APPENDIX 6

Sapphire Wind Farm Newsletter 1, May 2009
Sapphire Wind Farm Newsletter 2, January 2011

Sapphire Wind Farm Pty Ltd

Sapphire Wind Farm

May 2009 **Newsletter #1**

Introducing the proposed Sapphire Wind Farm to the local community

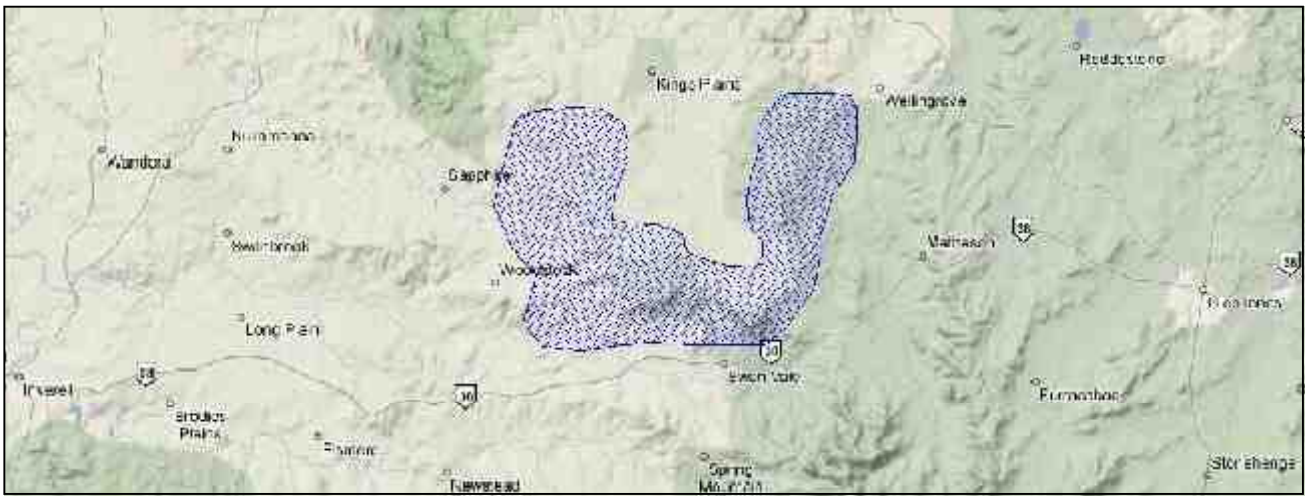
Dear Resident,

Wind Prospect CWP Pty Ltd is assessing the potential for a wind farm development on rural land approximately 18km west of Glen Innes and 28km east of Inverell, New South Wales (see map below). The proposed Sapphire Wind Farm would accommodate up to 178 wind turbines and produce up to 1,500 GWh of clean, renewable energy. This is enough to supply approximately 215,000[1] average homes across Australia.

Within this newsletter, we would like to introduce Wind Prospect CWP and the proposed Sapphire Wind Farm project to the community. The project is in the early stages of planning, and we are welcoming any comment that members of the community may have at this time. We intend to provide the community with regular updates by way of newsletters and contact details are made available on the back page of this newsletter should you wish to communicate with us directly.

Following further assessments we will hold a community Open Day where there will be a range of information about the proposed project on display and opportunities to ask questions and meet the Wind Prospect development team. In addition to this we will go live with an interactive project-specific website which will allow you to keep up to date with latest news regarding the wind farm.

Map showing the location of the proposed Sapphire Wind Farm (blue boundary) in relation to nearby towns.



Likely view of the Sapphire Wind Farm facing North along the Gwydir Highway at Swan Vale (example turbine layout shown).

[1] based on an indicative 3.3 MW turbine with a capacity factor of c.35% and an average household energy use of 6.926MWh p.a. (Electricity Gas Australia 2008 publication from the Electricity Supply Association of Australia ESAA)

WIND PROSPECT CWP PTY LTD AND THE WIND PROSPECT GROUP

Wind Prospect CWP Pty Ltd is a locally based wind farm development company with an office in Newcastle, NSW that is staffed by experienced wind farm professionals with a range of skills in planning, engineering and environmental science.

