

Kerrs Creek Wind Farm: Blowing Away the Myths



MARK ROBERTS
KERRS CREEK DEVELOPMENT PROJECT MANAGER

RES, a global renewable energy company, is proposing to develop a wind energy project between the communities of Kerrs Creek and Euchareena, accessed via Burrendong Way. RES has been monitoring wind resource at the site since the beginning of 2020, and conducted feasibility studies to determine the site's suitability for the development of a wind energy project.

Understandably, many people in the community have questions and concerns about wind energy, and their impacts on farms, communities and the environment. Today we separate fact from fiction and take a closer look at some of the top renewable energy myths!

For more detail, and links to official reports and data, head over to our website: kerrscreek-renewableenergy.com

Myth: Turbines proposed at Kerrs Creek Wind Farm will be the highest in Australia

In response to community feedback, RES has reduced the maximum allowable tip height of the proposed turbines at Kerrs Creek Wind Farm to be up to 254m (previously 280m). There are multiple wind farms proposed or approved both in NSW and across Australia that have turbine tip heights as high, or higher.

Globally wind turbines have been getting larger as at higher altitudes, wind speeds are typically stronger and more consistent. Additionally, larger turbines allow for longer blades, which further enhances their ability to capture wind energy. This trend towards bigger turbines helps to reduce the cost of energy production, which puts downward pressure on wholesale energy prices.

Myth: Wind farms take up prime productive land

Across Australia, wind farms co-exist with farming land, taking up approximately 2% footprint of the land. Farmers can graze animals or crop around the turbines and tracks with little disruption throughout the operation of the wind farm. The proposed Kerrs Creek wind farm will co-exist with grazing operations.

Myth: Wind turbines require more energy to manufacture than they produce over their lifetime

The emissions generated from a turbine's manufacture, installation, operation, maintenance, and decommissioning, under typical wind conditions are offset within the first two months to a year of operation. A report for the UN Intergovernmental Panel on Climate Change found the median payback time was 5.4 months.

Myth: Wind Turbines kill large numbers of birds and bats

Before being granted planning approval, a wind farm proponent must undertake a detailed biodiversity assessment that considers all the biodiversity impacts of the proposal including clearing of native vegetation and indirect or prescribed species impacts including potential bird and bat strike.

Myth: Wind farms devalue surrounding property values

Numerous global studies and independent research in Australia conducted over the past decade have found no substantial link between wind turbines and decreases in property values.

An independent report commissioned by the NSW Office of Environment and Heritage entitled Review of the Impact of Wind Farms on Property Values (Urbis 2016) concluded that there was no evidence of wind turbines causing value drops. This was particularly relevant for rural properties engaged in primary production, as "there is no direct loss of productivity resulting from wind farms". This study also found no evidence that wind farms impact the sale prices for residential or lifestyle properties.

Myth: Wind farms create health risks for surrounding residents

Across the globe, there are more than 300,000 installed wind turbines, with a significant number situated in proximity to populated regions (including densely populated areas). Extensive research carried out by prominent health and medical research organisations has found no evidence of the link between wind turbines and adverse health conditions. This research includes publications by: - World Health Organisation - Australia's National Health and Medical Research Centre - Macquarie University and the Woolcock Institute of Medical Research - UK Health Protection Agency - US National Research Council

