CHAPTER 19

Socio-Economic Assessment

19. SOCIO-ECONOMIC ASSESSMENT

This chapter, in addition to **Chapter 18** General Environmental Assessment, addresses aspects of the proposed Project beyond the key issues identified in the Director-General's Requirements (DGR's). In summary the following chapter contains sections on land value, mineral exploration, tourism, community wellbeing and Community Fund and the local economy.

19.1 Land Value

As with any property and land holding there are many factors which can influence the perceived and actual property value, including prevailing and permitted land uses, economic conditions, access/proximity to markets/workplaces and lifestyle considerations. In most agricultural areas the main determinant on property and land values is the productivity of the land.

It is commonly believed that wind farms can affect property and land values, and as such there have been a number of studies conducted to determine the relationship. However, these studies have predominantly concluded it is not possible to isolate the sole effect of wind farms on property and land values due to the myriad of factors (as outlined in the first paragraph) influencing value. By comparing the positive and negative impacts of the construction and operational stages of a wind farm to existing knowledge on what causes changes in property values, it is possible to predict the relationship between wind farms and property values.

Henderson and Horning Property Consultants (H&HPC 2006) conducted a study covering a fifteen year period into the relationship between wind farms and property/land values by assessing local property values around the operating Crookwell 1 Wind Farm in the New South Wales Southern Tablelands. The study also reviewed other overseas wind farms to compare with the Australian market. The United Kingdom perceptual study conducted by the Royal Institute of Chartered Surveyors (2004) concluded that the main negative impacts were from visual impact, fear of blight (see **Section 19.1.1** below) and proximity of a property to a wind farm. The conclusions from H&HPC relevant to this Project are:

- That agricultural productive capacity of the land subject to the wind farm and the surrounding property is not in any measured way affected by the wind farm;
- The associated property has additional revenue and benefits from the lease agreement, improved roads, erosion control and passive wind protection for stock from the substation and turbine towers;
- The future development of the land under existing planning controls would continue as zoned 1(a) Rural Zone;
- The wind farm development has the potential to slow down the shift of productive agricultural land to rural residential use in the short to medium term;
- There was no measurable reduction in values of properties that have a line of sight to the Crookwell 1 wind farm; and
- Soils, improvements and access to services are more important drivers of property values than visual impacts.

A recent publication in the Cooma-Monaro Express also reflected the findings of the above study. In a study conducted by the Real Estate Institute of Australia and several other real estate agents

operating in locations with wind farms in Australia, including Gippsland and Albany, were interviewed to see if wind farms did influence property/land values. All interviewed agents replied that "there is no indication of any depreciation in the value of properties hosting wind farms, or those adjacent to, or in sight of turbines" (Nuridin 2009). In fact according to some agents the Albany the wind farm is used as a marketing tool and in Ararat the wind farm has caused the town to prosper (Nuridin 2009). Further information on the relationship between wind farms and land values in Australia should be made available pending the NSW Valuer General finalising a report on the impacts of wind farms on surrounding land values in Australia.

The value of land suitable for subdivision could also be affected; however this is not considered a concern in relation to the Boco Rock Wind Farm as discussed in **Chapter 4** Project Justification. In summary there have been no applications or approved subdivisions in either Council within the immediate area surrounding the Project site. Moreover Council planning controls are set to limit the properties which can subdivide in the future. Conversely, due to the additional revenue to associated landowners, subdivision is less likely to occur in the short to medium term and the land will continue to be used for sheep and cattle grazing.

Some surrounding landowners have raised the concern that construction and operation of the wind farm will decrease the number of potential buyers within the market, which in turn could diminish property values. As already discussed, there are many factors that influence an individual's decision when purchasing a property and the presence of a wind farm may or may not have an influence on this decision. For example, a potential buyer may seek a life-style with a green energy aesthetic.

However, it should be noted that the Project cannot be developed without some risk of property value impacts during construction and operational phases, as personal perceptions and tastes will likely come into play. Due to the difficulty in assessing the real impacts on property values there are no suggested mitigation methods to apply. However as the Community Wellbeing and Local Economy (**Sections 19.4** and **19.5**) can be positively affected by the Project, such effects can be considered to contribute to the mitigation of any loss of property value that may occur.