Wind Prospect CWP Pty Ltd is a partnership between the Wind Prospect Pty Ltd and Continental Wind Partners. Wind Prospect Pty Ltd is part of the Wind Prospect Group, a progressive global organisation that is developing, constructing and operating renewable energy solutions in Australia, New Zealand, United Kingdom, Ireland, China and Hong Kong, Canada, France and the USA. Wind Prospect has over 18 years experience of successful development in the industry and has been involved in over 2,500 MW of approved wind generation, both onshore and offshore, with 380 MW under construction or operating in Australia.

The key to Wind Prospect's successes has always been, and will continue to be, our attention to early and effective community consultation along with the consideration of the thoughts, views and concerns of local residents. As such, we look forward to hearing your views throughout the development process.

Recent successes in South Australia include the Hallett Wind Farm, approximately 250km north east of Adelaide. This project is Wind Prospect's third wind farm development to progress to construction in South Australia, with more projects to follow (please see Wind Prospect's website for the latest news).

Continental Wind Partners is a leading renewable energy fund currently developing over 2,000 MW of wind energy generation projects in Europe, Australia and New Zealand.

Photomontage of Hallett Hill Wind Farm, one of four wind clusters approved for development totaling 260 MW.

DRIVERS FOR RENEWABLE ENERGY GENERATION IN AUSTRALIA

The Australian Government has clearly targeted renewable energy generation as a way of reducing greenhouse gas emissions and tackling the problems of global climate change. Indeed the Australian commitment to renewables is very much in the forefront of political drivers, such as the;

- ratification of the Kyoto Protocol,
- proposed extension to the Mandatory Renewable Energy Target (MRET) whereby retailers will be required to source 20% of their electricity from renewable energy by 2020, and
- recent discussions surrounding the introduction of an emissions trading scheme.

WHY WIND?

- Australia has a world class wind resource which can provide comparatively priced, clean and reliable energy to the nation.
- The development of wind farms helps to meet our ever growing demand for power.
- Utilising wind energy increases our diversity of energy sources thereby increasing our security of electricity supply.
- We need to reduce our greenhouse gas emissions under the Kyoto Protocol.
- Wind energy integrates very well with other renewable and fossil fuel technologies already in existence across the country.

THE SAPPHIRE WIND FARM

The Sapphire Wind Farm would consist of up to 178 wind turbines with a rated capacity between 2 to 3.3 MW each. The wind turbines would be three bladed, multi-pitch, horizontal axis machines, with a maximum height of approximately 155m (i.e. from the base of the tower to blade tip when the blade is in the vertical position). Turbines would be located chiefly on the higher altitude ridges within the site boundary, where they would be well spaced and positioned with a high regard for landscape amenity, existing land use, ecological, conservation, and cultural heritage values, and in accordance with relevant legislation.

The wind farm would also consist of ancillary structures and equipment which would be positioned in accordance with site constraints. These include underground electrical cabling, access tracks, wind measuring masts, a small switch gear building and compound and temporary facilities during the construction phase. An export distribution line would also be required to connect to the nearby transmission network. The site is currently used as rural farm land and this would continue to be the case after construction. Once the wind farm is operational it would be monitored remotely, with maintenance staff likely to service the machines every six months.

The life span of a wind farm is usually 20-25 years, after which time there would be an option to either decommission the site, fully restoring the area to its previous land use, or to upgrade the equipment and extend the wind farm's operational life (subject to DA approval).

WHY WE SELECTED THE SAPPHIRE WIND FARM SITE?

The Sapphire Wind Farm has been proposed after careful consideration of a number of potential sites in Australia and a variety of environmental and technical criteria.

We considered a wide range of factors when looking for wind farm sites including wind resource, proximity to the transmission grid, access, ecology, archaeology and cultural significance, proximity to residential dwellings and visual impact. We have assessed New South Wales considering these factors and consider the Sapphire Wind Farm site to be a prime location for a wind farm development.

WHAT HAPPENS NEXT?

