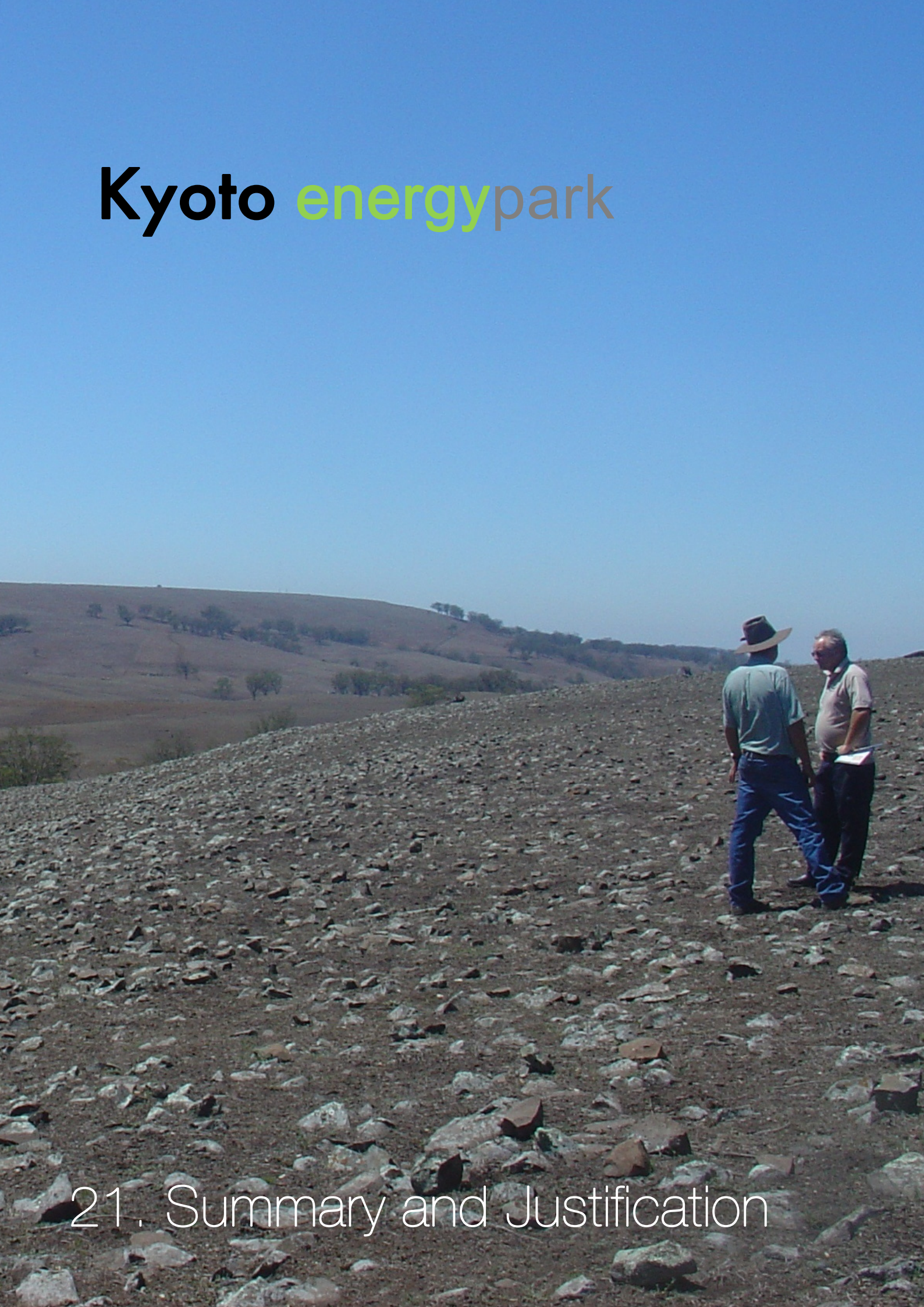
Kyoto energypark



21. Summary and Justification

21.0 SUMMARY & JUSTIFICATION

21.1 Key Strategic Planning Issues

- The Kyoto Energy Park project is a major initiative in providing large-scale renewable power and distribution for the Upper Hunter region.
- The Kyoto Energy Park will be a carbon negative project with overall energy payback period of 6 months for wind turbines and approximately 13 months for the Mt Moobi Solar PV farm. This will represent a positive step in the promotion of the use of renewable energy sources. It will help to reverse potentially catastrophic climate change.
- Ongoing employment for up to 15 operation and maintenance professionals.
- Regional multiplier effects of between 914 and 1595 job years.
- Development of a new skills sectors in the renewable energy industry within the Hunter region.
- The project combines three proven, commercialised renewable technologies (solar, wind and hydro) Solar PV offers the fastest deployment of any renewable energy technologies today
- Renewable technologies integrated in a complementary way to shave expensive peak demand
- Flexibility to easily move the peak supply as the peak demand period moves according to seasons
- Reduced peak demand resulting in infrastructure and generation savings
- Creation of jobs across various fields (e.g. research, installation, project management) during development and construction
- Significant ongoing green collar employment opportunities, including Indigenous employment, in maintenance and tourism, providing sustainable transitional employment for the Hunter region
- The project will be a source of ongoing economic contribution and revitalisation for the region
- Major tourism opportunity for the region with an on-site Visitor and Education Centre
- Generation of enough green electricity to power 62,000 homes annually
- 9.5 million tonnes of CO2 abated over the 25-year project life
- Virtually no water consumption during energy production thereby avoiding 700 million litres of Hunter water consumption reduction as compared to similar volumes of traditional energy
- Ongoing tourism benefits because of the regionally-unique scale of the project. This in turn, will aid the promotion of local area heritage and other attractions associated with the wind and equine industry.
- Opportunity to benchmark how alternate energy can be integrated into and transform, existing supply infrastructure, including opportunity to re-design that infrastructure.
- Assists both state and federal governments in moving towards achievement of greenhouse gas reduction targets in accordance with the Kyoto Protocol.

This report has addressed the requirements of the Director General of the NSW Department of Planning by providing an assessment of the site in statutory, strategic and environmental context as outlined in the Director General's Requirements.

In addition strategic justification for the project is discussed in Section 6.0 which outlines government mechanisms for renewable energy, greenhouse gas emissions savings, and key strategic planning considerations and local issues. Other Key planning considerations from subsequent discussions are summarised below and possible alternatives to the project including the 'do nothing' alternative.

21.2 Statutory Planning

A full review of the legislation relevant to the proposed project is provided in Section 4.0 of this report. It is shown that the objectives of the EPI's relevant to the subject sites and project are all consistent with the proposal.

In respect to the construction phase, a license will not be required under the POEO Act for the temporary operation of a mobile concrete batching plant on Mountain Station.

