

Union Fenosa: Crookwell 3 Socio-Economic Report

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1 Executive Summary

General

Futureye Pty Ltd (Futureye) was engaged by Crookwell Development Pty Ltd (CDPL) to conduct a socio-economic assessment of the proposed Crookwell 3 Wind Farm Project (Project) for its submission to the NSW Department of Planning and Infrastructure (DP&I) for approval.

This submission addresses the following Director-General's Requirements issued to CDPL on April 7, 2010:

- the social and economic impacts of the project;
- local community and landowner consultation requirements; and
- details of the community benefits arising from the project.

And the supplementary Director-General's Requirements issued to CDPL on August 16, 2011:

 a comprehensive, detailed and genuine community consultation and engagement process to ensure the community is both informed of the proposal and actively engaged in issues of concern to them, and is given ample opportunity to provide its views on the proposal.

Futureye provided an initial desktop analysis of economic and social issues based on the most recent published Australian Bureau of Statistics (ABS) data, local, state and national government policies, media reports and NGO and activist websites.

Futureye also assessed CDPL's community consultation strategy and community door-knock survey and interviewed community members who were highly concerned about the wind farm operation to build a robust understanding of the community attitudes and issues regarding the Project and projected impacts.

Demographic profile

The demographic profile of Crookwell as compiled for this report is predominantly rural with very low population density. A high proportion of population of the local population is English-speaking, Australian born, educated and of working age (57.9%) with 35.4% of the population aged 55 years or over. The Crookwell area has lower than average income yet high rates of home ownership. In addition, a high proportion of persons are in the labour force and in full time employment, with 4.1% unemployed persons

seeking work. With only a relatively small total labour force of 1,079 people, agriculture accounts for more than 90% of employment.

Economic Profile and Impact Characterisation

The Crookwell 3 wind farm development has the potential to provide a positive economic contribution to the local, regional, state, and national economy as a result of the project's capital investment. This is likely to provide direct and flow-on economic benefits through permanent and temporary employment and the associated contracting, supplies and services needs of the workforce. Furthermore, it is also anticipated that the proposed development would provide flow on economic benefits in terms of employment and commercial opportunities from the economic investment along with the benefits of upskilling of the local workforce within a growing energy market. Some landowners with lease agreements are expected to benefit directly form additional income.

Anticipated visitors to the proposed wind farm development could also contribute to the ongoing development of the tourism industry to the area.

It is expected that the positive economic contributions of the project will outweigh potential negative economic impacts, such as concerns regarding impact on property prices and potential property developments (e.g. subdivisions)

Public Policy and Consultation

The assessment of the social and policy context is based on a desktop review of current local, regional and state policy initiatives associated with renewable energy, wind-farms in particular, and community concerns regarding wind farms.

The Crookwell 3 wind farm is being proposed in a complex and challenging public policy context. CDPL and UFWA's reputation is dependent on its ability to manage activist and community expectations and position itself within the public policy context as a preferred supplier of wind farms.

The proposed wind farm at Crookwell is aligned with state and federal policy commitments to shifting Australia's energy supply to a greater percentage of renewable energy power sources such as wind. Reductions in electricity sources that generate greenhouse gas emissions are anticipated to have beneficial social and economic outcomes through supporting national and international efforts to reduce the potential impacts of global warming and climate change. CDPL has taken a beyond compliance approach to consulting the community stakeholders for the Project. CDPL has developed a community consultation and engagement program aimed at providing the community with factual information about the project and gathering feedback from the community and stakeholders about their concerns and interests. These concerns and interests can subsequently be addressed in the approvals process and fed back into the project design where appropriate.

On April 28, 29, and 30, 2010, CDPL conducted a door knock community consultation survey of households within a 3 to 5 kilometre radius of the proposed wind farm. The survey found the following:

- Of the respondents who were either supportive or highly supportive, a large number still had high levels of concerns about a range of issues, including electromagnetic interference, land values and noise.
- 100% of the respondents who indicated they were neutral towards the project (representing 26% of all respondents) were concerned or very concerned about a range of issues. Given the level of concerns that existed amongst this cohort, there is significant risk that they may oppose the project if these risks are not adequately addressed.
- A number of respondents concerned about the project met as a group had their comments recorded collectively had the meetings occurred individually, the number of people opposed would have been higher.
- Opponents indicated areas where they would like to see improvements from wind farm developers, namely responsiveness, transparency, compensation, community investment and regional planning and development. This provides an opportunity for CDPL to consider these issues and respond so as to improve CDPL's standing with these stakeholders become their wind farm developer of choice.

