

Executive Summary

ES1 Introduction

This Environmental Assessment (EA) supports a Major Projects Application for the construction and operation of a wind farm (a power station that generates electricity from wind energy) to be located in the Southern Tablelands near Tarago, NSW. The project is known as the Capital Wind Farm.

The proponent for the project is Renewable Power Ventures (RPV), an Australian developer and operator of renewable energy assets. Renewable Power Ventures operates the 89.1 megawatt Alinta Wind Farm in Western Australia and is seeking to develop further renewable energy projects.

This EA has been prepared for Renewable Power Ventures by Connell Wagner PPI. It addresses the Director-General's requirements (Department of Planning (DoP)) for the scope and content of the EA. In addition, it addresses issues specified by relevant stakeholder agencies, including Palerang Shire Council, and the Department of Environment and Conservation (DEC) and issues raised during community consultation.

The wind farm site is located on the Great Dividing Range about 12 kilometres south-west of Tarago. It is located on a number of rural properties that have been extensively cleared and are predominantly used for grazing sheep. The site is entirely within the Palerang Shire Local Government Area.

The project involves the installation of 63 wind turbines each with a capacity of about 2.1 megawatts. The wind turbine structures comprise a three bladed rotor of about 88 to 90 metres diameter mounted on a steel tower. The top of the blade sweep is about 124 metres above ground level. The turbines will be linked by underground cables and an overhead transmission line to a new substation where the output voltage will be raised from 33,000 volts to 330,000 volts for connection to the existing electricity grid. The wind farm layout, including the locations of the 63 turbines, the substation, underground cable and overhead line routes and access tracks together with construction facilities, is shown in Figures ES1 and ES2.

Construction works will include:

- the forming of about 33 kilometres of access tracks
- a facilities building and substation
- trenching for installation of about 20 kilometres of underground cables
- a twelve kilometre section of internal overhead transmission line
- footings for the wind turbines and erection of the wind turbines
- removal of two existing wind monitoring towers and installation of six short term and four permanent wind monitoring towers

The construction will be followed by removal of temporary facilities and restoration of the site.

ES2 Project Objectives and Alternatives Considered

Renewable Power Ventures has identified wind energy as a technically and commercially viable renewable energy technology that is supported by government to foster the development of renewable energy projects and reduce Australia's greenhouse gas emissions. The Federal Government's Mandated Renewable Energy Target (MRET) aims to achieve 9500 gigawatt hours (GWh) per year of new renewable energy by 2010.

The Capital Wind Farm has been chosen by Renewable Power Ventures as the most suitable wind energy site for development after consideration of a range of potential Australian sites. Each site was reviewed in terms of the technical, environmental, social and commercial factors relating to its development.

A range of design variables has been considered during the planning of the Capital Wind Farm with initial planning considering ten properties and a variety of layouts and connection options. The estimated number and type of turbines and the initial wind farm layout have been determined through comprehensive analysis of wind monitoring data and wind energy modelling together with commercial and environmental considerations and community consultation.

The final design will be confirmed following assessment of final energy studies and site conditions and in accordance with project approval conditions. The assessment presented in this EA includes discussion of the potential for variation in specific design parameters. It is anticipated that the impacts will be in accordance with this EA or in some cases may be less, due to the conservative nature of the assessment.

A range of alternatives has been considered for the grid connection and the proposed connection arrangement to an existing 330,000 volt transmission line has been confirmed as the only feasible arrangement. The connection will require the construction of a new 33,000/330,000 volt substation adjacent to the existing line.

ES3 Project Description

The project involves a total of 63 wind turbine generators each capable of generating about 2.1 megawatts of electricity. The wind turbines will be located in three groups about 12 kilometres south-west of Tarago.

Each turbine will comprise a footing, supporting tower, a wind turbine comprising three blades and a nacelle that houses the turbine shaft with gearbox, generator, hydraulics, motors, brakes, electronic control and communications equipment and lubrication systems. A generator transformer will be located near the base of each tower to raise the generator output voltage from 690 volts to 33,000 volts.

The turbine footings will comprise a reinforced concrete block about 15 metres by 15 metres and about 1.25 metres thick. The base of the footing will be about 2 to 3 metres deep and will be back-filled with soil.

The tower will be constructed from four sections of about 20 metres length each. It will taper from about 4.5 metres at the base to about 2.5 metres at the top.

