# MT GELLIBRAND WIND FARM

EDITION 12 | MARCH 2018



Welcome to the twelfth edition of the Mt Gellibrand Wind Farm Newsletter. This newsletter provides information and updates about the project. The Mt Gellibrand Wind Farm is located approximately 25km east of Colac, in south west Victoria. ACCIONA Energy looks forward to continuing a positive relationship with the local community and thanks you for your interest in the project.

Construction is progressing well on the ACCIONA Energy Mt Gellibrand Wind Farm, with works now at 75% complete, including some key project milestones which were achieved in the last few months.

In October, all internal road construction was completed. A total of 30km of new roads linking the turbines together. In addition, all 44 turbine foundations (footings) were completed in November – this is over 15,000 m3 of concrete! During November the number of workers onsite also peaked at 180. There are now approximately 120 personnel currently working on the Mt Gellibrand Wind Farm site.

With the completion of foundations, turbine assembly commenced in late 2017 and will continue through until next month. The wind turbines are composed of a tower (three sections), three blades, a hub and a nacelle (which houses the gears, generators and electrical conversion equipment). These main components are all transported separately to the site due to their size and weight. Delivery was completed for all 44 turbines last month – a total of 352 main component pieces!

Each component is assembled separately, moved into place by large cranes and bolted into position. The Mt Gellibrand Wind Farm has a number of completed turbines onsite. We anticipate that the last turbine assembly will occur in late April.

We would like to take this opportunity to thank the local community for their patience during our construction and delivery works.

Installation of turbines onsite

Blades delivered to site

# What happens next?

The underground electrical system is currently being installed to connect each wind turbine to the substation. For the Mt Gellibrand Wind Farm this is approximately 47km of cables! The electrical works have passed the half way mark, and are anticipated to be completed in May. A new substation is also under construction on Mooleric Road, opposite the current site compound. We anticipate that the majority of the substation will be completed by the end of March. New overhead transmission lines are also being installed from the substation, down Mooleric Road and Darcy's Lane, before connecting into the existing electricity network near the Princes Highway. Powercor will complete this new overhead line in the coming months.

Following completion of turbine assembly, we will start 'commissioning' each of the turbines. This process consists of a number of phases, prior to the turbine being ready for operation (i.e. producing electricity). Through this process each turbine will be tested to ensure all controls and components are prepared for operations. Standard electrical tests are performed inside the turbine as well as on the cabling back to the substation. At times in the process, the turbines will be 'energised', so that they can be adequately tested. This means you might see some of the turbines start and stop turning during this commissioning process.

In the coming months, an Operations and Maintenance building will also be constructed to accommodate the onsite staff, equipment and spare parts that will be necessary for ongoing maintenance of the project once it becomes operational. This will be located near the current site compound on Mooleric Road.

New substation under construction

# Recent events

Over the last few months, we have had the pleasure of hosting a number of special guests on the Mt Gellibrand Wind Farm Site. This includes the Victorian Minister for Energy, Environment and Climate Change Lily D'Ambrosio, the National Wind Farm Commissioner Andrew Dyer, former acting Colac Otway Shire Council CEO Robert Dobrzynski, Department of Environment, Land, Water and Planning staff members, and key stakeholders from the local community.


ACCIONA's Phil Cavanagh, National Wind Farm Commissioner Andrew Dyer and Colac Otway Shire Councils (former) acting CEO Robert Dobrzynski view the progress onsite

