Mount Emerald Wind Farm Development

NEWSLETTER #6 | MAY 2014

RECENT ACHIEVEMENTS

End April 2014:

- Responded to Council
 Development Application
 Information Request
- Submitted EIS to
 Department of the

 Environment for review

Welcome to the latest edition of the Mt Emerald Wind Farm Development Update Newsletter. The early part of 2014 has been a busy time for the Mt Emerald Wind Farm with some key milestones reached, namely the submission of the Environmental Impact Statement (EIS) to the Department of the Environment, and the development application reaching the decision making stage. Further detail is provided below.

What are the highlights:

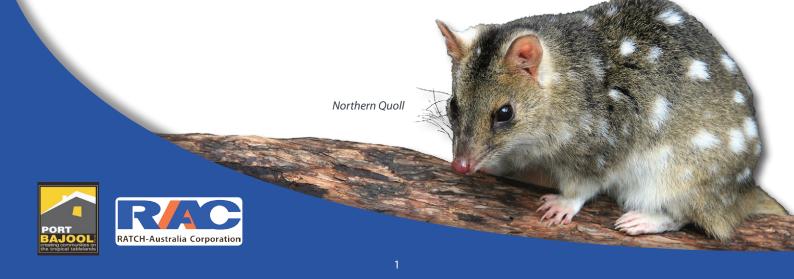
Environmental Impact Statement (EIS)

After over two years of on-site fieldwork and detailed studies, the federal Department of the Environment has approved the release of the EIS, for the Mount Emerald Wind Farm, for public comment.

The EIS includes detailed scientific research on flora and fauna species at the wind farm site and outlines practical measures to mitigate any possible impacts on these species.

Research included over 8,000 man-hours of on-site survey effort. It has incorporated cutting edge techniques—developed and used for a range of these species—and includes such studies as;

- Collaring and tracking of Northern Quolls by GPS or radio
- Use of sniffer dogs to find quoll dens
- DNA sampling of quolls and comparison with other populations in North Queensland
- Use of thermal imaging and night vision to identify bats and flying foxes at night
- Audio recording of bat and bird calls allowing identification of species
- Installation of motion sensitive infra-red cameras



- Collection of over 100 plant specimens for logging with the Queensland Herbarium
- · Comprehensive vegetation mapping of the site
- An investigation into the use of radar systems to track birds and bats, with the possibility of it being incorporated into the wind farm control network to avoid collision is further proposed.

The EIS also includes extensive studies on social impacts surrounding the wind farm including visual, noise, traffic, and economics.

The Environmental Impact Statement can be accessed and viewed at:

- www.mtemeraldwindfarm.com.au, or
- · Mareeba Shire Council office, or
- Department of Environment and Heritage office in Cairns.

Submissions on the EIS can be made to RATCH-Australia - see page 4 for details.

Development Approval

At the end of April, RATCH-Australia, the developers of the Mt Emerald Wind Farm, provided a comprehensive response to the council Information Request which supplements the development application (DA) for the project.

The Information Request included answers to concerns raised by Council and during community consultation for the project. All requests for further information have been responded to, including additional supporting detail and study results from the EIS.

The Information Request Response can be accessed via the project website: **www.mtemeraldwindfarm.com.au** or at the local Mareeba Shire Council office in Mareeba.

In April 2014, the Queensland State Minister for State Development Planning and Infrastructure provided notice he is considering 'calling-in' the project. If the project is 'called-in', then the responsibility for assessing and making a decision on the project would change from the Mareeba Shire Council to the State Government Department.



G A L L E R Y







Top: Northern Quoll fitted with radio tracking collar ready for release
Middle: Radio tracking of collared Northern Quoll
Bottom: Thermal Image of Spectacled Flying fox
Left: Sarus Crane

Listening to the Community - Modifying the proposal design

In response to outcomes of the environmental studies and issues raised by the community, modifications have been made to the proposed layout of the wind farm.

The current preferred wind farm comprises 63 wind turbines each with a capacity of 3MW.