Each of the turbine blades will be about 44 metres long and weigh about 10 tonnes. The turbines will have a hub height of about 80 metres and a rotation speed of about 15.5 revolutions per minute. The turbine operation will commence at a wind speed of 4 metres per second (14.4 kilometres per hour) and cut out at 25 metres per second (90 kilometres per hour). The turbines will be designed to operate automatically and will also be able to be monitored and controlled remotely. A small on-site work force of about eight staff will be maintained for inspection and maintenance purposes.

Associated works include a substation, facilities building, temporary and permanent wind monitoring towers, underground cables, a twelve kilometre internal overhead power line and access works. The substation and facilities building will be located toward the south of the largest group of turbines adjacent to the existing 330,000 transmission line to which the wind farm will be connected.

Electrical works will involve about 20 kilometres of 33,000 volt underground power and control cables, about twelve kilometres of 33,000 volt overhead line, a 33,000 to 330,000 volt substation containing a transformer with rating of about 135 MVA, switchgear and control and communications equipment.

Access to the site will be via Goulburn and Tarago with the bulk of traffic using Collector Road and Taylors Creek Road to reach entrances to Grose Hill (via Western Leg Road) and Hammonds Hill off Taylors Creek Road near Nardoo. On-site access will be by unsealed tracks that involve upgraded existing tracks or new tracks.

The construction stage of the project will continue for about 8 months and will involve:

- the delivery of equipment and materials to the site
- provision of temporary office and batch plant facilities
- earthworks for turbine footings, the substation and facilities building and access tracks
- erection of the 63 turbines, the facilities building and substation structures
- removal of two existing wind monitoring towers
- erection of six short term and four permanent wind monitoring towers
- trenching and installation of underground cables
- construction of a twelve kilometre overhead transmission line.

The construction stage of the project shall be subject to an Environmental Management Plan (EMP) that will incorporate controls to address the identified potential environmental impacts.

ES4 Planning Context, Approvals and Consultation

Development consent is being sought for both the construction and operation of the Capital Wind Farm pursuant to Part 3A of the NSW Environmental Planning & Assessment (EP&A) Act. As the project is an electricity generation station that will be able to generate in excess of 30 megawatts of electrical power it represents a designated development. Also under the State Environmental Planning Policy (Major Projects) it is listed as a major project that is subject to Part 3A of the EP&A Act. Assessment under Part 3A of the EP&A Act requires an Environmental Assessment to support the Major Projects Application. The Director-General of DoP has specified the matters to be dealt with by the EA. The Consent Authority for the wind farm project is the NSW Minister for Planning.

The Capital Wind Farm will also constitute scheduled premises under the NSW Protection of the Environment Operations Act and an Environment Protection Licence will be required for both the construction and operation stages of the wind farm development.

The Development Application will be assessed by DOP as integrated development and the referrals and approvals required under integrated development will need to be obtained as part of the development approval process.

It is likely that the project will be referred to the DEC in relation to issues related to noise, air, water, Aboriginal heritage and flora and fauna and to the Department of Natural Resources (DNR) in relation to soil conservation and native vegetation aspects. The DOP will assess the project in relation to planning matters and is likely to seek advice from Palerang Council with regard to local planning issues.

Chapter 4 includes a review of the project against the relevant Local Environmental Plans and relevant environmental legislation and sets out the program of consultation implemented for the project.

ES5 Existing Environment

The existing environment relevant to the project is described in Chapter 5 and in subsequent chapters that deal with specific environmental issues.

General Setting

The proposed development is located in an inland rural location that has been extensively cleared and has a predominantly pastoral land use. The development does not preclude the existing land use and it is anticipated that the landowners of the properties will continue to graze sheep and other stock on their properties.

Climate

The climate of the Capital Wind Farm site is a function of its inland elevated location. Rainfall is about 630 mm per year and averaged over the long term, is spread fairly evenly through the year with slightly lower rainfall during winter. Lower solar incidence and evaporation in winter means that soil moisture can be greater in winter months. Mean daily temperatures for Canberra Airport vary from a maximum of 32 °C in January to a minimum of –0.3 °C in July. Snow is possible during winter months. The site has high average wind speeds with the most prominent direction from the north-west followed by the east and the west. The site has a sufficient wind energy resource to support the development.

Air Quality

The air quality of the wind farm locality is not significantly affected by industrial or vehicle emissions. The main impacts on air quality arise from dust storms or bush fires. The construction stage will involve a range of earthworks that have the potential for dust generation. Accordingly, the Environmental Management Plan (EMP) for the project will incorporate controls to minimise dust emissions.