To further inform the strategy for managing community concerns relating to the proposed wind farm, CDPL hired Futureye to interview a select group of 6 highly-concerned community members between June 14 and July 8, 2010 to further understand the issues which underpin their concerns. Due to the nature of the interviews, the context being assessed, and survey research ethics, the interviewees have not been named in this report. Futureye has synthesised these community members' views under nine (9) thematic headings. CDPL has developed responses to address concerns under each thematic heading. The thematic headings and insights which support each are presented in the following table:

Thematic Issue	Highly critical resident concerns	CDPL Response and Approach
Corporate Engagement and Information	 Inaccuracies in information presented during information days¹ and that the information provided is not necessarily what was included in the final report that was lodged with DOP. 	 Some of these criticisms may apply to the preliminary illustrations that were displayed during the Crookwell 2 information day that was held prior to the finalisation and lodgement of the modification application
	 Dissatisfaction with the company's responsiveness and feedback to enquiries they had made Approach was not particularly sensitive to issues arising between neighbours 	 Commitment to preparing accurate information that addresses the environmental assessment requirements and is relevant to community's needs Seeks to validate the information provided with the aim of ensuring it
	 Subject experts provided by CDPL did not meet the expectations of some community members on some topics (e.g. fauna) 	 Provided with the aim of ensuing it meets the community's needs through ongoing consultation Has reviewed communications with community members and sought advice on how it may better ensure its responses to the community's queries address these concerns
Health / Noise	 Noise impacting human health and the rural soundscape 	Recognition this may stem from media articles and conflicting academic reports about noise impacts on health
		Commitment to address community- specific concerns and provide information about noise related impacts
		• Commitment to hosting a forum about noise with the company's acoustic specialist as part of a future information day as well as providing the community with information sheets about noise related impacts
Wind Farm Technology	• Scepticism about the environmental benefits of wind farm technology and consider it to be an old form of technology that is inefficient and ineffective at meeting energy requirements.	 Recognition that wind power is one of the only scalable commercial forms of renewable energy that can be deployed in a short timeframe to address state, federal, and international energy challenges Commitment to provide further

Table 1: Highly-Impacted Resident Concerns and CDPL Response

¹ This was in particular reference to visual images of the wind farm layout and a perception that the images were misleading.

Thematic Issue	Highly critical resident concerns	CDPL Response and Approach		
		information about this energy source at its future community information day		
Community Development and Regional Planning	 Cumulative impacts caused by a range of wind turbines being built in close proximity to the town of Crookwell Belief the state government's regional planning should consider community impacts when approving a wind farm by approving projects in less dense areas with government-subsidised funding to extend a transmission line to connect wind turbines to existing electricity infrastructure. Criticism of some structures and governance of community enhancement funds and believe there should be a greater linkage between expenditure from the funds and the impacts of the wind farm 	 Cumulative impacts will be assessed as part of the Crookwell 3 environmental assessment. CDPL is in the process of negotiating a planning agreement under which it is proposed that: CDPL will contribute an annual monetary contribution of amount of \$1,666 (adjusted annually to changes in the CPI) per operating turbine forming part of the Crookwell 3 wind farm; and these annual contributions will be paid into a Community Enhancement Fund which will fund local projects within a radius of 20-30km of the Crookwell 3 wind farm, including projects aimed at ameliorating any impacts from the Crookwell 3 wind farm 		
Flora and Fauna	 Impacts on flora and fauna, particularly on specific bird species, such as the wedge tail eagle Bird mortality within families of birds, which can potentially impact breeding cycles and future populations 	 Commitment to monitor and developing baseline data with regards to specific bird species and communities and off-setting any potential flora and fauna impacts arising from the proposal Commitment to implementing recommendations from flora and fauna assessments undertaken as part of the environmental assessments 		
Property Values	 Wind farm proposal impacts on property values Belief dwellings cannot be constructed within 2 kilometres of a wind turbine diminishing the potential to subdivide land due to the Upper Lachlan DCP 	 Acknowledgement of potential negative and positive impacts on property prices and recognition these are generally confined to the short term due to buyer uncertainty about future developments in the region Commitment to working with the local community and council to address the underlying issues behind the DCP buffer zones in order to get a positive 		

Thematic Issue	Highly critical resident concerns	CDPL Response and Approach
		outcome for landholders interested in subdividing their land
Community Division	Belief proposed wind farm developments have created divisions and tensions within the community and that wind farm developers are not helping to address these issues	• Commitment to investigate how CDPL can provide information and engage with landholders in a manner which mitigates any potential tension caused in the community arising from the proposed wind farm development
Buffer Zones	• Enforcement of a two-kilometre buffer area between any wind turbine and a residential property	 Acknowledgement of community concerns about issues of proximity to wind farms
	• Understanding visual impacts on properties, 'look and feel' of the region and people wanting to locate in the area	• Commitment to a minimum of 1 kilometre buffer from all non-host landowner dwellings, perceived by the company as good practice
		• Commitment to implement recommendations from detailed noise and visual impact assessments undertaken as part of the environmental assessments.
Distribution of Benefits	 Neighbours perceived as being equally impacted by wind turbines receive no financial benefit, particularly prevalent where the lease recipient was absent from the property, while the non-participating neighbour was in residence 	Commitment to the Community Enhancement Program with the aim of directly benefiting the local community and the potential directly impacted landholders

Recommendations for future activities

It is recommended that CDPL progress a number of future activities in consultation with the NSW government, local council, the community at-large, and highly critical community members. In summary, the recommendations include:

- Continue to implement the current consultation strategy in a manner which ensures the further consultation, addresses the issues (including health impacts associated with noise) raised by the highly-concerned stakeholders;
- Continue to implement the consultation strategy in a coordinated, wholeof project and transparent manner throughout the planning process, construction, operational and closure phases of the project;
- Develop a robust governance structure with roles and responsibilities for the Community Enhancement Program;
- Formalise, maintain and promote a consultation register, grievance mechanism and issue resolution tracking mechanism which is integrated into CDPL day-to-day operations as well as supplier agreements;
- Establish and publicly promote a local employment and purchasing policy for preferentially sourcing labour, services and products from the local community and region wherever practicable; and
- Provide employment requirements in the pre-construction compliance report.