A consent under Section 75V of the EPAA and Section 138 of the Roads Act is anticipated for local road works close to the Kyoto Energy Park site. Road works would include minor works such as local road widening and repairs to facilitate the transportation of oversize and overmass vehicles to site. Consent for works within or over roads will be required under Section 138 of the Act.

The site represents an important asset in providing a renewable energy resource, contributing to Australia's commitment to the targets of the Kyoto Protocol and Federal and State Government policies aimed at reducing ad managing Australia's greenhouse gas emissions.

21.3 Site Suitability & Implications of Proposed Land Uses

A full review of the existing site in relation to the social and environmental impacts has been undertaken within this report.

Detailed investigation was undertaken to ensure the environmental constraints and opportunities were fully investigated. The key benefits of the proposed Kyoto Energy Park that were identified in this report are summarised as follows:

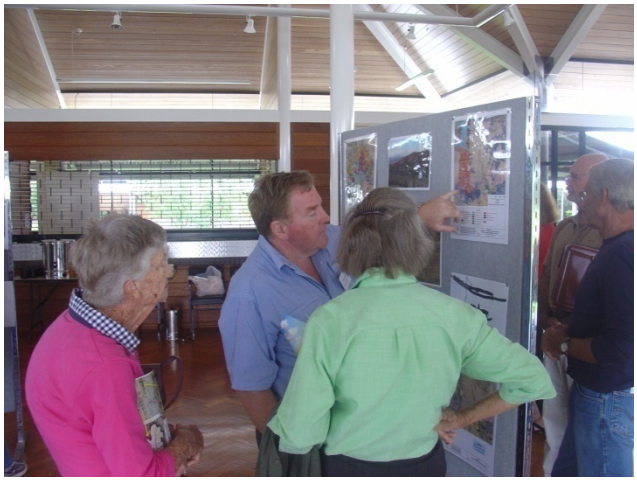
- The Kyoto Energy Park proposal will provide an additional use of the land with minimal disturbance and destruction of the existing landscape and existing agricultural and tourist activities on the properties (an optimum use of the land).
- In relation to the important sustainability issues of greenhouse gas reduction, the Kyoto Energy Park will provide a carbon-free source of energy that will replace energy traditionally generated through burning of coal. It will displace the greenhouse gas emissions associated with the production and use of electricity and will encourage improvement in the capacity of local renewable energy.
- Previous approval for wind monitoring towers on both sites has been granted. Wind monitoring undertaken by the CSIRO has been undertaken on site for over 8 years confirming the resource potential for electricity generation from wind.
- Topography and location of the sites are well suited to a variety of renewable energies as proposed. Narrow ridgelines, exposure to winds (prevailing winds are from the valley to the east and from the west), updrafts from the numerous gullies are ideal for wind energy production. Mt Moobi Plateau on Mountain Station has ideal solar access and insolation levels for solar photovoltaic applications.
- Steep gullies are present on site for storage of energy via a mini-hydro plant that will be powered from excess renewable energy during non peak periods.
- The existing land use planning provisions include for encouraging "development which is ecologically sustainable" and will not result in "adverse cumulative impact". Eco-generating works and facilities are a permitted use within the landuse zones where work is proposed.
- Steep slopes adjacent ridgelines (east and west) cannot easily be used and will not be impacted on by the project.
- General remoteness from nearby urban areas of Scone, Aberdeen and Muswellbrook and low level effects of generated noise and visual exposure of turbines to residencies. Turbine rotation noise can be managed and controlled at a single residence .
- Relative ease of access for heavy haulage vehicles to site via a back road and relatively low level of inconvenience to local road users.
- Insignificant impact on adjacent land values
- Seen as a potential tourist icon for the Upper hunter merging in and complimenting existing benign landuses such as the equine and wine industry in the region.
- No impacts to air quality in the area
- No large water requirements and associated storage capacity typical for large scale electricity production
- Negligible impact on local biodiversity and it is not likely to affect any threatened species at the limits of their known distribution.