Site Geology

The geology of the wind farm site comprises predominantly intrusive igneous rocks for much of the site. Ordovician metasediments are present for parts of the development. The geology does not present any impediments to the construction works but does exhibit considerable variation. A geo-technical study has been undertaken during planning of the site works and siting of the wind turbines.

The development of the wind farm does not conflict with any existing plans to develop mineral resources. The Dalton-Gunning area to the north of the site has one of the highest frequency of earthquakes in eastern Australia. The turbine towers and footings will be designed to withstand the appropriate seismic loading.

Soils

The soil types of the site relate closely to the geology of the underlying rocks and factors such as slope, aspect and drainage. Some of the soils that may be encountered by the project are classified as having high to very high erosion hazard. The project EMP will include a Soil and Water Management Plan that has appropriate erosion and sediment controls. With the proposed management measures, it is anticipated that the project can be implemented without exacerbating existing areas of erosion and in some cases the repair of areas of existing erosion using excess spoil excavated from turbine footings and revegetation, may be achieved.

Water Resources and Site Drainage

The water issues for the project include water usage requirements and potential impacts on waterways and any aquatic ecosystems.

The project will require water during the construction stage for activities such as dust control, the concrete batch plant and plant and equipment wash down. Depending on weather conditions during construction it may be necessary to import water for the purpose of controlling dust on access tracks or at sites where earthworks are being undertaken and for re-establishing vegetation at disturbed areas. This will involve the supply of about 19.5 ML over the 8 month construction period. Several options have been identified for sourcing the water required during construction, including use of local groundwater supplies. The local groundwater resource is indicated to be large and its use by the project will have an insignificant impact on the resource, reduces water cartage traffic on local roads and avoids competing with other users for local surface water supplies. Once operational, the project will require only a small amount of water and may be able to obtain much of the requirement from roof drainage

The project area is located wholly within the Lake George catchment area. The location of the wind farm site, in a low rainfall area and on ridges and hilltops, means that it is distant from permanent watercourses. The access tracks will have minor crossings of ephemeral creeks. These crossings will be designed to minimise impacts on the banks. Sediment controls will prevent sediment from construction earthworks affecting the site's watercourses.

The substation will be located in a valley to the south-east of the Hammonds Hill Ridge. A large transformer that will contain about 50,000 litres of oil will be installed in the substation and the substation design will include suitable measures to contain a spill or loss of oil from the transformer. The smaller generator transformers located at each turbine site will each contain less than 1,000 litres of oil and incorporate containment measures.

Land Uses

Existing land uses on the wind farm properties include grazing, residential, small areas of pine plantation and sand extraction and occasional surveying activities using Trig Stations located within the site. Similar land uses are applicable to neighbouring properties. The assessment in the EA indicates that due to the small area required for the wind farm, the current land uses will continue and can coexist with the wind farm. It is possible that some disruption to grazing activities on the wind farm properties may occur during the construction stage of the project.

No turbines will be constructed on the Crown Land associated with Osborne Trig Reserve, however a licence will be sort for access and underground cabling across the reserve. The Osborne and Red Hill Trig Stations are close to the proposed construction works and both will be fenced off to prevent disturbance.

Utility Services

The wind farm development requires construction of a new 33,000 volt to 330,000 volt substation to connect the wind farm to the existing 330,000 volt transmission line located to the south of the wind farm site. The wind farm will draw a small amount of power from the grid when not operating. Other than electricity, the main utility service required by the wind farm will be a number of telephone lines to enable the wind farm to be remotely monitored and controlled as necessary.

Social Impact

The locality has a rural population of low density with nearby townships of Tarago and Bungendore. Pockets of small acreage rural residential areas are present in part of the areas surrounding the wind farm.

The main social impacts of the wind farm development relate to potential employment opportunities for the local population and to any potential changes to the local community that may arise from the project. It is anticipated that the project will generate either directly or indirectly a number of employment opportunities for people from the local area.

A number of neighbours to the wind farm have also expressed concerns in relation to noise, visual impacts and impacts on property values. Where possible, the project design has been modified to address concerns raised by neighbours while still ensuring that it remains viable. The project is unlikely to result in an excessive demand on local resources. A program of community consultation has been implemented with open days and direct one on one consultation with neighbours. Issues raised during that consultation have been considered by the project planning and where warranted and practicable, the project has been amended to address the issue. Consultation will be continued through the planning, construction and operational stages.