Recent amendments include:

- A 500m buffer zone around Walsh's Bluff
- Removal of 4 turbines from the southern part of the site, to reduce impact on particular plant life
- Removal of an additional turbine from the northeast to improve visual amenity

These changes are in addition to previous measures made at the request of the community:

- Moving the turbines off the top of the western ridgeline to further within the property to screen a significant portion of the turbines from views to the west of the site
- Removal of turbines in the north-east at the request of owners within this view shed
- Removal of turbines in the south-east to significantly reduce the size of turbines visible to the residents of Rangeview

Health Effects

In February this year, the National Health and Medical Research Council (NHRMC), Australia's leading medical research body, released its review of potential health impacts of wind farms and concluded that:

- "there is no reliable or consistent evidence that wind farms directly cause adverse health effects in humans; and
- wind farm noise was unlikely to be heard from distances beyond 500 to 1500 metres."

The review considered research into noise, shadow flicker, and electromagnetic radiation from turbines, and found no conclusive evidence of any direct health effects from these sources.

The paper should act to reassure the community that wind farms are safe and pose no threat to their health. It is the best expert advice we have at this stage, and we are confident that it is accurate.

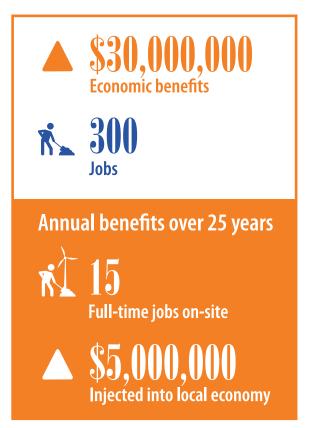
Economics

An independent economic assessment of the wind farm proposal, undertaken as part of the EIS, estimated the direct benefits to the local Mareeba and Tablelands economy would be approximately \$30 million, and would create 300 jobs directly and indirectly (flow-on) from the construction.

The report estimates over the 25 year operating life of the wind farm, annual benefits would see at least 57 additional jobs created, including 15 full-time roles onsite, along with an annual injection of over \$5 million to the local economy.

The project will significantly increase the regional revenue coming into and staying within the local and regional community, with expenditure in the form of:

- Accommodation during construction and postconstruction which includes feeding them with local produce
- Technical services engineering, maintenance and consultancy. These services will be sourced locally where available and possible.
- Ancillary services cleaning, general maintenance, weed and pest control



"The developers hope the release of the information paper reassures the local community regarding their concerns about health impacts. We will continue to work with the local council and the relevant authorities to minimise any potential impact the wind farm may have on neighbours and nearby communities – both human and natural."

Geoff Dutton

Exec. General Manager – Operations and Development, RATCH-Australia

Interesting Case Study

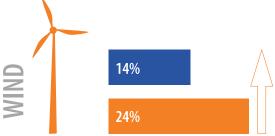
You may have seen or heard comments such as:

- "wind doesn't work".
- "it needs a lot of back-up generation for when the wind doesn't blow"
- "doesn't reduce CO₂"
- "doesn't replace fossil fuel generation"

These comments are not supported by what is actually happening on the electricity network. As an example, in July 2013, the Australian Electricity Market Operator (AEMO) released historical market information on the South Australian electricity network. South Australia has the greatest number of wind farms operating in Australia with 16 for a capacity of 1,200MW.

When comparing figures from 2008-09 to 2012-13 some interesting facts arise:

- Generation from wind increased from 14% to 24% of South Australia's energy production
- Generation from gas decreased from 50% to 47%





2008-09

2012-13







Above: Energy comparison percentages in South Australia

- Generation from coal decreased from 34% to 15%
- During this time no new plant was installed to provide back-up generation
- Wind power produces more electricity than coal
- Power pool prices have reduced from 5.1¢/kWh to 3.0¢/kWh (3¢/kWh is a 2011-12 value which does not include a carbon tax component, allowing direct comparison)
- Equivalent CO₂ emissions have reduced from 8.1 million tonnes to 5.1 million tonnes

EIS Submissions

The EIS can be viewed at:

Mareeba Shire Council office - 65 Rankin Street, Mareeba

Deptartment of Environment and Heritage Protection -

Level 4, Building 2, William McCormack Place, 5B Sheridan Street, Cairns

Documents can also be accessed via the project website www.mtemeraldwindfarm.com.au

Submissions on the EIS can be made to:

RATCH-Australia Corporation Limited, GPO Box 12833, George Street, Brisbane QLD 4003, or via email to terry.johannesen@ratchaustralia.com

Closing date for submissions is the 2 July 2014

RATCH-Australia

www.mtemeraldwindfarm.com.au www.ratchaustralia.com