19.1.1 *The Concept of "Blight"*

Compensation for "blight", relating to the loss of future property value or from loss of amenity, was scrutinised in the Land and Environment Court in the case of Taralga Landscape Guardians Inc v Minister for Planning and RES Southern Cross Pty Ltd, 2007. The Taralga Landscape Guardians Inc sought compensation in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991* New South Wales (NSW). However the proposition presented a number of insurmountable hurdles according to Chief Judge, Justice Preston.

The Taralga Wind Farm was proposed by a private developer on land where the development was permitted. The Chief Judge summarised that if the concept of blight and compensation were to be applied to the Taralga project, then any otherwise compliant private project which had some impact in lowering the amenity of another property would be exposed to a claim. The Chief Judge went further in saying that:

> *"Creating such a right to compensation would not merely strike at the basis of the conventional framework of land use planning, but would also be contrary to the*

relevant objective of the Act, in s 5(a)(ii), for 'the promotion and co-ordination of the orderly and economic use and development of land'".

The resulting decision from the Taralga judgement is relevant to the Boco Rock Wind Farm, as the Proponent has leased the land for a permitted land use.

19.2 Mineral Exploration

19.2.1 *Existing Situation*

The proposed Project is located in the Lachlan Fold Belt. Local geology predominantly consists of distal marine sedimentary units, deposited between the Ordovician and earliest Silurian. Quartz-rich turbidites (quartz >65 %) form a major component of these units (Department of Primary Industries (DPI) 2009).

There are no mineral drill holes or metallic mineral deposits recorded on-site. There are four mineral sites occurring along the MacLaughlin River with the major commodity being sapphire. However the sites are not operating and have never been worked. There are two current mineral exploration titles held by Volcan Australia Corporation Pty Ltd (Volcan) (Title Number 7293, 7294) for non-metallic minerals and one mineral title application by Geogen Victoria Pty Ltd (Geogen) (Application Number 3631) for geothermal substances (DPI 2009) over the Study area.

North of the Project site there are eleven mineral drill holes with records of gold, silver, copper, lead, zinc and arsenic. There are two metallic mineral deposits with gold, silver and copper as commodities. There are six major industrial mineral sites, however only the Nimmitabel Basalt Quarry by GC Schmidt Pty Ltd runs continuously, with the Nimmitabel Pit and McCarthys Pit, Warregal Corner extracting granite intermittently (DPI 2009).

The closest exploration site from the NSW DPI January 2009 is Harnett, north of Cooma, which is believed to have 4.63 million tonnes at 2.9 grams per tonne of gold-equivalent.

19.2.2 *Potential Impacts*

The Project has potential to inhibit any current or future exploration of the area for mineral resources during the construction and operation phases. To determine the degree of potential impact, the Proponent contacted Volcan and Geogen, and provided each company with information relating to the proposed Project.

During the operation of the Project mineral exploration can still occur around the wind turbines and associated infrastructure, and the upgrading of roads can assist in the matter. There will be a limit on the proximity such activity can occur to a wind turbine, to prevent any instability in ground conditions leading to turbine failure.

Both Volcan and Geogen have advised that the locations of the proposed wind turbines do not appear to adversely impact their licences and that they have no objections to the proposed Project.

Cumulative Impacts: An assessment of cumulative environmental impacts considers the potential impact of a proposal in the context of existing developments and future developments to ensure that any potential environmental impacts are not considered in isolation. It is anticipated that there

will be no cumulative effect to mineral exploration from the introduction of the proposed development into the area.

19.2.3 *Management and Mitigation*

The Proponent will continue to liaise with Volcan and Geogen and provide updates of any modifications to the Project design that arise during the construction of the Project and also at the time of decommissioning, communicate with associated landowners and mineral title holders that may wish to retain roads.

19.3 Tourism

Wind farms appear to be generating great public interest, as experienced in many regions of Australia, including the Esperance and Albany Wind Farms in the southern region of Western Australia, Windy Hill Wind Farm near Ravenshoe, Queensland and Lake Bonney Wind Farm near Tantanoola, South Australia. Tourists are able to drive around these wind farms, and even walk up to a turbine at the Albany Wind Farm. Wind farms are even appearing on top destination lists with the Albany Wind Farm, Western Australia voted number 16 out of 20 and it is believed that more than 100,000 vehicles visit the wind farm annually (MAP Marketing 2008; Verve Energy 2008).