Economic Impact

The project is considered to be commercially viable and will produce income from the electricity generated. It will also provide direct income to landowners where the wind farm is located and to companies involved in the project development. The project is likely to provide a small but significant boost to the local economy related to employment and increased demand for various local services.

ES6 Visual Issues

Wind turbines are large structures that are generally located in exposed and elevated positions. As such they can be visible over a large area and visual impact assessment is a key element of the wind farm assessment.

A comprehensive visual impact assessment has been undertaken (Appendix C) that incorporates elements of landscape analysis, identification of the visual catchment and preparation of visual simulations of the wind farm (photomontages).

The visual catchment is shown in Figure 6.1 and indicates that as expected, the wind farm will be visible over a wide area. Its visual impact will reduce with distance despite it being visible. The planning of the wind farm has considered a range of aspects to mitigate the visual impact and where practicable, measures have been incorporated in the design.

The visibility of the wind farm was assessed for ten representative viewpoints spaced around the wind farm. The assessment used criteria based on the distance from the wind farm and extent of the view field angle as described in Appendix C and a photomontage prepared for each viewpoint. The viewpoints covered locations in each of the main directions surrounding the wind farm and included views from one kilometre to nine kilometres. All of the viewpoints are from public roads surrounding the wind farm. Eight of the ten viewpoints are located close to individual residences or central to a number of residences.

Based on the visibility criteria, two of the viewpoints were assessed as having high visibility. Two viewpoints with visibility assessed as low have significant numbers of turbines at distances of more than 5 kilometres.

The perceived visual impact is likely to vary between individuals depending on a range of factors. For this reason the set of ten photomontages has been prepared showing how the wind farm will appear when viewed from the ten representative viewpoints located around the site. The photomontages are provided in Appendix C and enable the Consent Authority and interested stakeholders to make their own judgement of the visual impact of the development. Computer based images of the wind farm have also been used by Renewable Power Ventures during consultation with neighbouring residents to demonstrate the visual impact for their residence location.

The visual impact of the ancillary works is minor when compared to that of the wind turbines and a range of mitigation measures have been incorporated to mitigate their impact.

ES7 Flora and Fauna Issues

The wind farm site is predominantly cleared grazing land with limited remnant native vegetation and significantly reduced habitat compared to natural bushland. The main impacts of the wind farm development relate to site disturbance during construction and, once operational, to potential for blade strike by birds or bats.

Assessments of flora and fauna values by relevant specialists and the project's impact on those values are provided in Appendices F and G and are summarised in Chapter 7.

Site surveys were conducted to identify species of flora and fauna present at the site, identify significant habitat that could be disturbed and establish the potential for the development to impact on significant flora and fauna values.

Due to the cleared nature of the properties it is possible to implement the project with minimal clearing. The location of site works will mostly involve grazing lands that have a high proportion of exotic grasses. Limited clearing of trees will be required on Hammonds Hill to enable turbine construction and access. Due to the small amount of clearing there will be a low impact on fauna habitat and on native flora. As an offset, an endangered vegetation community of Yellow Box Woodland, identified to the south-east of the Hammonds Hill Group adjacent to the Tarago-Bungendore road will be fenced off from stock for the duration of the project. If any areas of rock outcrop are disturbed, it is proposed that they be relocated to a nearby location where they can provide habitat.

An initial desktop assessment of bat fauna, that could potentially be present in the region, was undertaken by database review and inspection of the site to identify habitat present and the potential impacts of the project. This was followed by a survey of the bat species present at the site, undertaken in March 2005.

The assessments by the ecologists indicated that the development will not significantly impact any Threatened Species and a Species Impact Statement will not be required. In addition, the assessments have indicated that the project does not need to be referred to the Federal Minister for the Environment under the Environment Protection and Biodiversity Conservation Act.

ES8 Heritage Issues

The Aboriginal and non-Aboriginal heritage issues have been assessed for the wind farm site and findings of the Aboriginal heritage assessment are presented in Appendix E and heritage issues are summarised in Chapter 8.

The site survey identified five areas with surface evidence of Aboriginal relics including two artefact scatters and three isolated artefacts. In addition, six areas were assessed as Potential Archaeological Deposits (PADs). A permit for subsurface investigation is being sought from the DEC (Section 87 Application under the National Parks and Wildlife Act 1979) to further investigate the four PAD areas that could be impacted by the project. Subject to conduct and reporting of these investigations and review by DEC, a further permit may need to be sought to undertake the construction works required for the project. These stages will be undertaken in consultation with DEC and the Aboriginal stakeholders.