Also importantly the subject site represents a disturbed area of grazing land relatively free of major environmental constraints. Constraints were identified which were manageable with proper mitigation techniques and environmental management procedures.

Restoration and regeneration of native species in any area that may be impacted by the proposal shall occur during the life of the project.

The Draft Statement of Commitments (Section 20.6.3) outlines how the details of theses various reports will be incorporated into future site planning to ensure the ongoing development of the site will be done in a manner which is sympathetic to the site, the wider environment and the needs of the community.

21.4 Community Feedback



The proposed Kyoto Energy Park will provide a positive contribution to the Scone and regional community in a social and economic sense. These benefits include:

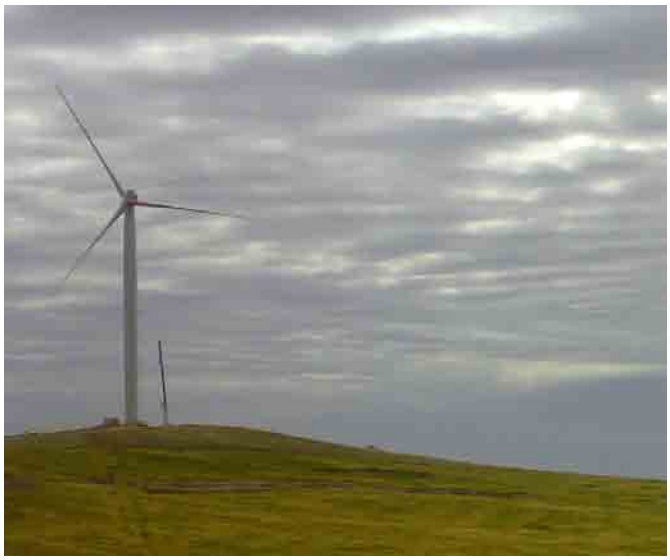
- Identify Scone as a area that is clean and free from polluting activities consistent with the area;
- Substantial capital investment associated with the development with approximately 60% (82 to 122 million) of total investment captured domestically;
- The addition of the Visitor's and Education Centre which will help as a part time education facility, developing skills in renewable technology, and contribute toward tourism in the region;
- A reduction of greenhouse gas emissions in line with Federal and State policy; and
- Increased spending in the local community through additional employment and indirect benefits.

The public have a further interest in this proposed development through their involvement in the initial stages of this application. Consultation has also occurred through media coverage, presentations, phone interviews with key organisations, consultation with residents and other forms of community consultation which has allowed the expression of views, opinions and ideas as well as feedback.

Public interest will be further maintained once the proposed Kyoto Energy Park is in operation, through the establishment of the community charter known as the Moobi Foundation. This will include seed funding and assistance in the raising of further funds to enhance and support the local community.

The main objectors to the proposal raised numerous issues, essentially being characterised by concerns for:

- Visual intrusion of the wind turbines into the landscape
- Loss of Property Values
- Bushfire risk
- Noise



This report addresses each of these concerns and any perceived negative impact does not justify non-approval of the proposal in light of the numerous and significant benefit.

