# COPPABELLA Wind Farm



The Coppabella Hills

The Coppabella Wind Farm (CWF) is heading towards construction, with early planning underway.

Goldwind Australia has completed a number of environmental studies. These include preparation for the construction works to ensure future workers have a detailed understanding of project site working requirements.

Certain areas of the project site contain complex topography, and therefore a comprehensive design screening process has been considered in advance of construction.

As we move toward the construction of the wind farm, the application of environmental protections and controls will be key to protecting local fauna and flora. Recent seedlings that were planted along Whitefields Road are showing good growth, sprouting into new trees.

Community Relations Officer Alison is available to speak on 0401 472 691 and alisondeale@goldwindaustralia.com or at the Local Information Centre, 30-32 Fitzroy Street, Binalong.

Open days:

- Monday 12:30pm 2:30pm
- Thursday 9:00am 12:00pm

## **Binalong Brahmans + Coppabella Wind Farm**

The Coppabella Wind Farm sponsorship program is again supporting the Binalong Brahmans. In 2024, the team will have new uniforms tailored for athletes. The new season is already underway and we look forward to seeing the revamped team wear.

The CWF sponsorship helps to alleviate the financial burdens for club members. The team will be able to play against other regional teams with the best attire and equipment.

We are happy to see this lasting relationship between the wind farm and the Binalong Brahmans. CWF has been a proud supporter of the Binalong Brahmans in past years. With the project approaching construction, we wish to work in partnership with local organisations like the Binalong Brahmans to showcase the unique talent in the local area.

CWF is looking forward to seeing the Binalong Brahmans compete this year.



**Binalong Brahmans Game** 

### Advanced technology to improve turbine energy output



A visual representation of Nacelle-LiDAR technology

The wind turbine model to be installed at Coppabella Wind Farm (CWF) is the GW136-4.2MW, are known for utilising advanced operating technology in their operation.

For the first time in NSW, Goldwind Australia will introduce the Nacelle-LIDAR technology on a wind turbine. LiDAR devices mounted on top of the wind turbine will be commissioned at the CWF.

This technology will enable the advanced detection of approaching wind. It can adjust operation in a smooth and dynamic fashion, while better aligning itself to changes in wind speed and direction. This improves the stability of operation, reduces the loads experienced, and optimises the amount of electricity generated.

LiDar (Light Detection and Ranging) operates by transmitting optical pulses into the atmosphere and receiving the backscattered signals to measure wind speed and direction. Ground-based LiDARs are widely adopted in the wind industry to measure wind resources and evaluate feasibility of a project during pre-construction assessments.

This approach is becoming popular as a low-cost, portable alterantive to having meteorological mast towers with sensors, that read similar measurements. Nacelle-mounted LiDARs share the same operating principle as ground-based LiDARs, but these measure the oncoming wind by sending pulses horizontally ahead of the actual turbine face for each wind turbine.

Goldwind has developed a certified technology to use nacelle-mounted LiDARs for advanced intelligent wind turbine control, known as E-farm LiDAR Assisted Control (LAC).

This modern LiDAR sensor based system is capable of smart control through data analysis and prediction, reducing the adverse impact of uncertainty and pulsation of wind variability on the machine.

Different from traditional wind turbines, which can detect the wind energy and loads only after the wind reaches the rotor. LAC equips wind turbines with a smart "brain" and "eyes", so that it can precisely capture such wind information, with changes in front and in advance of the wind turbine.

This information is introduced into the wind turbine control system, which enables the machine to identify harsh oncoming conditions and calculate optimal pitch/rotation speed settings to face them. This kind of "going with the wind" approach is proven to reduce the fatigue on turbines, optimise energy generation, and improve adaptability to severe weather conditions.



## How to find out more information.



1800 884 689



www.coppabellawindfarm.com



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#### Postal address:

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