STOCKYARD HILL Wind Farm

STOCKYARD HILL WIND FARM
COMMUNITY NEWSLETTER

No.22 | December 2018

Welcome to the 22nd edition of the Stockyard Hill newsletter. This newsletter provides information to the communities involved in the Stockyard Hill Wind Farm project. More copies are available by either contacting us, or downloading from our website.

GOLDWIND

CONSTRUCTION SET TO STEP UP

Construction of the largest wind farm in the southern hemisphere continues to progress well, with 28 turbine foundations poured and 27 kilometres of access tracks completed as of November 21.

Stockyard Hill Wind Farm Project Director Andrew Monahan said work on the project had continued tirelessly through the wetter months, with increased productivity forecast during the drier summer period.

"Commencing construction of a wind farm in May was always going to present its challenges, however the team has worked through those and with the warmer weather upon us construction is well and truly in full production," he said.

Mr Monahan said the over-dimensional wind turbine components, which began arriving in Geelong in October, were now being transported to the site.

"This is a major logistical exercise, with the near-70-metre blades having to travel overnight from Geelong via the Western Highway, through Beaufort and entering the site from Skipton-Beaufort Road," he said. "Tower sections are delivered to the site via Skipton."

The first tower is scheduled to be erected in the coming weeks, with plans to erect three complete wind turbines per week from early 2019.

Mr Monahan said the project workforce appreciated the support from the community.

"We understand that our works will continue to have an impact on the local community, but we endeavour to minimise this as much as we can and continue to encourage feedback from the community on areas we could improve on," he said.

Quick Facts

As of November 21, 2018:

- Access tracks completed – 27 kilometres of 110 kilometres
- Foundations poured – 28 of the 149 turbines
- Powerline foundations poured – 96 out of 278, with one pole erected

Transmission line on schedule

Construction of the transmission line and terminal station to connect the Stockyard Hill Wind Farm to Victoria's existing electricity grid is progressing to schedule.

Physical works associated with pole foundations began in July within the southern section of the transmission line route and will progress to the northern sections in early 2019. The first pole installations will occur during November and December this year. Plans are under way to upgrade the intersection of Lower Darlington Road and Camperdown-Lismore Road in the new year, following the resurfacing of Lower Darlington Road to the east of this intersection.

With improved road access along Lower Darlington Road, civil works including preparation of the base for the new 500kV Haunted Gully Terminal Station is also under way.

Construction of the $140 million project is being managed by AusNet Services, the largest diversified energy network business in Victoria.

AusNet Services Project Manager Kris Amato said he was pleased with the initial progress.

"We're extremely grateful for the support and patience of landowners and the community," Mr Amato said.

"AusNet Services is committed to working together with Goldwind to ensure that the local community is informed throughout the works, and that impacts are minimised where possible."

For information regarding the Stockyard Hill Wind Farm Transmission Line project visit **www.ausnetservices.com.au/Projects/Windfarms/Stockyard-Hill-Wind-Farm**

FIRE RISK A FOCUS

The construction team is now on high alert with the fire season imminent. Work is being managed to ensure fire risks are mitigated and measures are in place to ensure any breakout is quickly contained.

Stockyard Hill Wind Farm Construction Manager Stephen Evans said all vehicles entering the site must have a fire extinguisher on board.

A number of fire tanks have also been established around the construction site. "We understand it's a major risk and we are ensuring all works undertaken are in line with the approved fire management plan, but we are also taking further steps to ensure our work is done in a safe and appropriate way to minimise any potential risks," Mr Evans said.

Contractors lend a hand

Contractors have helped landowners on two separate occasions putting out grass fires, not related to the wind farm, that could have become difficult to control.

On both occasions the contractors used fire extinguisher from their vehicles, with the fires contained.

BLADES ARRIVE IN TOWN

One of the longest blades ever transported in Australia was delivered in early November from the Geelong Port to the project site.

The 68.6-metre-long blade will be a part of a GW140/3.57MW turbine with a 140-metre rotor and 110 metre hub height. Consisting of 149 turbines, once operational, Stockyard Hill Wind Farm will be the largest wind farm in Australia and the Southern Hemisphere, producing to power approximately 391,000 Australian homes each year.