21.5 Ecologically Sustainable Development & Climate Change

As a result of the initial baseline studies, undertaken as part of the Environmental Assessment of the site, a close understanding of the environmental principles of the site has been obtained. In addition the increasing need for projects to be ecologically sensitive has resulted in the concept plan being planned around the existing environmental characteristics of the site. The environmental characteristics of the site, while unique and important, support the capacity of the site to accommodate development of this type.

The proposal directly addresses the growing concern of climate change by helping transform energy generation capacities within NSW from non-renewable resources to renewable resources. This has a significant benefit by directly displacing Greenhouse Gas emissions from non-renewable generation technologies.

In 1998 Scone was identified in as a location suitable for wind energy production by the ex-Sustainable Energy Development Authority (SEDA). A wind mast was installed on site and has been monitored for a period of over 8 years confirming the wind resource for the sites. Pamada are proposing further technologies including a large-scale solar photovoltaic plant and a mini hydro plant for peak energy production and energy storage.

21.6 Consideration of Alternatives

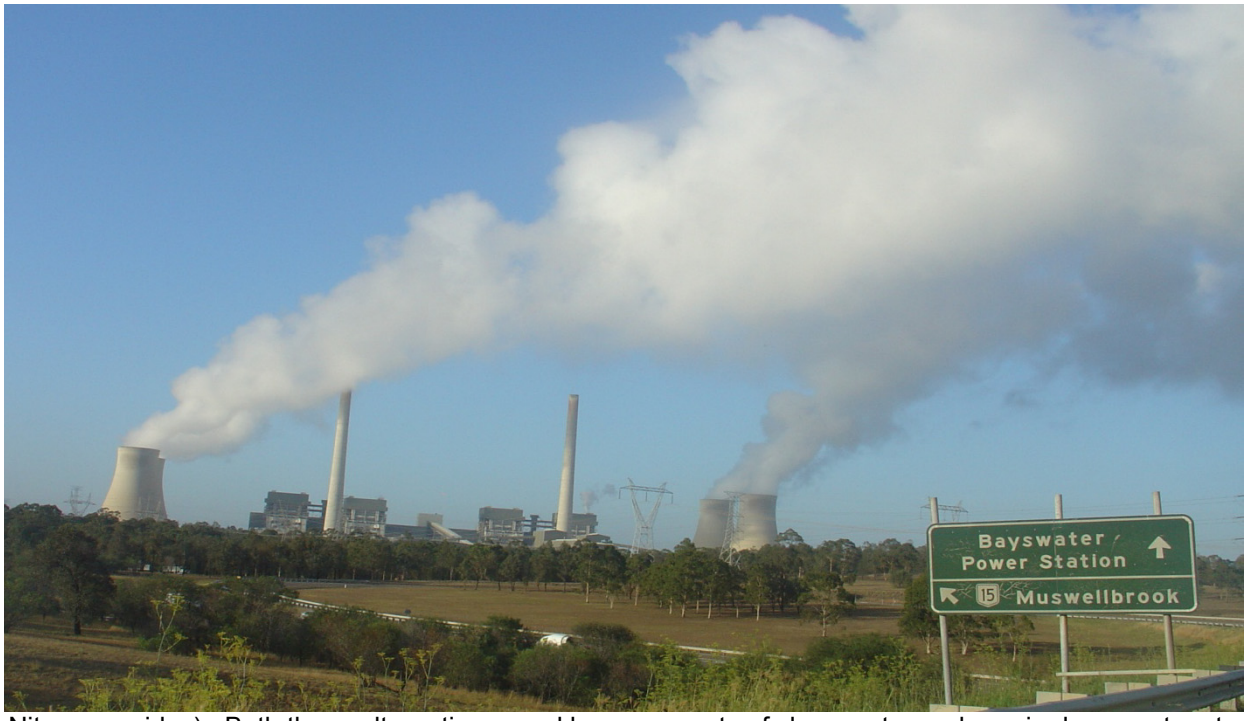
As part of the ongoing development of the site, the Kyoto Energy Park plan has been evolving as a greater understanding of the environmental and social constraints and opportunities of the site have been obtained. In order to fully appreciate the development and consider all possible outcomes, alternatives must also be considered.

21.6.1 The 'Do Nothing' Alternative

The subject site represents an excellent opportunity to advance the objectives of the Kyoto Protocol and other green house gas reduction strategies for the benefit of the environment and the community. To do nothing would continue the trend toward using fossil fuel based energy production resulting in further greenhouse gas emissions.