2 Introduction

The following report is a Socio-Economic Characterisation and Consultation Assessment required as part of Crookwell Development Pty Ltd's environmental assessment for the proposed Crookwell 3 wind farm. This report considers the socio economic impacts of the proposed Crookwell 3 wind farm, outlines the community consultation undertaken and proposed and addresses the relevant Director General Requirements (DGRs) issued by the NSW Department of Planning and Infrastructure (DP&I) [formerly known as Department of Planning].

In particular, this report outlines the following:

- Proposed project background;
- Director General's Requirements;
- Demographic and economic profile of the area surrounding the proposed project;

- Economic impact assessment of the proposed project;
- Policy context and social objectives surrounding the proposed project;
- Assessment of stakeholder concerns; and
- Social impact assessment.

In response to the Crookwell 3 wind farm proposal the NSW Department of Planning and Infrastructure has requested that the proponent fulfils the Director-General requirements listed below. The environmental assessment report prepared in support of the planning application for the Crookwell 3 wind farm proposal will address each of the issues required by the Director-General requirements.

This report addresses the following DGRs:

- the social and economic impacts of the project;
- local community and landowner consultation requirements; and
- details of the community benefits arising from the project.
- a comprehensive, detailed and genuine community consultation and engagement process to ensure that the community is both informed of the proposal and is actively engaged in issues of concern to them, and is given ample opportunity to provide its views on the proposal.

3 Background

3.1 The Proponent

Crookwell Development Pty Ltd (CDPL), a fully owned subsidiary of Union Fenosa Wind Australia Pty Ltd (UFWA), is proposing the Crookwell 3 wind farm (Project). Accordingly, CDPL is the current proponent of the Project but the proponent may, in the future, be a successor or assignee of CDPL. The total estimated project cost of the wind farm site is between \$90 million to \$110 million. Subject to obtaining the necessary planning and development approvals, construction is expected to commence in 4th quarter 2012.

The majority stakeholder parent company, Union Fenosa, was an international energy group with a presence in 14 countries worldwide and with over 12,000 employees. It has a long history of successful renewable energy projects around the world, building more than 2,000 MW of green energy capacity across: wind, solar, hydro, biomass and other renewable energy sources.

Union Fenosa Group was acquired by gasNatural (a Spanish Utility group) and together they have created a leading vertically integrated gas and electricity group that has a presence in 23 countries and employs over 20,000

staff, has installed 17,000 MW of installed electricity generatiing capacity and has more than 20 million customers. In September 2009, Union Fenosa & gasNatural organisations merged, forming gasNatural Fenosa.

UFWA still exists as an entity and has eight wind farm projects across NSW & Victoria. This portfolio represents an investment of approximately \$2 billion in renewable wind generation. Once complete, the portfolio will increase Australia's present wind generation capacity by over 1,000 MW. In addition, the portfolio will result in the creation of several hundred jobs in the construction and operational phases

3.2 The Project

CDPL, the proponent, is seeking project approval for the construction and operation of a wind energy facility to be known as the Crookwell 3 Wind Farm (the project). The project is to be located on two separate land parcels known as Crookwell 3 East (with an area of 1,100 Hectares) and Crookwell 3 South (with an area of 400 Hectares) (the Site).

The project comprises a number of elements, including:

- 30 individual wind turbines standing up to 152m at top of blade tip with a capacity of up to 3.4MW each (some of the turbines may be fitted with obstacle lighting as required);
- 30 individual kiosks for the housing of 33kV Transformers and 33kV Switchgears and associated control systems to be located in the vicinity of the wind turbine towers (in some turbine models being considered the kiosk's equipment are integrated within the tower or nacelle);
- internal unsealed tracks for turbine access;
- upgrades to local road infrastructure as necessary to provide access to the site;
- an underground electrical and communication cable network linking turbines to each other within the site boundary and then using either an underground or overhead connection between the Crookwell 3 site boundaries and the Crookwell 2 site boundary to reach the substation approved as part of the Crookwell 2 Wind Farm;
- up to 3 wind monitoring masts fitted with various instruments such as anemometers, wind vanes, temperature gauge and potentially other electrical equipment; and
- the project will also require a maximum of two temporary concrete batching plants during the construction phase only, to supply concrete for the foundations of the turbines and other associated structures.

Grid connection will be achieved via a connection to the 330kV transmission line which bypasses the site. The project will utilise and be connected to the single substation, control room and facilities for the grid connection, approved as part of the Crookwell 2 Wind Farm.

Figure 1 shows the proposed indicative layout of the project and is subject to further detailed design.

Crookwell 3 East and Crookwell 3 South may be developed in stages.