With the potential for increased traffic from visitors to the wind farm, other economic opportunities exist through activities such as wind farm tours, souvenirs, food and drink, accommodation, etc. which could form the basis of a wind tourism industry. Similarly, increased visitor numbers attracted by the wind farm could result in increased exposure to other local attractions and amenities.

The annual report from the Cooma-Monaro Shire 2007-2008 strategic service objective is to "Actively promote Cooma-Monaro and the wider region as a vibrant holiday destination". Over the past few years there has been a decrease in visitor numbers and accommodation reservations. To try and change these figures the Cooma-Monaro supports and co-ordinates events held across the Monaro, including:

- Australia Day celebrations;
- Annual street fair;
- Cooma show;
- Nimmitabel show;
- Numeralla folk festival; and
- Bi-annual Cooma Show and Shine Car Exhibition.

Other events held near the area which have the potential to increase visitor numbers to the region include the "*Bredbo ute muster*" and "*Bredbo sheep dog trials*". Bombala, also known as platypus country, has a focus on eco-tourism, motorcycle and heritage tourism, with a feature recently at the Sydney Motorcycle Show (Bombala 2008).

The Project will have the potential to increase visitor numbers to both councils, as demonstrated with other wind farms in Australia. However, as the Project occurs on private land, tourists will only be able to access the wind farm from public roads. If increased traffic is recorded within the area, a parking/stopping bay to provide a vantage point for the wind farm could be considered by the Proponent, subject to the suitability and availability of land. The Project fits with the Cooma-Monaro

Shire's strategic service objective as the Project will add to the potential to attract tourists to the area during off-peak season, as the wind farm will be operational throughout the year. The Project will also accommodate Bombala's goals and provide another attraction for visitors to the region.

19.4 Community Wellbeing and Community Fund

19.4.1 *Existing Situation*

The Regional State of the Environment Report (SoE) 2004 for Cooma-Monaro Shire and Bombala Councils describes the state of community wellbeing via a range of factors, which are listed in **Table 19.1**. Nimmitabel is not listed in the SoE, however it shares factors with both councils, including a declining population, decrease in full-time employment and unsealed roads in poor condition.

Table 19.1: Community wellbeing factors

	Enhancements	Issues
Cooma-Monaro Shire	Drinking water quality	Accommodation for increasing ageing population
	Crime statistics suggest relatively safe place to live	Decrease in full-time employment
	One public hospital and a community health centre	No tertiary studies available
	Infrastructure is in a reasonable condition overall	Unsealed roads in poor condition
	Population grew in number and age	Limited public transport
	Ownership of motor vehicles increased	Barking dogs
Bombala	Drinking water quality	Population decline and increased ageing
	No major noise problem	Decrease in full-time employment
	Infrastructure, except for roads, is generally in a satisfactory condition	Limited post secondary education
	One hospital in Bombala and one multi-purpose centre in Delegate	Declining road infrastructure
	Use of private vehicles	Limited public transport

Source: Adapted from SoE 2004

19.4.2 *Potential Impacts*

Community wellbeing will be positively influenced by the Project during the construction and operation phases in a number of ways, including:

- A short term increase in population during construction due to the work force;

- A potential increase in population during operation due to increased money in the economy, which supplies infrastructure;
- A small increase in full-time employment during operation for a select skilled workforce;
- With increased money in the economy and increased population, the potential for improved tertiary study; and
- The upgrade of roads to accommodate heavy vehicles during construction.

There will also be an increase in the number of jobs available in the area during the construction of the Project. At the Snowtown (Stage 1) Wind Farm in South Australia, which has 47 wind turbines and an installed capacity of 98.7 MW, there was an average of 55 to 65 workers on-site each week. Overall it is estimated that there were 130 people hired directly over the construction of the Project, including contracted companies (personal communication Campbell 2009). The Boco Rock Wind Farm will have more wind turbines and a greater installed capacity, which could result in more people hired during the construction phase of the Project.

Cumulative Impacts: An assessment of cumulative environmental impacts considers the potential impact of a proposal in the context of existing developments and future developments to ensure that any potential environmental impacts are not considered in isolation. It is anticipated that there will be no adverse cumulative effect to community wellbeing from the introduction of the proposed development into the area.

19.4.3 *Management and Mitigation*

The Proponent is committed to providing a Community Fund to benefit the local area in the vicinity of the Project. The purpose of the fund is to support community groups, programmes and activities that community values or requires support for. Such programmes have been successfully established for Wind Prospect developments in South Australia and in the United Kingdom.