Without the proposed development there would be an increased fossil fuel based energy production in the region and NSW in general, mainly through increased coal mining and gas facilities. NSW currently has a large energy capacity deficit meaning that it needs to import (buy) electricity from Queensland and Victoria at reduced efficiency and greater economic and environmental loss.

Alternative electricity production capabilities in the area include the mining and burning of coal and gas resources for electricity production. Both forms of energy are non-renewable, require mining and have significant greenhouse gas emissions and other pollutants (for gas, emissions are primarily CO_2 and



Nitrogen oxides). Both these alternatives need large amounts of clean water and require large water storage for cooling.

21.6.2 Alternative Land Use Configurations

As previously mentioned the overall design of the Kyoto Energy Park project is the result of carefully examining the site, its constraints and opportunities. Given the topography and associated constraints, alternative land uses to the Energy Park and existing grazing are not feasible.

Traditional farming practices for the site are susceptible to climate change consequences of drought and water restrictions. Groundwater systems in the vicinity are already stressed to levels that are not replenishable under current use. The proposal represents and opportunity to diversify rural incomes and develop new forms of industry that is sustainable and free from polluting activities.

The overall footprint (i.e. developable area) utilized by the Kyoto Energy Park facilities is in the order of 0.5 %. Overall damage and disturbance of the landform is minimal. Alternatives can therefore be considered limited as any development would be limited to the flat areas of the site designated for components such as the batching plant, site substation and Maintenance Shed.

Upon completion of the life of generator components (solar, wind, hydro) new technology can be easily installed to replace outdated technology. Options exist for fully decommissioning generator components at the end of the project life. Wind turbine footings are buried below ground level during site restoration and can be fully rehabilitated.

21.6.3 Consequences of not Proceeding

The subject site and development plan have been shown to be beneficial to the environment while serving the needs of the community in terms of energy consumption education and employment. Some of the main consequences of the proposal not proceeding may include the following:

- Increased production of greenhouse gas emissions and other airborne pollutants from continued use of fossil fuel based energy generation;

- Increased mining activity and transportation requirements from continued use of fossil fuel based energy generation and resultant significant loss of water.
- Non-diversification of employment opportunities skills and new technologies for local and regional economies in the Hunter Region;
- Limited injection of funds into the local economy through associated construction activities and tourism;
- Ongoing economic and environmental consequences of not addressing power generation deficits within NSW.

The Kyoto Energy Park project will provide the regional community with a valuable financial injection , employment, educational considerations and benefits from tourism attracted to the area. This includes development of new skills technologies and further educational opportunities for schools and institutions.

It is envisaged that this would also have associated spending in terms of local services and accommodation.

21.7 Principles of Ecologically Sustainable Development and Greenhouse Gas Emissions

The 5 principles of ESD are:

- Inter-species Equity – the conservation of biological diversity and ecological integrity;
- Intragenerational Equity – the provision of equity within generations;
- Intergenerational Equity – the provision of equity between generations;
- The Precautionary Principle – the assumption in decision making, that there is, or will be a serious or irreversible threat to the environment; and
- The Global Dimension – the internationalisation of environmental cost.

Inter-species Equity

It is considered that given the highly disturbed nature of the site, that the Kyoto Energy Park will have a negligible impact on regional biodiversity. Additionally, the DECC have deemed the proposal is not a 'Controlled Action' under the EPBC Act 1999.

It is considered that the adverse impacts associated with the proposal are minimal in comparison to the benefits to the environment to be gained by implementing a renewable energy based electricity supply which contributes to a long term reduction in greenhouse gas emissions.

Intragenerational Equity

The benefit of the Proposed Kyoto Energy Park will be felt by all age groups as it contributes to the achievement of a cleaner environment.

Intergenerational Equity

As clean, renewable resources, rather than fossil fuels are used in the process, there are zero emissions adding to the greenhouse effect. This will aid the move toward a 'cleaner' more sustainable environment available for future generations. This will be particularly important for the Upper Hunter in general with current initiatives to increase fossil fuel based electricity production from coal and gas resources.

The Precautionary Principle

There are no unknown or unquantifiable threats to the environment associated with the proposed Kyoto Energy Park that will require a precautionary approach to be adopted.

The Global Dimension

The proposed Kyoto Energy Park will not produce any off-site impacts. In fact, the development will contribute to Australia's targeted reductions in greenhouse gas emissions under the Kyoto Protocol.

21.8 Conclusion

The proposed Kyoto Energy Park project generates electricity from green renewable resources such as sun, wind and water storage. The project will a avoid generating greenhouse gas (GHG) emissions and significant water use associated with electricity produced from fossil fuel and thermal type power stations.