The total estimated cost of the Project is between \$90 million to \$110 million. Subject to obtaining the necessary planning and development approvals, construction is currently expected to commence in the 4th quarter of 2012.

3.3 Study Area

The Site is located entirely within the Upper Lachlan Shire Council Area. The Upper Lachlan Shire Council (Council) was formed in 2004 with the amalgamation of Crookwell Shire, Gunning Shire, and Mulwaree Shire.²

The Upper Lachlan Shire Council Area borders the Great Dividing Range in the southern tablelands of New South Wales. It is at the headwaters of two very important water catchments – the Hawkesbury-Nepean and the Lachlan River.

The Site is approximately 17 kilometres south-east of the Crookwell township and will border the existing Crookwell 1 wind farm and the approved Crookwell 2 wind farm (see Figure 1 – Locality Map). The surrounding area is undulating with some steeper slopes around incised valleys. Crookwell 3 South is bordered by Pejar Dam on the eastern side, with Woodhouselee Road providing the western boundary to Crookwell 3 East.



Figure 1 – Locality Map

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 $http://www.environmentcommissioner.act.gov.au/soe/soe 2004/UpperLachlan/population.htm \eqref{thm:soe} matching \eqref{thm:soe} and \eqref{thm:s$

4 Study Scope

The objectives of this report are to:

- establish a demographic profile of the Crookwell region using the 2006 Census Data;
- compare the Crookwell demographic profile with neighbouring localities and Australia as a whole;
- establish an economic profile of the Crookwell region;
- describe the scope of local and regional employment and economic opportunities;
- describe the potential employment and economic impacts that the proposed development could have on the Crookwell region;
- identify relevant social policy objectives of the Crookwell area and how the proposed development complements these policy objectives; and
- describe the community concerns identified during the consultation undertaken to date and outline how the CDPL proposes to address these concerns.

4.1 Study Approach

The socio-economic characterisation is limited to a desktop review of available secondary economic information sources, review of the community consultation program, interviews with highly-concerned community members, and dialogue with project managers and consultants.

To complete this report, the following activities were undertaken:

- Definition of the project area and identification of the relevant Census Collection District;
- Compilation of census data relevant to the Crookwell site;
- Compilation and comparison of key demographic indicators in relation to the Crookwell region;
- Analysis of similar wind farm development Environmental Assessments and Department of Planning determinations to inform the approach to economic and employment projections;
- Analysis of economic and employment data and description of opportunities within the local area and broader region;
- Compilation and consideration of Upper Lachlan Shire social and economic development policies (including a subsequent analysis and description of how the proposed developments can assist in the achievement of the policy objectives);
- Review of consultation activities undertaken and an analysis of community feedback received as a result of the consultation program, with a subsequent qualitative analysis of social issues that have been identified during the consultation program.

5 Director-General Requirements Summary

The Environmental Assessment (EA) provides a comprehensive assessment of all relevant environmental issues. In turn, these issues and management strategies will play a key role in determining the final wind farm layout. The EA addresses each of the Director-General's Requirements. The Director-General's Requirements of particular relevance to this report are synthesised in Table 1.

Table 1: Director-General Requirements
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Director General Requirement	Scope of Assessment
 Consultation Requirements issued on 7th April 2010. The Proponent must undertake an appropriate and justified level of consultation with the following parties during the preparation of the EA: Upper Lachlan Shire Council; Goulburn Mulwaree Council; Department of Environment, Climate Change and Water; NSW Office of Water; Department of Industry and Investment; NSW Roads and Traffic Authority; NSW Rural Fire Service; Land and Property Management Authority; Sydney Catchment Authority; Commonwealth Department of Defence; Civil Aviation Safety Authority; Aerial Agricultural Society of Australia; and the local community and landowners. The EA must clearly describe the consultation process and indicate the issues raised by stakeholders during consultation and how these matters have been addressed 	The project's community consultation and engagement approach involves informing and engaging members of the community on issues which they are concerned about. The community consultation approach is outlined in this report.
 Supplementary consultation DGRs issued on 16th August 2011. A comprehensive, detailed and genuine community consultation and engagement process must be undertaken. This process must ensure that the community is both informed of the proposal and is actively engaged in issues of concern to them, and is given ample opportunity to provide its views on the proposal. Sufficient information must be provided to the 	Each of these matters have been addressed in this report.

Director General Requirement	Scope of Assessment
community so that it has a good understanding of what is being proposed and of the impacts. There should be a particular focus on those non wind farm associated community members who live in proximity to the site;	
• the Environmental Assessment must clearly document and provide details and evidence of the consultation process and who was consulted with;	
 all issues raised during the consultation process must be clearly identified and tabulated in the Environmental Assessment; and 	1
• the Environmental Assessment must state how the identified issues have been addressed, and how they have informed the proposal as presented in the Environmental Assessment. In particular, the Environmental Assessment must state how the community's issues have been responded to.	

6 Demographic Profile

The demographic information presented in this section allows for the development of a profile of the Crookwell population, using the Upper Lachlan and Southern Tablelands areas as comparators. This profile focuses principally on the 2006 Census QuickStats. Unless indicated otherwise, all statistics referred to in this section of the report at 2006 statistics taken from the 2006 Census QuickStats.