A Preliminary Environmental Assessment has been submitted to the NSW Department of Planning and will be available on their website shortly at www.planning.nsw.gov.au (following the links to *On Exhibition* and then *Major Projects Part 3A)*. Over the next few months the focus will be on talking to the community to get further input into the proposal, and at the same time engaging specialist consultants to undertake and complete detailed investigations into the following areas:

- Ecology
- Landscape and Visual Impact
- Acoustics
- Geology
- Civil Works/Construction
- Electromagnetic Interference
- Aviation
- Traffic Impact and Safety
- Cultural Heritage and Archaeology
- Cumulative Impact

PROPOSED TIME LINE

- May 2009 - Proposal Announced
- June 2009 - Director General's Requirements issued
- Late 2009 - Project Submission & DoP Decision
- Late 2010 - Construction Begins
- Mid 2012 - Complete and generating electricity!

MORE ABOUT WIND FARMS

Visual Effects

The view of modern wind turbines provokes a mixed response from the public; many consider them to be elegant additions to the landscape while others do not like the way wind farms look. Wind farms are usually found on ridgelines, theoretically making them visible over a large area. However, distance from the wind farm, along with screening by intervening topography, vegetation and buildings are all factors that reduce the visibility of the wind farm. Weather and light conditions also have a significant effect on wind farm visibility.

We will be undertaking a review of the project in terms of landscape effects and visual amenity. Part of this study will determine how visible the wind farm will be from representative viewpoints around the local area, by way of 3D modelling and the production of wind farm photo simulations. We have found that many people have been pleasantly surprised by the results of these photo simulations, as in most cases they show that the wind farm will be a distant rather than prominent landscape feature.

Sound

Thanks to technological improvements modern wind turbines are very quiet and while they do emit sound as the blades rotate, it is quite possible to hold a normal conversation at the base of a modern machine. The main sound from wind turbines is the aerodynamic noise from the blades. This sound varies according to turbine type, topography, wind speed and direction (it is very difficult to hear a wind farm on a windy day due to the background noise, such as rustling vegetation and the whistling of the wind itself). However, concerns over sound emitted from a wind farm are understandable given the noisy reputation of earlier turbine models. To allay these concerns and to ensure the wind farm complies with South Australian EPA's Environmental Noise Guidelines (Interim guidelines, 2007), we will be commissioning an acoustic consultant to assess if there will be any noise effects from the proposed project on nearby properties.

Ecology

The construction and operation of a wind farm has the potential to affect the ecology of the site. A comprehensive biodiversity assessment of the site will focusing on flora, fauna (including birds, reptiles, and invertebrates), habitats and waterways. Our approach is to avoid where possible, mitigate appropriately, and offset biodiversity losses as advised. We are exploring the use of BioBanking to mitigate for habitat losses, which allows landowners to set aside land in return for payments. If you are interested in assisting with this, please take a look at the BioBanking website below and/or contact us directly for more information.

Useful Websites

Sapphire Wind Farm: www.sapphirewindfarm.com.au

Wind Prospect: www.windprospect.com.au

Clean Energy Council: www.cleanenergycouncil.org.au

BioBanking: www.environment.nsw.gov.au/biobanking

HOW TO CONTACT US

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If you wish to participate in the community consultation, please make contact with us and request a copy of our Public Opinion Survey.