The Proponent is proposing to contribute $2,500 per wind turbine into a Community Fund as each stage of the Project commences commercial operation, as outlined in **Section 3.9.2**. Contributions will continue annually for the lifetime of the Project until such date that the Project ceases operation and is decommissioned. Based on the two layout options proposed for the Project this could total $267,500 to $312,500 per annum, equating to $5.35m to $6.25m over an estimated 20 year Project life.

Possible options for the structure and administration of the Community Fund include, but are not limited to:

- The fund split between the two Councils;
- The fund managed by a publicly-elected group;
- Funding to sporting clubs, infrastructure, education, etc;
- Funding to local environment and cultural heritage projects; and/or
- Variable funding to groups based on their proximity to the Project.

With the addition of the Community Fund and other secondary effects from the construction and operation of the Project, both Councils and Nimmitabel are expected to experience an overall increase in community wellbeing.

19.5 Local Economy

19.5.1 *Existing Situation*

As previously discussed the Project occurs within two Councils, the Cooma-Monaro Shire and Bombala. Therefore any existing or potential impacts will be associated with these two Councils. According to the SoE 2004, both Councils had negative annual changes to Gross Regional Product. **Table 19.2** shows the industry outputs of both councils for 2001, which revealed Bombala's main industry as agricultural and forestry services and Cooma-Monaro Shire's main industry as business services. However in the Cooma-Monaro Shire the majority of people were employed by the retail industry.

Table 19.2 Industry outputs for Cooma-Monaro Shire and Bombala Shire, 2001

Industry	Cooma-Monaro Value ($ million)	Bombala Value ($ million)
Mining	0.8	0.4
Agricultural and forestry	29.6	31.5
Manufacturing	28.1	9.1
Business services	77.5	11.8
Tourism and hospitality services	20.3	4.8
Retail	35.2	6.2
Other output	159	18.3
Government/Education	48.5	9.5
Total	**398.8**	**91.6**

Source: Adapted from SoE 2004

19.5.2 *Potential Impacts*

Of all the stages of a wind farm development, the construction and decommissioning stages of the Project will generate the largest economic gain for the greatest number of people and businesses in both Council areas. This is due to the hiring of a large temporary work force over approximately two years of construction and one year of decommissioning. Employment opportunities would involve concreting, earthworks, steel works and electrical cabling during construction, with demolition and removal during decommissioning. Indirect employment opportunities would involve food industries, fuel, accommodation and other services that contractors would require coming to the area. Where possible the Proponent will source from local companies (as has commonly been the case with other wind farm developments around Australia), which is likely to include the utilisation of the nearby quarries during construction.

There will be some short-term impacts during construction, such as modified grazing activities of associated landowners. However, all associated landowners will be compensated for any potential impacts and therefore localised negative economic impacts will be minimised.

During the operation of the wind farm there would be a small number of permanent jobs available. The Community Fund as discussed above and in **Chapter 4** Project Justification, would also provide financial benefits and improved equity to the surrounding communities, improving the existing economic situation.

Cumulative Impacts: An assessment of cumulative environmental impacts considers the potential impact of a proposal in the context of existing developments and future developments to ensure that any potential environmental impacts are not considered in isolation. It is anticipated that there will be no adverse cumulative effect to the local economy from the introduction of the proposed development into the area.

19.5.3 *Management and Mitigation*

To ensure that the local Councils benefit from the construction of the Project, local contractors will be used where it is feasible. This will involve the Proponent liaising with local industry representatives to utilise the full potential of local resources. A number of local businesses have already made themselves and their services known to the Proponent.

19.6 Proposed Transmission Line

The proposed transmission line will be assessed apart from this EA under Part 5 of the *EP&A Act*. Impacts relating to land values, mineral exploration, tourism, community well being and the local economy are considered to be similar to those associated with the Boco Rock Wind Farm development.

19.6.1 *Cumulative Impacts*

The proposed transmission line development will occur in parallel with the planned upgrade to the existing 66 kV network as described in **Chapter 3** Project Description and the Boco Rock Wind Farm. It is anticipated that there will be minimal cumulative impacts to the issues addressed in this chapter from the introduction of the proposed transmission line into the area. However, if necessary, an assessment will be included in the Review of Environmental Factors for the transmission line.

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