At approximately 2,000 people, the Crookwell Township is the closest significant population centre to the site (See Figure 2 – Crookwell Urban Centre)



Figure 2 – Crookwell Urban Centre

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In order to understand Crookwell's characterisation in comparison to its surroundings, the Crookwell State Suburb Area (see Figure 3 – Crookwell State Suburb Area), Upper Lachlan Shire (See Figure 4 – Upper Lachlan Shire Statistical Local Area), and the Southern Tablelands (See Figure 5 – Southern Tablelands Statistical Subdivision) have also been assessed and analysed.



Figure 3 – Crookwell State Suburb Area

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As previously mentioned, the Upper Lachlan Shire was formed in 2004 following the amalgamation of Crookwell Shire, Gunning Shire, and Mulwaree Shire.³ The Southern Tablelands region of NSW comprises 10 Local Government Areas (LGAs) including the Mulwaree and Crookwell Shires.



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Figure 4 – Upper Lachlan Shire Statistical Area

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http://www.environmentcommissioner.act.gov.au/soe/soe2004/UpperLachlan/population.htm#m ore



Figure 5 – Southern Tablelands Statistical Subdivision

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Caution should be exercised in drawing definitive conclusions based on small sample sizes in the Crookwell State Suburb.

6.2 Total Population

Compared to its surrounding areas, Crookwell had a relatively stable population with a low population density. The population of Crookwell marginally increased from 1,929 to 1,993 between the census of 2001 and census of 2006 (see Table 2 – Total Population). However the Southern Tablelands population dropped in total from 25,092 in 2001 to 22,480 in 2006.

Census Year	Crookwell (Urban centre)	Crookwell State Suburb	Upper Lachlan Statistical Local Area	Southern Tablelands Statistical Subdivision
2001	1,929	-	-	25,092
2006	1,993	2,497	7,053	22,480

Table 2 – Total Population

Crookwell and the Upper Lachlan had low population densities of less than 0.01 people per hectare. This compares with other shires in the Southern Tablelands population which have significantly higher population densities.⁴

⁴ Australian Capital Region Population Density – ACT Office of the Commissioner for the Environment

6.3 Population by Age

Crookwell had an older population, yet retained a sizeable proportion of people who are of "working age." The median age of 44 in Crookwell and the Upper Lachlan Shire was slightly higher than the median age of 40 for the Southern Tablelands (See Table 4 – Population by Age). Furthermore, 35.4% of the population was aged over 55 years and 19.6% of the population aged less than 14 years. While the age demographics show an older population, 57.9% of the population could be considered to be of 'working age' (this is based on the ABS defined age ranges from 15 - 64). In the Upper Lachlan Statistical Local Area and Southern Tablelands Statistical Subdivision, the proportion of the population of 'working age' was 62.1% and 63.6% respectively. It is worth noting that within 10 years many people may not be of working age.

Age Cohort	Number of persons and percentage of total persons in the region			
	Crookwell State Suburb	Upper Lachlan Statistical Local Area	Southern Tablelands Statistical Subdivision	Australia
0-4	140	384	4,189	1,260,405
	(5.6%)	(5.4%)	(6.2%)	(6.3%)
5-14	349	1,028	9,865	2,676,807
	(14.0%)	(14.6%)	(14.6%)	(13.5%)
15-24	259	654	7,510	2,704,276
	(10.4%)	(9.3%)	(11.2%)	(13.6%)
25-54	866	2,628	26,262	8,376,751
	(34.7%)	(37.3%)	(39.0%)	(42.2%)
55-64	320	1,095	8,996	2,192,675
	(12.8%)	(15.5%)	(13.4%)	(11.0%)
65 years and over	564	1,263	10,528	2,644,374
	(22.6%)	(17.9%)	(15.6%)	(13.3%)
Median age of persons	44	44	40	37

Table 3 – Population by Age

6.4 Country of Birth

Crookwell residents were predominantly Australian born (see Table 4 – Country of Birth). A similar profile exists in the Upper Lachlan and Southern Tablelands areas.

Number of persons and percentage of total persons in the region				
	Crookwell State Suburb	Upper Lachlan Statistical Local Area	Southern Tablelands Statistical Subdivision	Australia
Australia	2,160	6,061	53,395	14,072,944
	(86.5%)	(85.9%)	(86.7%)	(70.9%)
England	45	173	1,785	856,939
	(1.8%)	(2.5%)	(2.7%)	(4.3%)
Scotland	16	39	559	130,204
	(0.6%)	(0.6%)	(0.8%)	(0.7)
New Zealand	14	38	255	389,463
	(0.6%)	(0.5%)	(0.4%)	(2.0%)
Germany	11	29	249	106,524
	(0.4%)	(0.4%)	(0.4%)	(0.5%)
Netherlands	7	20	233	78,927
	(0.3%)	(0.3%)	(0.3%)	(0.4%)

6.5 Indigenous Population

With regards to Indigenous population size, the percentage of Crookwell's Indigenous population was similar to the national percentage, with surrounding areas slightly below the national average. In 2006, the Southern Tablelands region had an estimated population of approximately 22,480 with the Upper Lachlan LGA contributing about 7,053 and the Crookwell Area 2,497 alone. Of the Crookwell population, 2% (54 people) are Indigenous compared with the 1.4% (98 people) in the Upper Lachlan LGA and the 1.7% (375 people) in the Southern Tablelands. The proportion of the population which is Indigenous in this region is 2.2% being slightly lower than the National average, which is 2.3%, of Australia's total population (See Table 5 – Total Indigenous Population).