Sapphire Wind Farm

January 2011 **Newsletter #2**

An update on the proposed Sapphire Wind Farm

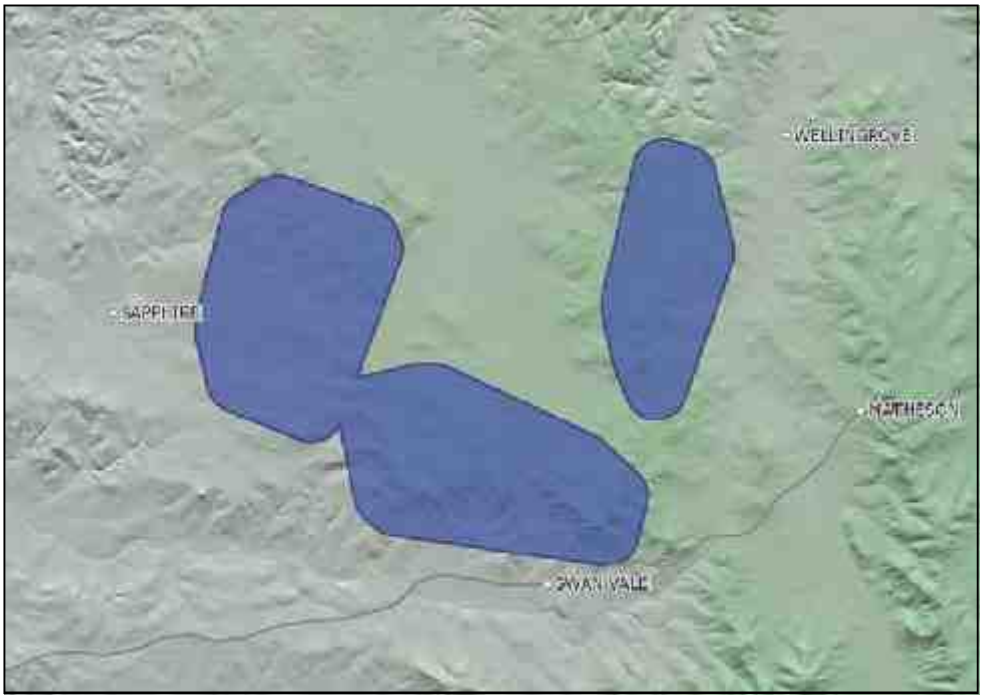
Dear Resident,

Following the announcement of the Sapphire Wind Farm back in May 2009, the project has continued to evolve as the various assessments and detailed project design work is carried out. At present there are two proposed turbine layouts which reflect the potential use of wind turbines between 1.5 MW to 3.3 MW.

Why, you may be asking? Well, the design of a wind farm is based on current turbine technology which is constantly evolving. So the turbines we considered at the start of a project can be different to those on the market 2-3 years later. Also, as more detailed wind speed data is collected from the site, the opportunity for different classes of machine (turbines suitable for specific wind regimes) opens up (or reduces). Finally, different sized turbines require different separation distances between machines, to prevent one machine interfering with the next. The spacing of a 1.5 MW turbine wind farm is not the same as that for a 3.3 MW machine (although there are exceptions!).

These factors combine to produce the two initial layouts which are presented in the Preliminary Environmental Assessment submitted to the NSW Department of Planning. We have been refining these layouts over the past two years, as we received feedback from the public, on-site assessments and wind data. We will continue to refine these layouts, until we are ready to submit the planning application in May 2011.

The image below shows the current boundary of the Sapphire Wind Farm, consisting of either 125 x 3.3 (or equivalent) MW or 159 x 1.5 (or equivalent) MW wind turbines. This has the potential to produce enough electricity to power over 145, 000 households.[1]



Further details on the wind farm proposal can be found on the project website, in the Preliminary Environmental Assessment (available on the NSW Department of Planning website under Major Projects) and at our **Open Days** in Glen Innes and Inverell this February, details of which are on the next page.

[1] based on an 159 x 2.05 MW turbines with a capacity factor of c.35% and an average household energy use of 6.926MWh p.a. (Electricity Gas Australia 2008 publication from the Electricity Supply Association of Australia ESAA)

WHAT'S BEEN HAPPENING?

Open Days

We intend to hold two **Open Days** detailing the aspects of the wind farm at two separate venues, as follows:

- **Wednesday 2nd February** at the **Library & Learning Centre, Glen Innes** between **3.00 - 7.30pm**
- **Thursday 3rd February** at the **Riverside Function Centre, Inverell** between **2.30 - 7.30pm**.

There will be the opportunity to meet and ask questions of members of the Wind Prospect CWP team, as well as various displays and posters explaining the studies currently being undertaken in preparing the project application. We hope to see you there!

ENVIRONMENTAL STUDIES CURRENTLY UNDERWAY

Ecology

Ecological surveys were carried out by Eco Logical Australia who were on-site between October 2008 and January 2011, assessing the flora and fauna in the area of the wind farm. Once their reporting is complete, details of their findings will be made available on the project website. Where the proposal could have a significant impact on the local ecosystem, we will modify the layout or have plans to invest in BioBanking (www.environment.nsw.gov.au/biobanking/) as a means of protecting the environment.