In accordance with the requirements of the Director General of the Department of Planning, the proposed Kyoto Energy Park has been assessed in relation to its potential to have impact on the environment (this includes the social, economic and physical environment). This Environmental Assessment Report contains a comprehensive analysis of the likely impacts (both positive and negative) that might arise from the proposed development. It should be noted that for the purposes of evaluation of the potential for adverse environmental impacts, the worst case scenarios have been modelled.

The greenhouse effect is recognised as one of the world's most pressing environmental problems, with the consequence being significant changes in local, regional, and global temperatures. Recently there has been increasing scientific predictions and international consideration given to the need to reduce GHG emissions and the carbon intensity of energy production.

The Kyoto Energy Park Scone is a project that will significantly reduce GHG emissions and water use by displacing electricity generated by fossil fuel sources. The federal Emissions Trading Scheme (ETS) is due for implementation in 2011 following recent recommendations from the Garnaut Green Paper and just released White Paper of the federal government. Under this scheme the Kyoto Energy Park would generate 'carbon credits' which can be traded under a national carbon scheme.

During the Environmental Assessment constraints were identified and original layouts of the project components were modified based on the detailed environmental site investigation. The final layout of the Kyoto Energy Park as proposed represents a balanced position in conserving the important environmental attributes of the site while providing infrastructure required for renewable energy production.

At a level which is readily understand, the main features of this application are:

The Main Points

The Kyoto Energy Park is a genuine attempt to bring to the world, Australia, the Hunter and all its people, a path towards a clean and sustainable future.
The Kyoto Energy Park seeks to create electricity, fed into the national grid, using the completely renewable and non-impacting natural resources of wind, solar energy and gravity. By integrating the numerous technologies, the project seeks to optimise the specific characteristics of the location and make for a genuinely sustainable enterprise.

The key elements of the park are:
- **3-10MW Solar Photo Voltaic Array;**
- **42 Wind Turbines;**
- **1 MW Closed-Loop Hydro Plant; and**
- **Visitor and Education Centre**

The main benefits are:
- The natural wind and solar resources are strong and combined with elevational change, the natural attributes of the site are excellent for an integrated Energy Park;
- Demand for electricity is close by and will make the use of the electricity generated from the Kyoto Energy Park highly efficient, producing enough **green power** for approximately **62 000 households**;
- The creation of the Kyoto Energy Park provides short term and long term **employment** and creates a **new tourism** destination for the Upper Hunter;
- The **Moobi Foundation**, an initiative of the Kyoto Energy Park shall **invest into the community** of the Upper Hunter through a Not-For-Profit structure (using community leaders);
- The Kyoto Energy Park is proposed to create clean and renewable electricity and create a transition to **less reliance on the burning of coal** as the main form of creation of electricity; and
- Creation of an enterprise that may continue without the time constraint of the resource that is harvested (such as coal) running out…. Wind and sun shall continue

The main impacts are:
- The placing onto the landscape of the 42 wind turbines, creating for some, an unacceptable visual intrusion and with others a positive visual beacon of commitment to making and keeping the Upper Hunter a clean green place, without coal mines and the ecological destruction that coal mining brings;
- The overall footprint (i.e. developable area) utilized by the Kyoto Energy Park components and facilities is in the order of 0.5 % of the sites' area. Overall damage and disturbance of the landform is extremely minimal. Upon completion of the life of the generator components (solar, wind, hydro) new technology can be easily installed to replace outdated technology or fully decommissioned, without any land degradation;
- The opportunity to **remove the equivalent of 90 000 cars** off the roads in terms of greenhouse gas abatement (which includes approximately **9million tonnes of CO_2 gases** over the initial life of the proposed technology);
- The opportunity to create electricity with negligible use of water, leaving the water in the landscape not loosing it in the cooling towers of a coal powered power station - the **saving** of approximately **700million litres of potable water annually** – or the equivalent of about **12 Olympic pools daily!**;
- Clean and renewable energy production free from other air pollutants such as coal dust, heavy metal compounds, carbon monoxide, sulfur and nitrogen oxides;
- Large scale significant **investment into rural Australia**;
- **Short and Long term jobs, reinforcing the Hunter as a region of high skills in the generation of Electricity**

The main matters consistently raised by the community relate to:
- **Intrusion into their visual reference and the potential loss of property values;**
- **Support for the concept of renewable energy, but not in the Hunter;**
- **Bird strike and Bushfire risk; and**
- **Noise Concerns.**

