation to cleared construction pads which reduce available fuel load.
- Lightning protection devices are installed on every turbine, which reduce ground strikes that might otherwise have started fires.
- Monitoring systems are installed in turbines to detect temperature increases and will automatically slow or shut down the turbine if the temperature or wind speed exceeds an assigned threshold.
- Any flammable elements are located high above the ground.
- Onsite infrastructure, such as access tracks, can assist with firefighting efforts and improve fire response in an area.

> **“Before the windfarm tracks were built no one would have ever considered even trying to fight a smaller fire in the area as it was too dangerous. The windfarm tracks help us fight smaller fires in the area.”**
>
> **Landholder and CCC member for the Dundonnell Wind Farm**

Can transmission lines cause a bushfire?

Transmission lines, managed and maintained properly, are a very low fire risk. This is due to the height clearance between the transmission lines and the ground, as well as the managed vegetation that runs beneath the line.

Transmission lines can also be shut down when required. In the event of a fault on the line, the protection systems will immediately deactivate the line to prevent an electrical fire.

Tilt Renewables partners with experienced transmission companies who build and manage the transmission lines that connect our wind farms to the grid.

Transmission infrastructure, transmission lines and meteorological masts can be difficult for pilots to see when fighting fires. Tilt Renewables will continue to work with local fire services to find ways to improve their visibility, for example having yellow markers at the base of masts.

Can aerial firefighting still occur?

Yes, aerial firefighting can occur within and around the Project. Several fires in Australia have been fought with helicopters and fixed wing planes around wind farms. Our operations team are in direct contact with emergency services and can immediately halt the operation of the wind farm to allow safe aerial firefighting around the turbines. Experience has shown that the best position to stop turbines in is a 'Y' shape because it maximises airspace between turbines.

Figure 2: CFS Fighting the Waterloo Fire in 2017 at Waterloo Wind Farm

Does the wind farm create pollution or waste?

The waste created by a wind turbine is relatively low. It contains oil which is replaced approximately every five years, and wind turbine blades are made from composite materials and glue that are non-toxic.

Can wind turbines be recycled?

A wind turbine is predominantly made of recyclable metals, including steel, aluminium, copper and cast iron. Approximately 85 to 94 per cent of a wind turbine (by mass) is recyclable and can be recycled in Australia. Blades which are made of epoxy and composite materials, such as fibreglass or carbon fibre (like aeroplanes and sailing boats), are currently not recyclable.

Will the wind farm cause light pollution?

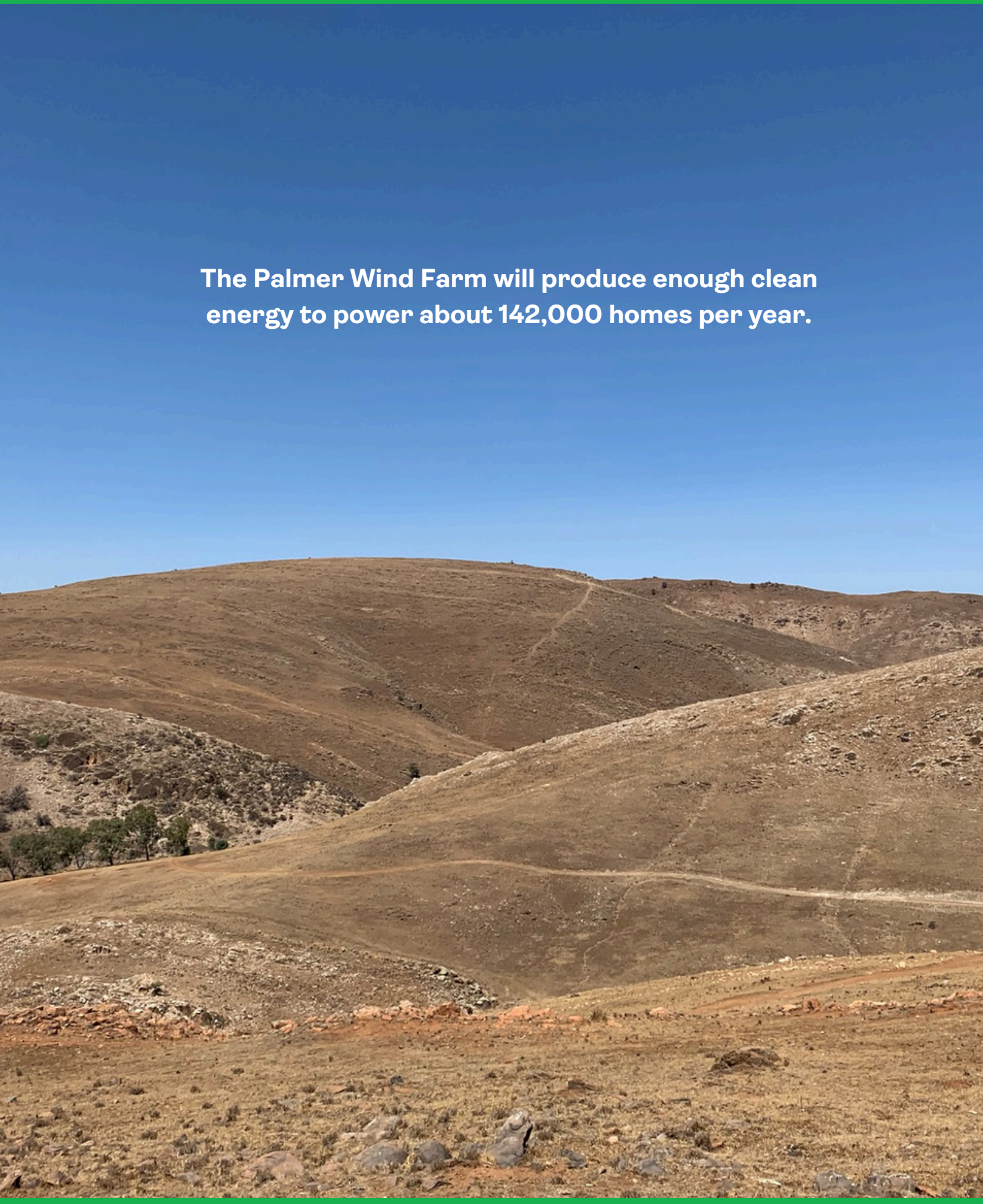
Light pollution during operations will be the same as any household or farming operation. Tilt Renewables is very aware of the nearby International Dark Sky Reserve and worked with authorities to assess the aviation risk of the project and avoid aviation lighting on the turbines. This was approved by the State Planning Assessment Panel.

Who is responsible for decommissioning?

The wind farm owner is responsible for decommissioning. Requirements for decommissioning – such as reinstating the land – are set out in contracts with landowners and planning approvals.

Decommissioning is accounted for during the wind farm's planning to ensure sufficient funding is available to cover the costs.

The Palmer Wind Farm will produce enough clean energy to power about 142,000 homes per year.



Questions?

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