Myth: Wind farms are noisy

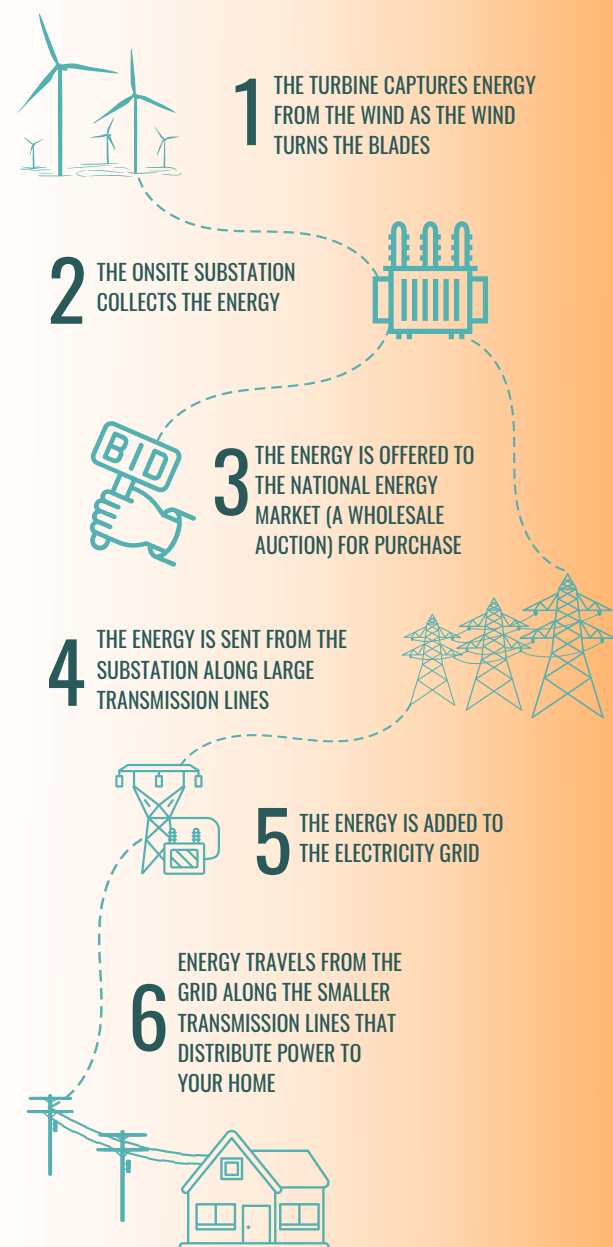
A typical land-based wind turbine produces a similar noise level as a standard refrigerator at a distance of 300 metres from the turbine. In NSW proposals for wind energy projects are usually assessed by the NSW Government through a rigorous process under the Environmental Planning and Assessment Act. NSW has adopted the most stringent noise criteria of any state in Australia and wind farm operators are required to meet these limits at all times.

Myths: Wind farms are a fire risk and hinder the ability to fight fires

Under normal operating circumstances, it's extremely unlikely that a wind farm can cause or adversely affect a bush fire. Wind farms are also highly unlikely to start a bushfire by attracting lightning. Should a wind turbine be struck by lightning, built-in control systems divert the voltage safely underground.

Wind farms can assist firefighting efforts. The roads and safe-turn-around points provided by wind farm

6 STEPS FROM THE WIND TO YOUR HOME



infrastructure can enable local firefighters to safely access areas that were otherwise inaccessible, providing firebreak, backburn and safe evacuation opportunities.

Aerial firefighting can continue to be undertaken around wind turbines if appropriate strategies, emergency management systems and communications protocols are in place. As part of the Kerrs Creek project, RES must develop and implement a bushfire management plan that includes response strategies such as shutting down and positioning turbine blades to facilitate aerial access and consult with the NSW RFS to develop other appropriate procedures, such as curtailment (stopping) of turbines during fire events.

Myth: Wind farms components can't be recycled

According to [a Clean Energy Council report released last year](#), around 85% to 94% of a wind turbine's mass is recyclable. Leading turbine manufacturers are taking steps to increase the sustainability of the sector through a combination of research and demonstration projects with the aim to produce zero.

Myth: Wind farms components only last a few years before they are sent to landfill

A wind farm will typically have a lifespan of 25-30 years. The site conditions determine the design and lifespan of the turbines, based on the wind loads placed on the components. The components of the wind farm will have long term warranties of 25-30 years.

Myth: There are no local jobs associated with wind energy

The Kerrs Creek Wind Farm project will generate more than 200 jobs during construction with an estimated 10 ongoing jobs over the 30-year life of the project. If you are looking to start a career in renewables or transition to a career in renewables, there are many ways you can be involved in this exciting and growing industry.