Main Findings of the Environmental Assessment Report

- The Kyoto Energy Park is an opportunity to support environmental sustainability, renewable energy use and regional economic benefits.
- The project is an opportunity to contribute to state-wide greenhouse gas reduction and to renewable energy targets set by the Kyoto Protocol and covered under the MRET federal legislation. The project will generate 'carbon offsets' that will be taken up or traded under the Emissions Trading Scheme (ETS) which will be implemented by the Federal Government in the future.
- Wind and solar components are expected to save 317,000 tonnes of GHG emissions annually or 9.5 million tonnes over the 30 year life of the Energy Park, assisting mitigation of greenhouse gas emissions from stationary energy sources.
- The proposal is not inconsistent with the objectives of the Scone LEP 1986 and is permissible with consent in the zones applicable.
- The Kyoto Energy Park would have negligible water requirements. Generators including solar and wind do not require water for operations. The mini-hydro plant is a closed system which when charged will require minor top up allocations during maintenance.
- There were no Aboriginal artefacts of places of Aboriginal significance identified during the investigation on both sites. Areas which were likely to contain evidence of Aboriginal occupation and habitation were not identified. Aboriginal stakeholders advised that no impact to known artefacts or aboriginal cultural heritage would occur as a result of the Kyoto Energy Park proposal.
- The proposed development will not compromise any listed items of environmental heritage for works within or external to the site.
- Direct and Indirect employment will provide increased economic activity for Scone and the wider Hunter region.
- The total expected capital expenditure for the project is between 140 and 190 million dollars. Final expenditure will depend on the final generator capacity of the park. It is estimated that 60% of total expenditure would be captured domestically.
- On-going employment for the Kyoto Energy Park would be in the order of 10 to 15 fulltime equivalent jobs.
- The addition of a tourism component in the form of the Visitor Education Centre would provide further economic benefit to the Upper Hunter region and the local area of Scone.
- Noise from on-site activities will meet DECC criteria. Construction noise impacts of a minor nature (associated with the transmission line connection to the grid), can be expected during construction of these lines. Noise mitigation measures will be required only in relation to overhead power line connection activity, where power poles are to be erected within 200m of residences.
- Noise levels were predicted to exceed acceptable criteria at one residence due to the operation of some of the wind turbines on Mt Moobi (being wind turbines 27,28,29,30,31). Sector management of some or all of these turbines would occur to reduce noise levels during operation under offending wind conditions to within criteria.

Main Findings of the Environmental Assessment Report

- The scale of the proposed wind turbines will have a visual impact on some locations in close proximity to the subject sites, including Thompson's Creek Road, Middlebrook Road and to a lesser degree, areas east of Mountain Station. In high visual impact areas it is intended to carry out 'compensatory landscape' works as needed to integrate or screen wind farm elements and re-orientate views.
- The ancillary components of the proposed development will have low, easily-managed visual impact
- All turbine blades are to have a matt finish to avoid potential blade glint issues.
- The assessment concludes that no nearby houses have modelled shadow flicker of greater than 30 hours per annum and therefore shadow flicker is not expected to be a constraint to the project.
- All wind turbines proposed for Mountain Station are outside the limits defined by the OLS and all other flight procedures. Seven of the proposed wind turbines on Middlebrook Station are currently infringing airspace defined by Air Services Australia. The final turbine layout for Middlebrook Station will depend on discussions between Pamada and Air Services Australia after a more detailed evaluation of the traffic routes and aircraft procedures for Scone airport.
- Assessment revealed one (1) endangered flora population: one (1) endangered flora community and seven (7) fauna species over and adjacent to the sites. A 7-part test concluded that the proposal was not likely to have a significant impact upon threatened species, endangered populations or endangered ecological communities. No Koalas were observed during fauna surveys and there was no evidence of previous Koala habitation within the subject site.
- The proposal will include an Adaptive Management Program for the Wedge-tailed Eagle and Nankeen Kestrel. Monitoring of bird and bat species will also be undertaken during operation of the Energy Park.
- The project was determined as 'not a controlled action' under the EPBC Act by the Commonwealth DEWHA and can be approved under a bilateral agreement.
- Potential air quality impacts would be limited to the dust generation from exposed areas during construction stages of the Kyoto Energy Park project. Exposed works areas would be limited to access roads, turbine excavations, material stockpiles, minor earthworks and regrading areas. Dust mitigation measures and soil management practices will be adopted on site during construction and operations.
- There are no estuaries or lakes located within the subject site or local area and no potential threats identified in the catchment action plan. No potential adverse impacts have been identified and no further assessments/actions are required in relation to impacts on estuaries or lakes.
- Two (2) locations within the proposed development were identified as being exposed to bushfire threat. This included the Managers residence and the Visitor and Education Centre. Bushfire threats are able to be managed through design considerations, vegetation management and on site emergency services and procedures.