	Crookwell	Percentage of Indigenous population in Crookwell	Australia	Percentage of Indigenous population in Australia
Indigenous persons (comprises Aboriginal and Torres Strait Islander)	54	2.2%	455,031	2.3%

Table 5 – Total Indigenous Population

6.6 Labour Force and Employment

A comparatively high proportion of Crookwell residents aged over 15 years were in the labour force. There were 1,079 people aged over 15 years that were in the labour force. Of these, 59.2% were employed full-time, 29.1% were employed part-time, 4.9% were employed but away from work, 2.7% were employed but did not state their hours worked and 4.1% were unemployed (See Table 6 – Labour Force Status). There were 819 usual residents aged 15 years and over not in the labour force.

In Crookwell, 4.1% (44 people) were unemployed and potentially looking for work. It is also noted that national and state unemployment rates have fluctuated since the date of the 2006 census, following the global financial crisis and the subsequent recovery.

Count of persons aged 15 years and over, and % of total labour force				
	Crookwell State Suburb	Upper Lachlan Statistical Local Area	Southern Tablelands Statistical Subdivision	Australia
Total labour force	1,079	3,341	31,603	9,607,987
Employed full time	639 (59.2%)	2,090 (62.6%)	19,060 (60.3%)	5,827,432 (60.7%)
Employed part time	314 (29.1%)	922 (27.6%)	8,916 (28.2%)	2,685,193 (27.9%)

Table 6 - Labour Force Status

Count of per	Count of persons aged 15 years and over, and % of total labour force				
	Crookwell State Suburb	Upper Lachlan Statistical Local Area	Southern Tablelands Statistical Subdivision	Australia	
Employed away from work	53 (4.9%)	125 (3.7%)	1,248 (3.9%)	337,991 (3.5%)	
Employed hours not stated	29 (2.7%)	82 (2.5%)	835 (2.6%)	253,567 (2.6%)	
Unemployed	44 (4.1%)	122 (3.7%)	1,544 (4.9%)	503,804 (5.2%)	
Not in labour force	819	1,982	19,244	5,271,116	

6.7 Income

Crookwell had a low median weekly individual income (See Table 7 – Weekly Income).

In Crookwell (Suburb), the median weekly individual income for persons aged 15 years and over who were usual residents was \$367, compared with \$466 in Australia. The median weekly household income was \$682, compared with \$1,027 in Australia. The median weekly family income was \$890, compared with \$1,171 in Australia. The lower median weekly income levels in the area may be associated with the increasing number of retirees in the area. This was noted during the Upper Lachlan Strategy 2020 Vision Workshops in June 2005.⁵

Table 7 – Weekly Income

Weekly Income	Crookwell State Suburb	Upper Lachlan Statistical Local Area	Southern Tablelands Statistical Subdivision	Australia
Median individual income	\$367	\$374	\$412	\$466

⁵ Upper Lachlan Strategy 2020 Vision Workshop Notes, June 28, 2005. Reference can be found at: http://upperlachlan.local-

e.nsw.gov.au/files/1762/File/CrookwellWorkshopNotes28June2005.pdf

Weekly Income	Crookwell State Suburb	Upper Lachlan Statistical Local Area	Southern Tablelands Statistical Subdivision	Australia
Median household income	\$682	\$731	\$842	\$1,027
Median family income	\$890	\$962	\$1,064	\$1,171

6.8 Dwelling Characteristics

Dwelling characteristics and the availability of housing may be of relevance to the development depending on the project's choice of accommodation for its construction workforce.

There was a high level of home ownership with a slightly lower than average household size. Very few private dwellings in Crookwell were rented (18.7%), and for those that were, there was a median weekly rent of \$110 which is 42% less than the Australia median of \$190 (See Table 8 – Dwelling Costs). Less than 24% of dwellings were being purchased under a rent-buy scheme in Crookwell, compared with Upper Lachlan (24.7%), Southern Tablelands (29.8%), and Australia (32.2%).

Table 8 - Dwelling Costs

	Crookwell State Suburb	Upper Lachlan Statistical Local Area	Southern Tablelands Statistical Subdivision	Australia
Median weekly rent (\$/weekly)	110	90	135	190
Median housing loan repayment (\$/month)	1,000	1,070	1,127	1,300
Average household size	2.4	2.5	2.5	2.6
Average number of persons per bedroom	1.1	1.1	1.1	1.1

The median monthly housing loan repayment was \$1,000, compared to \$1,070 in Upper Lachlan, \$1,127 in Southern Tablelands, and \$1,300 in Australia. The average household size was 2.4, slightly lower than the national average of 2.5.

There was a high level of home ownership in Crookwell. Separate houses were the predominant type of dwelling, as was the case in Upper Lachlan and the Southern Tablelands (See Table 9 – Dwelling Characteristics).