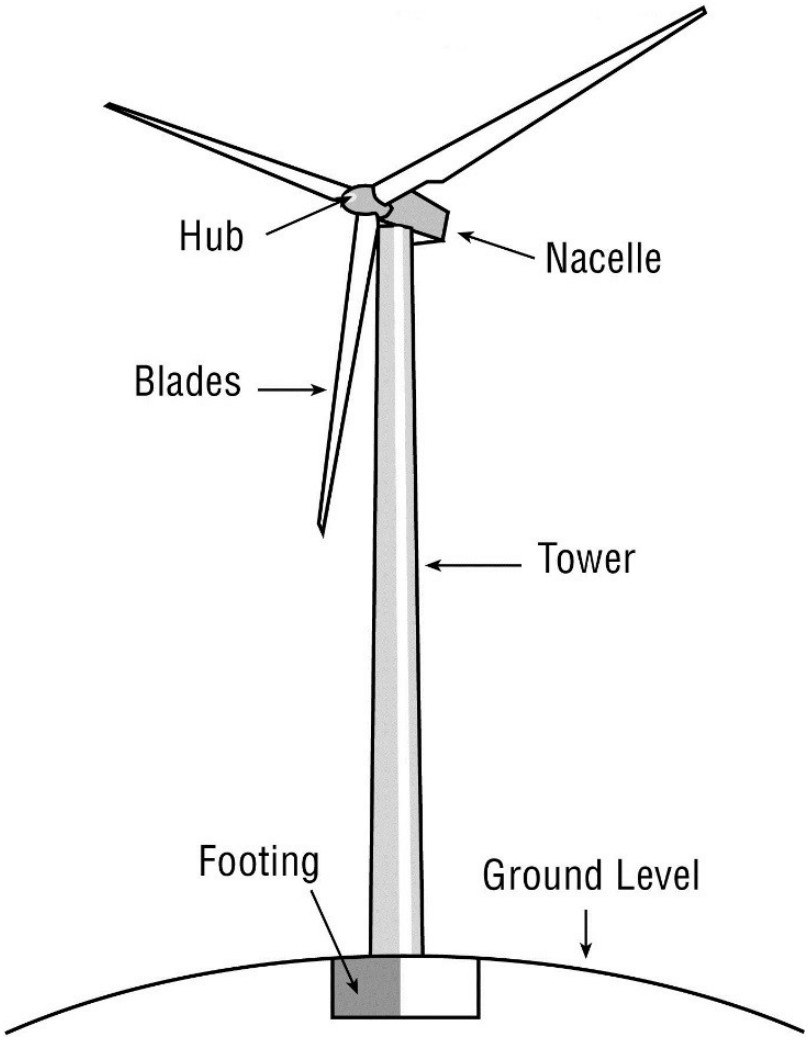

Site visit from the Victorian Minister for Energy, Environment and Climate Change Lily D'Ambrosio, with Project Manager Andrew Tshaikiwsky and ACCIONA Energy Australia Managing Director Brett Wickham

# Local community benefits

ACCIONA Energy is committed to supporting our local community. In 2012 the Mt Gellibrand Wind Farm community sponsorship fund was established. Since then it has contributed over $100,000 towards community and education programs. This sponsorship program will be maintained for the operational life of the wind farm.

We thank all of the organisations for sharing their fantastic projects with us last year and look forward to working alongside the community in 2018.

ACCIONA co-sponsor the Agribusiness, Environment and Sustainability category at the 2017 Colac Otway Business Excellence Awards



A typical modern wind turbine structure

# How does a wind turbine work?

Wind turbines convert the energy of the wind into electricity. Wind turns the blades which spin a shaft connected to a generator, producing electricity. This electricity travels through a transformer and into the local electricity network.

Wind turbines generally start to turn at wind speeds of three metres per second. Most turbines reach maximum power output at a wind speed of around 15m/s (54km/hr).

At gale force winds of about 25m/s and above, the blades are angled or 'feathered' into the wind and generation is stopped so that the wind turbines are not damaged.

The rotor turns the blades at approximately nine to 15 revolutions per minute at a maximum tip speed of 230km/h.

The nacelle, which contains a generator, transmission system and power control equipment, is designed so that it can rotate around the tower to face into the wind, allowing the turbine to produce electricity regardless of wind direction.

Phil Cavanagh
Construction Manager

# Meet our team

Phil comes to the project with considerable experience having looked after varied aspects and disciplines of construction, predominately structural and civil works. This includes buildings, refineries, smelters, paper mills, roads, a coal loading facility and many bridges. Mt Gellibrand is also Phil's seventh wind farm project!

As the Construction Manager, Phil ensure that the day-to-day construction of the project is progressing smoothly, managing both ACCIONA Energy staff and numerous subcontractors, and takes pride in completing projects safely.

Outside of work, Phil loves spending time with his two children Tyler and Jack. And enjoys football, cricket and any sport his children are involved in.

# Any questions?

ACCIONA Energy is committed to engaging with the local community surrounding the Mt Gellibrand Wind Farm. We acknowledge the importance and value of feedback (including both enquiries and complaints).

We can be contacted via our free call community information hotline **1800 283 550**, by email at **mtgellibrand@acciona.com**, or by post PO Box 252, South Melbourne, VIC 3205. A copy of the Mt Gellibrand Wind Farm Complaint and Evaluation Process can be found on our website.

Blade installation taking place at Mt Gellibrand.

acciona

MT GELLIBRAND WIND FARM

## CONTACT US

We welcome your contact for information or feedback about any of our activities. Please call the free-call number **1800 283 550** or email mtgellibrand@acciona.com.

Visit our website for more information about our other projects www.acciona.com.au

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