Main Findings of the Environmental Assessment Report

- Coal mining potential is limited over both sites due to deep and complex coal strata. The sites have potential for long term (>15 years) coal seam gas reserves, however the Kyoto Energy Park will not precluded or sterilise any potential for the extraction. In relation to sterilisation of existing mineral/gas and gravel resources, all license holders over the properties have been contacted and have no objection to the proposal.
- The existing electricity distribution network in the Upper Hunter is currently being upgraded by Energy Australia. This includes a new substation at Scone, Aberdeen and Muswellbrook and supply networks. Under this proposal the Kyoto Energy Park will further contribute to the installation of network infrastructure in the region and supply to rural communities of Scone.
- The project sites are located on ridgelines in relatively remote locations which offer opportunities to link with existing transmission easements.
- Overhead transmission lines will be used for external connection to the grid. There are two options for connection to the grid a 66kV and a 132kV with final selection based mainly on final park capacity. The 66kV connection from the site substation to the new Scone STS consists of approximately 12.5km of external overhead transmission line. The 132kV connection would be to the existing Dartbrook Mine connection or the Muswellbrook STS (41.6km of overhead line). In addition about 8.5km of 33kV overhead line would be used to connect Middlebrook Station to the site substation.
- Most of the new line will replace existing pole infrastructure along existing road routes that have been selected to bypass built-up areas and residential zones.
- A Connection Application for connection of the Energy Park to the local grid will be lodged with Energy Australia, subject to approval of this application.
- There are no impacts related to electromagnetic interference (EMI) with microwave signals, defence and aircraft navigation signals, radio communications and mobile telephones within a radius of 50km of the two sites, as a result of the proposal. In relation to radio communications, the owners of point to multi-point type fixed licenses and essential and emergency service organisations would be contacted as part of the wider community consultation process, to minimise risks of conflict.
- Wind turbine generators have the potential to affect analogue television reception in close proximity to the site. These areas of potential impact have been identified and best practice correctional options are available and have been included in this proposal.
- No groundwater dependent ecosystems were detected on site. The construction and operations will not impact upon any groundwater systems of resources within or adjacent to the site. Water for dust control will be sourced from existing dams located on Middlebrook Station or will be trucked to site.
- The construction stage of the project is estimated at 20 months duration from commencement of works including site establishment, civil works, construction of access tracks, turbine footings and underground cabling, construction and installation of all components and ancillary facilities and transmission line connection to the grid.

Main Findings of the Environmental Assessment Report

- The erosion and sedimentation controls will be adopted during construction periods to protect soils and existing natural drainage of the site.
- The preferred port of entry for importation of solar and wind turbine components is the Newcastle Port which has the capacity for large heavy components and is the most suitable and safe point of access.
- Transportation to site is feasible. Existing heavy vehicle haulage routes were identified from Newcastle to the Kyoto Energy Park site for transportation of large wind turbine to the Kyoto site. Final routes for transportation of components would need to be approved by the RTA.
- The land surrounding the proposed Kyoto Energy Park is dominated by agricultural land, horse studs, scattered rural homesteads, lifestyle blocks, and some rural residential subdivisional developments. There is some potential for development of surrounding lots however this is mostly limited to rural lot subdivisions.
- The views of the local community have ranged from strong opposition to strong support. Those most strongly opposed to the project live closest to the proposal and have expressed their acceptance of renewable energy technologies but are concerned over local impacts such as noise, visual and potential devaluation of land. Those in support of the proposal were generally committed to “green energy” and the association with Scone as a green town.
- Given the prominence of the wind farm component, there may be an initial reduction in value to immediately adjacent residencies, based on community perception rather than actual outcomes. After a short period of time the initial effect generally reduces to zero.
- A range of Environmental Management Plans (EMPs) have been identified and should be prepared for those aspects of the development with potential risks to ensure that recommended avoidance and/or mitigation measures are properly implemented in a timely manner to the industry standards.
- Consideration will be given to the mitigation and management of health and safety risks associated with construction and ongoing operation of the facility. These risks will be managed through a series of Environmental Management Plans (EMPs) prepared prior to commencement of construction and operational activities.
- The development of this site is critical in reinforcing the need for green energy. It is ideally situated to contribute and integrate into the existing community. For these reasons the proposed development is submitted for consideration.

Kyoto Energy Park Scone is wholly an Australian Enterprise. The Management is 100% Australian.
The funding of this proposal and report is 100% Australian.
An Australian Project

This document has been produced on Options Recycled PC 100 paper.
Options Recycled PC 100 paper is manufactured with non-polluting Green Power electricity generated from wind power & using 100% post consumer waste fibre.