There are no non-aboriginal heritage items that will be impacted by the project. The Currandooley Homestead has heritage significance but is distant from site works and access tracks. Several trig stations at the site are constructed rock cairns that have heritage significance. The only one close to the construction works is Osborne Trig Station. It will be fenced off during construction works to avoid risk of damage.

ES9 Traffic and Transport Issues

The traffic and transport issues related to the construction and operation of the Capital Wind Farm have been assessed and documented in Appendix I and are summarised in Chapter 9.

The construction stage of the project involves the transport of a considerable quantity of components and materials to site. Construction activities will include use of oversize and overmass vehicles that will require special consideration and approval for use of public roads. Over 8,000 one-way truck movements and some 9,000 one-way car movements will be involved for the construction stage. About 2,900 of the truck movements relate to road base material which if sourced on-site will reduce the traffic volumes on local roads. It is also possible that water may be sourced from on-site further reducing the volume of trucks on local roads. The construction stage vehicle movements will be spread over about 8 months but it is anticipated that some disruption to local traffic will occur at times. To minimise disruption and ensure road safety a Traffic Management Plan will be developed in consultation with the local Traffic Management Committee and implemented during the construction stage of the project.

Palerang and Goulburn-Mulwaree Shire Councils will be consulted regarding use of local roads and their agreement will be sought for the traffic control measures proposed.

Once on-site, the existing access tracks will be used wherever possible and these will require minor works to upgrade them. Some new sections of access tracks will be required to access individual turbine sites and the substation and facilities building. These will be designed in accordance with the erosion and sedimentation requirements for the project and will, as far as possible, avoid the clearing of trees. Grades will be designed to suit the large vehicles accessing the site during the construction stage.

ES10 Noise Issues

The noise issues associated with the construction and operation of the Capital Wind Farm have been assessed and documented in Appendix H and are summarised in Chapter 10. The noise assessment of the wind turbines included background noise monitoring at eight Noise Sensitive Locations (NSLs) (in this case residences), noise modelling using the noise specifications for the Suzlon S88 2.1 MW wind turbine and evaluation of the potential noise impact at potentially impacted residences.

Background monitoring was undertaken at eight NSLs (residences). The results of the background monitoring and resultant objective noise criteria based on background noise data are supplied in this EA and have been used to assess noise compliance.

Modelling of the turbine noise was undertaken to determine the likely noise that could be experienced at residences at various distances from the wind farm. This involved the use of a noise spectra for the wind turbine to be used at the site. A model was selected that would give reliable and conservative predictions of the noise at selected receiver locations for various wind speeds. The computed noise levels were compared with the noise criteria developed from the background monitoring according to the procedure outlined in the South Australian Environment Protection Authority Noise Assessment Guideline as required by the NSW EPA.

The assessment has shown that predicted wind farm noise levels only exceed or equal noise objectives at three of the nearest neighbouring residence locations. The closest neighbouring residence to the turbines is Luckdale at 1.2 kilometres and it is expected that the turbines may be audible at times at this location. A slight exceedance of noise criteria has been predicted for this location although due to the conservatism of the model the actual results may be less.

Following modification of the layout and based on the conservative nature of the predictive model used, the noise impacts associated with the operational project are considered to be within acceptable limits. Post commissioning monitoring can be undertaken, if required, to confirm any impacts and a range of options to control or mitigate any unacceptable impact applied.

ES11 Telecommunications Interference

The potential for telecommunications interference associated with the operation of the Capital Wind Farm has been assessed and is documented in Appendix J and Chapter 11.

The development is unlikely to affect aircraft navigation systems or radio reception.

In the case of local television reception, broadcast services are mostly received from Canberra by satellite. Some residences which currently have poor reception of the Canberra programs due to topographic screening would not be adversely affected by the development.

An assessment of the potential for interference of television signals has indicated that reception at some residences to the north-east of the various turbines may be affected by the wind farm installation. The extent of the interference cannot be precisely defined, but may extend one to three kilometres from the wind farm in the case of UHF reception. Various options are available to address potential interference, that may be encountered, including modifications to receiving equipment, to installation of digital or satellite reception. It is proposed that Renewable Power Ventures will assess any cases of television interference and rectify the problems shown to be associated with the wind farm development.

ES12 Safety Issues

A review of potential safety issues associated with the construction and operation of the Capital Wind Farm is documented in Chapter 12. Controls will be incorporated in the relevant project management plans to ensure safe conduct of the activities arising from the project. There are no health issues likely to arise from the project.