Foundations form a solid base

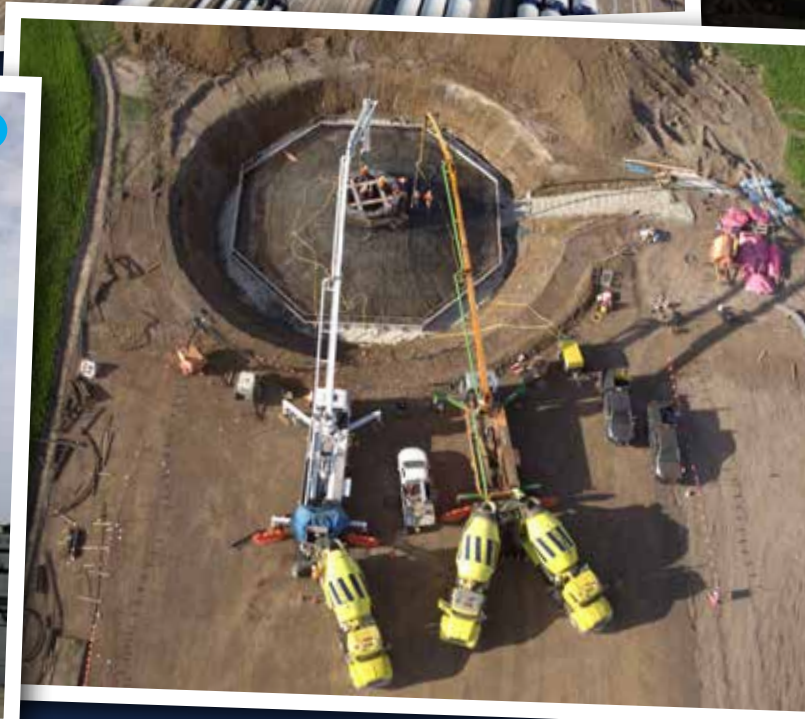
The project is using two types of foundation design; one is called a gravity and the other an anchor.

It is usually the underlying ground conditions which ultimately determine the foundation type to be implemented, and this is determined via geotechnical studies completed before construction begins. Gravity foundations rely on physical mass and are founded on densely compacted soil. They will have a larger footprint – about 20m x 20m (underground) - and will be around 3.3 metres deep, with more concrete being required – about 590m^3 and weighing about 1400 tonnes.

Anchored foundations must be built on rock material and will always be seated on shallow rock surfaces found under the ground. They typically have a smaller footprint than gravity type, about one-quarter of the area, with less concrete being required – typically less than half of what goes into the gravity type, with a depth of around 2.3m, with 12 x 11m-long steel rods and 75mm diameter rods drilled deeper into the underlying rock base (about 8m). These types of foundations generally weigh only 530 tonnes.

Snapshot of construction

1. The project's quarry is supplying the material for the access tracks and hard stands
2. There will be approximately 110 kilometres of access tracks constructed for the wind farm
3. Blades, nacelles and towers ready to leave for Australia
4. Up to 59 tonnes of steel and 590m^3 of concrete can go into making one foundation



Goldwind Australia Powering the Nation

By 2020, one in ten Australian homes will be powered by Goldwind's advanced wind turbine technology. For more than 20 years, we've been putting the wind to good use by providing turnkey solutions to customers and partners across the globe.

In 2012, we delivered our first wind farm in Australia: the 19.5MW Morton's Lane Wind Farm in Victoria.

A year later, we brought the winds of change to the Southern Tablelands of NSW and built the 165.5MW Gullen Range Wind Farm.

Recently, we delivered the 175MW White Rock Wind Farm Stage 1, 10MW Gullen Range Solar Farm and 20MW White Rock Solar Farm.

We're currently constructing three wind farms, including the 530MW Stockyard Hill and 321MW Moorabool wind farms in Victoria, the 148MW Cattle Hill Wind Farm in Tasmania, and we will soon start the 280MW Coppabella Wind Farm in NSW.

Once operational, these projects will provide clean energy to about 830,000 more homes across Australia.

Our footprint in Australia is exploding - by 2020, Goldwind's advanced wind turbine technology will power one million Australian homes with sustainable, clean energy.

GOLDWIND

COMMUNITY INVESTMENT PROGRAM *delivers for our community*

The community benefits of the Stockyard Hill Wind Farm continue to roll out, with just over $250,000 of support approved to local community groups since October 2017.

We are focused on investing in programs and initiatives that benefit the local community, or local community groups who conduct activities that help build sustainable communities.