Electromagnetic Interference (EMI)

A study conducted by Laruie Derrick & Associates to assess potential radio-communication interference surrounding the proposed wind farm site found no immediate impact on existing services. Should any turbines cause television interference, Wind Prospect CWP will rectify the issue by installing improved receptor/transmitter infrastructure or providing satellite television equipment at their expense.

Acoustics

The acoustic study, carried out by SLR Consulting, will assess construction and traffic noise impacts, as well as operational impacts. This will incorporate baseline noise monitoring and establish the relevant noise criteria for selected properties surrounding the project in accordance with the industry standard guidelines. Additional computer noise modelling of the project will be used to optimise the layout of the wind farm to further reduce or remove any potential noise impacts on nearby residences.

Traffic & Transport

A study to be conducted by Bega Duo Designs will assess the impact of internal roads for the project, traffic during the life of the wind farm, as well as the increased traffic demands during construction. The study will cover all foreseeable impacts of traffic including the nature and volume of traffic generated, transport routes, impact on current infrastructure and the potential for upgrading existing roads.

Cultural Heritage & Archaeology

An Indigenous and Non-Indigenous cultural heritage and archaeological assessment will be carried out by NSW Archaeology working in tandem with local Aboriginal communities and representatives. The study will include a review of historical and relevant literature, as well as a comprehensive field survey of the project area and detailed community consultation. The assessment will be carried out in accordance with the Department of Planning and Department for Environment, Climate Change and Water requirements. Any significant findings that suggest the project could have an impact on the cultural heritage of the area will be discussed with the appropriate people and dealt with by avoidance, mitigation or removal in accordance with the regulations.

Civil and Military Aviation

In order to identify any potential impacts on aviation in the area, we consult with the Civil Aviation Safety Authority and the Department of Defence. These bodies also advise that we speak with Airservices Australia and the Aerial Agricultural Association of Australia, as well as local airports and airfields. The wind farm layout is designed so that it does not create a problem for any air operations in the vicinity of the project.

ENVIRONMENTAL STUDIES CURRENTLY UNDERWAY

Landscape and Visual Impact Assessment (LVIA)

LVIA for the proposal is being undertaken by Green Bean Design (GBD). The primary purpose of the LVIA is to provide an assessment of the potential landscape and visual impacts from the development of the wind farm on people residing in, visiting, or travelling through areas surrounding the project site.

Landscape and visual impacts will be assessed separately, although the procedure for assessing each of them is closely linked. A clear distinction is drawn between landscape and visual impacts, where:

- Landscape impacts relate to the effects of the proposed wind farm on the physical and other characteristics of the landscape and its resulting character and quality, and
- Visual impacts relate to the effects on views experienced by visual receptors (e.g. residents, tourists or motorists) and on the visual amenity experienced by those people.

All components of the proposed wind farm development will be assessed as part of the LVIA process, which includes:

- Access and maintenance tracks,
- Control/facilities building,
- Aviation safety lighting on top of the wind turbines, if required,
- An electrical substation and possible transmission line, and
- Up to 159 wind turbines, to a maximum height of 155m (to blade tip), depending on turbine model.

Preliminary view of Sapphire Wind Farm from Wellingrove looking south west

The assessment will involve both desktop and field studies. A desktop study of topographic maps and aerial photographs to identify potential view locations and "Landscape Units" surrounding the wind farm, followed by on-site confirmation of these locations will be carried out. A shadow flicker and visibility assessment will be completed, followed by a determination of a visibility rating (level of potential impact) for each view location. The visibility rating for each view location is determined by reference to a number of criteria and factors including the category and sensitivity of the receptor, the context of the view, number of receptors and the approximate distance to the wind farm. Photomontages will be prepared to show how the proposed wind farm may appear following construction, and will include views from key viewing locations identified during the fieldwork.