Number of dwellings and percentage of occupied private dwellings				
	Crookwell State Suburb	Upper Lachlan Statistical Local Area	Southern Tablelands Statistical Subdivision	
Total private dwellings	1,176	3,641	31,288	
Occupied private dwellings	998	2,763	26,145	
Separate house	941	2,654	23,651	
	(94.3%)	(96.1%)	(90.5%)	
Semi-detached, terrace or townhouse	37	44	976	
	(3.7%)	(1.6%)	(3.7%)	
Flat, unit, apartment	0	11	980	
	(0.0%)	(0.4%)	(3.7%)	
Other dwelling	20	45	512	
	(2.0%)	(1.6%)	(2.0%)	
Not stated	0	9	26	
	(0.0%)	(0.3%)	(0.1%)	

Table 9 - Dwelling Characteristics

Approximately 51.2% of private dwellings were not mortgaged, which was similar to the Upper Lachlan area yet significantly higher than the Southern Tablelands area (40.1%) as well as the Australia-wide (32.6%) (See Table 10 – Tenure Type).

Table 10 - Tenure Type

Number of dwellings and percentage of occupied private dwellings					
	Crookwell State Suburb	Upper Lachlan Statistical Local Area	Southern Tablelands Statistical Subdivision	Australia	
Owner occupied and not mortgaged	511 (51.2%)	1,412 (51.1%)	10,490 (40.1%)	32.6%	
Owner occupied and mortgaged (includes being purchased under rent//buy scheme)	231 (23.1%)	683 (24.7%)	7,800 (29.8%)	32.2%	
Rented (includes rent- free)	187 (18.7%)	467 (16.9%)	6,248 (23.9%)	27.2%	
Other-tenure type	12 (1.2%)	35 (1.3%)	267 (1.0%)	0.9%	
Not stated	60 (6.0%)	166 (6.0%)	1,340 (5.1%)	7.1%	

6.9 Demographic Profile Conclusion

The collective observations of the aforementioned describe a local population in Crookwell that has the following characteristics:

- rurally based with very low population density;
- a high proportion of population of working age (57.9%) with 35.4% of the population aged 55 years or over;
- English speaking and Australian born;
- educated;
- high proportion of persons in the labour force and in full time employment, with 4.1% unemployed persons seeking work;
- lower than average income; and
- high rates of home ownership.

7 **Economic Profile**

The economic profile of the Crookwell area and its surrounding Upper Lachlan area is based on insights from the demographic profile as well as online desktop research about the region.

Agriculture, as part of the larger collective industry entitled agriculture, forestry and fishing is the major economic activity of the Upper Lachlan Area, with other economic activity driven by tourism and small business. The economic profile is reflected in data relating to Crookwell, where the predominant industry of employment is agriculture. With only a relatively small total labour force of 1,079 people, agriculture accounts for more than 90% of employment in Crookwell.

	Number of businesses			
Industry	Non employing	Total employing	Total	
Agriculture Forestry and Fishing	225	273	498	
Manufacturing	6	6	12	
Construction	15	27	45	
Wholesale Trade	6	12	18	
Retail Trade	9	27	36	
Accommodation Cafes and Restaurants	12	9	21	
Transport and Storage	9	9	18	
Communication Services	0	3	3	
Finance and Insurance	9	0	9	
Property and Business Services	30	18	48	
Education	3	0	0	
Health and Community	3	6	9	
Services	3	0	9	
Cultural and Recreational Services	0	0	0	
Personal and other Services	3	3	6	
Total All Industries	330	393	723	

Table 11 – Mix of Businesses in the Crookwell Postcode

Source: Counts of Australian Business 2007 (ABS Cat 8165.0)

7.1 **Economic Base**

The Upper Lachlan Shire's economic base is primarily agriculture specifically wool, lamb, beef cattle, potatoes and certified seed potatoes.⁶ Some agricultural processing and value-adding also exist. The Shire has a strong and well-regarded agricultural sector which gives its local economy a solid foundation. Manufacturing also contributes to the shire's economic base. There are pressures within the shire for industries seeking to maintain competitiveness and productive capacity, particularly for labour-intensive manufacturing industries and some migration of industry out of the Shire has occurred. Consolidation of agribusinesses has also had an impact on the economic base within the shire with larger landholdings required to sustain employment levels⁷.

Due to changes in landholding and subdivision patterns, land use has changed and large scale agricultural enterprises, typical for the production of grains and dairying, have partly been replaced by alternative agricultural production, such as olive growing, alpaca fibre and horse studs.

Retail and more contemporary industries and the service sector are increasing in value and importance. Crookwell has experienced a range of changes over the last two decade.