Clubs and organisations funded in the October 2018 include:

- Beaufort & Skipton Health Service – educational food program for parents and carers.
- Beaufort & District Athletics Club – new fleet of step hurdles and junior collapsible hurdles.
- Beaufort Historical Society – printing of new book on Trawalla Settlement.
- Beaufort Golf & Bowls Club – solar panels.
- Beaufort Primary School – environmental impact teaching program for 2019.
- Beaufort Secondary College – 26 netbooks and trolley.
- Linton Play Reading Group – assistance with production of play about Linton.
- Skipton Lions Community Shop – town Christmas party.
- Lismore Cemetery Trust – cement beam for headstones/plaques in lawn section.
- Lismore District Lions Club – repairs to caravan park shower block.
- Lismore Men's Shed Inc – solar panels.
- Lismore Primary School – 10 new iPads.
- Skipton Cemetery - Ashes Memorial Garden area and removable bollards.
- Skipton Recreation Reserve – upgrade of lighting.
- Upper Mt Emu Creek Landcare – program of future works.
- VFBV West Region Rural Championship Committee – Championship event.
- Victoria Police - Linton Community Representative – 5 bikes for Skipton Rail Trail.
- Waterloo Endurance Ride – events throughout 2019.

If you are interested in applying for funding for your club/organisation, please apply online at **www.stockyardhillwindfarm.com.au/community-investment-application/**.

Applications for investment are reviewed biannually, in April and October of each year, but applications can be submitted at any time. The next round of community investment closes in April 2019.

The Pyrenees Chorale (pictured) benefitted from the program in April to purchase a new keyboard for the Choir

STOCKYARD HILL Wind Farm

TIP HEIGHT
≈180m

149
turbines to
be constructed

TURBINE MODEL
Goldwind 3S

OPERATIONAL WIND SPEED
2.5m/s (10kph) to 20m/s (77kph)

GENERATOR
length 5.4m
weight 86,300kg

The SWEPT AREA
of the blades is
15,482m²

HUB HEIGHT
≈110m

NACELLE
length 10.1m
weight 42,500kg

TOP SECTION
L: 24.8m W: 4.5m

HUB
length 5.3m
weight 43,700kg

SECTION IV
L: 21.8m W: 4.5m

BLADE
length 68.6m
weight 19,800kg each

≈110km
ACCESS TRACKS

SECTION III
L: 21.8m W: 4.5m

SECTION II
L: 21.8m W: 4.5m

BOTTOM SECTION
L: 16.0m W: 4.8m

TOTAL STEEL FOR FOUNDATIONS
≈7,471 tonnes

Total Energy Generation is
up to 530MW. This equates to
up to 391,000 average VIC homes

CONCRETE
Gravity Foundations - 590m³
Anchored Foundations - 215m³

Win a replica of the real thing

As construction of Stockyard Hill Wind Farm ramps up, we're giving members of the public the chance to win a replica of the real thing.

Moonambel's Gillian Matthews and Beaufort's Will Kermond are the most recent owners of a replica wind turbine, donated by Stockyard Hill Wind Farm.

Gillian is our September winner and came into the office this week to collect her prize.

"I'm delighted. I love the wind farm project and think it is a really exciting thing for our Shire," she said.

Will won his model turbine by entering a draw at the recent Community Families Health Day organised by Beaufort & Skipton Health Services and the Pyrenees Shire.

Other winners have included Peter Bourke from Beaufort, and John Dunne from Brewster.

Members of the public can enter the draw by filling in their details at the Stockyard Hill Wind Farm office at **70A Neill Street Beaufort**.

While you're there, ask our Community Relations Officer Trish Collins for an update on Australia's largest wind farm project.

Diversity on Community Reference Group

A diverse group of local residents has been assisting the project for the past 12 months. The members of the community reference group are: Douglas Ball (Independent Chairman), Jim Mahony, David Bain, Ian Homan, Michael Murphy, John Kavanagh, Douglas Smith, Nick Shady, James Kirkpatrick, Emma Wallish and David Jackson.

Members are more than willing to assist community members with information relating to the wind farm or address any issues they may be experiencing with construction activities.

Need to keep up to date with construction activities?

The project releases a fortnightly Construction Update which is published in the local papers and on the project's website.

MORE INFORMATION

For more information visit **www.stockyardhillwindfarm.com.au** or call our project hotline on **1800 753 730**.

Landscape and Visual Screening

Owners of dwellings within four kilometres of the Stockyard Hill Wind Farm turbines with line of sight to turbines will be contacted in the coming months to discuss the project's landscape and visual screening program. This is a requirement of the planning permit to assist the closest neighbours in reducing the potential visual impacts of the project.