Air Safety

The wind farm is more than 30 kilometres from an airfield using instrument landings. The height of wind turbine structures is greater than 110 metres and the Civil Aviation Safety Authority (CASA) has been advised of the proposed development. Details of wind turbine locations and their height will be provided to CASA, Airservices Australia and the Department of Defence for inclusion in their 'obstacle' databases.

Physical Safety

The type of wind turbines to be used on the site have a very low incidence of blade failures and are unlikely to present a safety risk. A range of design and construction standards apply to the wind turbine structures to ensure that they are soundly constructed and safe. In addition, automated controls are generally able to sense defective operation and shut the turbine down for inspection and maintenance. The moving turbine blades will be more than 35 metres above the ground and well clear of people or vehicles that may pass under them.

Electrical Safety

There are some 15 standards applicable to electrical systems for the wind farm. All electrical equipment will be designed, installed and operated in accordance with relevant overseas or Australian standards. Stringent regulation and compliance requirements are designed to ensure the safety of site staff and the community.

Bushfire risk is of particular concern for rural residents and the contractor will consult with the local Rural Fire Service to ensure the adequacy of the project bushfire controls.

ES13 Greenhouse Issues

An assessment of the greenhouse gas emissions for the Capital Wind Farm project is provided in Chapter 13. Generation of electricity from wind energy involves much lower greenhouse gas emissions than occurs for generation types using fossil fuels. Where the wind farm displaces fossil fuel generation with emissions characterised by the NSW Pool Coefficient, the project will result in net greenhouse gas emission savings. The NSW Pool Coefficient defines the greenhouse gas emissions per unit of energy generated for the NSW 'pool' of generators. Based on the wind farm's projected average annual generation and using the NSW Pool Coefficient, savings of about 390,000 tonnes of carbon dioxide equivalent per year could be obtained or 9.75 million tonnes over a 25 year period.

ES14 Cumulative Impact

The visual impact of the Capital Wind Farm is regarded as its most significant planning issue. The recent planning approval for the Woodlawn Wind Farm will potentially result in two wind farms located within five kilometres of each other. From some viewpoints these may appear as one wind farm. However, due to the elevated ridges running through the locality the viewfields of each wind farm will be limited. The large, sparsely populated areas of Lake George and the Collex property reduce the extent of visual impact. At a distance, the wind farms may be visible but will not dominate the broader landscape.

Mitigation measures incorporated for the construction and operation will ensure that the wind farm will not cause further erosion, degrade the ecology of the region, or cause water pollution. In terms of power generation, wind farms are regarded as one of the most benign generation types.

ES15 Statement of Commitments

The mitigating measures that are proposed for the project have been identified in the relevant sections of the EA and Appendices. A compilation of mitigation measures is provided in Chapter 15 of the EA and represents the project's Statement of Commitments required for assessment under Part 3A of the EP&A Act. EMPs will be prepared for the construction and the operating stages of the project. An outline of the Contractor's Environmental Management Plan (CEMP) is provided in Appendix K.

ES16 Project Justification

In summary, the development is justified for the following reasons:

- It utilises renewable energy to produce about 132 megawatts of electrical power
- It provides additional generating plant to assist the National Electricity Market (NEM) to be able to meet forecast demands
- By displacing generation from fossil fuels it can deliver net savings in the emissions of greenhouse gases of the order of 390,000 tonnes per year and up to 9.75 million tonnes over 25 years
- It contributes to achievement of the Federal Government's Mandated Renewable Energy Target
- When implemented in accordance with the controls identified in this document, it does not compromise environmental values at the locality, including ecological, heritage, soils and water quality. It also does not place undue stress on local resources
- It provides additional income to the landowners of the properties on which the wind farm will be located
- The development is located on cleared grazing land and is able to operate compatibly with the existing grazing operations
- The project is likely to provide a small but significant boost to the local economy, particularly associated with the construction phase of the project

- It is a commercially viable development that will assist Renewable Power Ventures to meet its business objectives
- There appears to be positive support from the general community for wind energy projects
- The project complies with the principles for inter-generational equity.

Some impacts of the project could be considered as adverse by some stakeholders including changes to the landscape of the locality and increased traffic on local roads during the construction period.

These impacts have been considered by Renewable Power Ventures and where possible the project modified to mitigate the concerns of neighbours. Overall, it is considered once the mitigation measures have been applied that any adverse impacts will be of a minor nature and outweighed by the positive longer term environmental, social and commercial benefits of the project.