Although the wind farm will be visible from a number of view locations, including road corridors and a number of residential properties, the majority of views from residential dwellings are likely to be screened by a combination of undulating hills and tree planting, sheltering dwellings. The full assessment of landscape character and visibility will be detailed and illustrated in the LVIA report, as part of the planning application.

A visibility rating for each of the view locations will be assessed to provide an indication of the level of potential visual impact. Furthermore a cumulative assessment for the potential landscape and visual impact associated with existing or proposed wind farms in the vicinity will also be detailed in the final LVIA report.

HAVE YOU COMPLETED A PUBLIC OPINION SURVEY?

YOUR OPINION MATTERS TO US AND WILL HELP SHAPE THE DEVELOPMENT OF THE PROJECT.

AN UPDATE ON RENEWABLE ENERGY DRIVERS IN AUSTRALIA

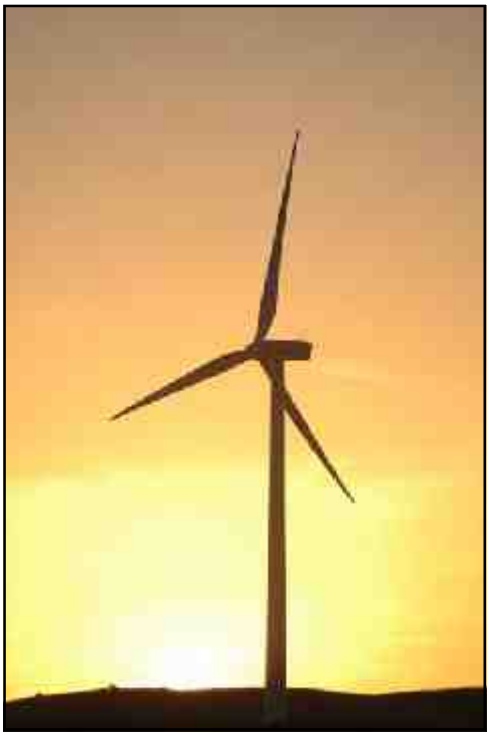
The Australian Government has taken its first steps to meeting its election promise of addressing climate change and reducing carbon emissions. The implementation of the Renewable Energy Target (RET) in August 2009, providing an expansion on the Mandatory Renewable Energy Target (MRET), aims to acquire 20% of Australia's electricity from renewable sources by 2020, the equivalent of 45,000 GWh. In June 2010 the RET was separated into Large Scale Renewable Energy Target (LRET) and the Small Scale Renewable Energy Scheme (SRES), which commenced January 2011. The separation of the RET is expected to create greater opportunities for renewable energy compared to the previous scheme.

WHAT HAPPENS NEXT?

A Preliminary Environmental Assessment (PEA) has already been submitted to the NSW Department of Planning (DoP) and is available on their website at www.planning.nsw.gov.au. A submission will also be made to the Commonwealth Department of Environment, Water, Heritage and the Arts (DEWHA) regarding the Environmental Protection and Biodiversity Conservation (EPBC) Act. Over the following months our focus will be on completing the environmental studies and preparing the Environmental Assessment. Once submitted, the DoP will assess the project with respect to the Part 3A (Major Infrastructure and Other Projects) planning process. It will also be assessed with respect to Critical Infrastructure legislation as the project is greater than 30 MW capacity.

PROPOSED TIME LINE

Q1 2011	**Project Studies Completed**
Mid to Late 2011	**Project Submission and DoP Decision**
Late 2011	**Engineering Design & Turbine Procurement**
Mid 2012	**Construction Begins**
	Site access tracks
	Temporary site infrastructure
	Turbine erection and crane hardstand areas
	Substation and internal electrical reticulation
End 2013	**Operation**
	Maintenance and Monitoring
End 2033	**Refurbishment or Decommissioning**



Useful Websites

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Wind Prospect: www.windprospect.com.au
Continental Wind Partners: www.continentalwind.com
Clean Energy Council: www.cleanenergycouncil.org.au

Clean Energy Council

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Have your say

If you wish to participate in the community consultation, please complete a copy of our **Public Opinion Survey** or visit us at www.sapphirewindfarm.com.au.