Tourism has emerged as the third major industry in the Shire, behind the traditional agricultural industries and retail. Crookwell is becoming a popular destination for retirees and 'tree changers' (people wishing to leave large cities for a lifestyle change).⁸

7.2 Local Economy

The Upper Lachlan has a local economy which is integrated with that of Canberra (from Gunning) and Goulburn (from Crookwell). Some Gunning residents work and shop in the ACT while some Crookwell residents work and shop in Goulburn. These cross-border worker flows mean that it is difficult to determine the actual number of jobs within the Shire. However a good characterisation can be made based on the Crookwell ABS statistics.⁹

In Crookwell, there is a small business economy supported by agriculture. A total of 723 businesses are based in the Crookwell postcode area (See Table 11 – Mix of Businesses in the Crookwell Postcode). Crookwell is currently a

⁶ http://www.communitybuilders.nsw.gov.au/download/Townlife_Crookwell.pdf

⁷ http://upperlachlan.local-

e.nsw.gov.au/files/5426/File/EconomicDevelopmentPlanStrategyOct07.pdf ⁸ http://upperlachlan.local-e.nsw.gov.au/about/1273/1274.html

⁹ http://upperlachlan.local-

e.nsw.gov.au/files/5426/File/EconomicDevelopmentPlanStrategyOct07.pdf

small business economy with around 46% or 330 businesses counted being non-employing (i.e. are sole traders providing work only for working proprietors). The other 54% (393 businesses) mostly employ less than 5 staff – and only 12 (all in agriculture and retail) employ more than 20 staff.

Some of the non-agriculture based businesses in the area are small specialty interest shops including businesses focused on popular fishing locations such as the Crookwell Water Supply Dam, Pejar Dam, Wyangala Dam, Reedy Creek, Laggan and Golspie, Phils River, Bolong River, Lachlan River, and Abercrombie River.¹⁰

7.3 Education

The Crookwell area has a public pre-school (ages 5 and below), primary (ages 5-12) and secondary school, Crookwell High School which has 292 pupils between ages 12-18, St. Mary's Private School, a Christian primary school with enrolments of 150 students, is also located at Crookwell. Other nearby schools are in the towns of Gunning, Goulburn, Bigga, and Binda.

Illawarra Institute of Technology and TAFE NSW Illawarra Institute, based in Goulburn, are the two closest technical and further education (TAFE) institutions. The University of Wollongong – Moss Vale Campus provides tertiary education options beyond TAFE courses. This presents an opportunity for local recruitment for the project subject to local skill bases being appropriate.

7.4 Economic Support

The area's economy has experienced some challenges with drought, an aging population, and a static population. Small businesses and service sectors are increasingly required to compete from larger regional centres such as Goulburn. In response, the Crookwell Shire formed the Crookwell Highlands Advancement Group (CHAG) to focus on the area's economic development. Crookwell has received support funding from the NSW Department of State and Regional Development (DSRD) Town life Development Program which provides community planning process and/or project funding to assist communities of 2,500 persons or less. In 2009, Crookwell received further funding from the Small Chambers of Commerce Fund¹¹ to undertake projects to promote business growth and tourism opportunities.

¹⁰ http://www.upperlachlantourism.com/crookwell.htm

¹¹ http://www.business.nsw.gov.au/NR/rdonlyres/CFFE917D-8B10-49BF-ADB9-

⁰²⁹EF46609E2/0/rel_costa_business_chamber_funding_20091204.pdf

Crookwell has an existing Community Economic Development Strategic Plan which seeks to guide the town's economic development. The Plan was completed for Crookwell at the time of the amalgamation with the Upper Lachlan Shire and has not yet been updated to cover the new Shire boundaries.

8 Economic Impact Characterisation

An economic impact characterisation measures the contribution of a major commercial or government activity or the additional activity generated by a new project to a local, regional, state, or national economy, typically in terms of employment and contribution to the Gross Domestic Product to the economy.

This analysis of the potential impact which the Crookwell 3 wind farm project would have on the Crookwell economy is based on an understanding of the Crookwell 2 Economic Impact Analysis and developments that have occurred since its approval. The Crookwell 3 project involves two distinct phases:

- the construction phase and its associated short term economic impact; and
- the operational phase and its on-going economic impact.

In undertaking the economic impact analysis a number of economic considerations were taken into account. These included:

- An economic impact base case: A base case is normally incorporated into an economic impact analysis outlining what would happen in the event that the project did not proceed. In this case, the best approach was to assume a "do nothing scenario" similar to that of the cost benefit analysis;
- Potential displacement effects: displacement of economic activity (i.e. loss of activity, such as agriculture due to development of farm land for other uses) was also considered as part of the economic impact analysis. The wind farm infrastructure land use is split into two stages. During the construction phase, up to 35 hectares of land will be used across both sites, approximately 2.3% of total site area. Once in the operational phase, the wind farm project will utilise 16 hectares, covering approximately 1% of total site area. It is important to emphasise that 70% of the operational phase land use is accounted for by the access tracks, the majority of which have been designed to run over existing farm tracks and will also be used for ongoing agricultural use. This design feature significantly reduces the overall impact on agriculture land uses within the site boundary. The impacts on existing agricultural activities are expected to be limited and the level of production is expected to stay the same. In addition, the landowners with turbines on their property will receive lease incomes in addition to their existing income. As a result, no such displacement effect is considered likely to arise, with the result that further consideration is not necessary.

Multiplier or flow-on impacts: These impacts were considered as the economic activity associated with the project (construction and operating phases) would increase the demand for goods and services in the local economy. The flow-on impacts were assessed qualitatively given the small geographic nature of the local economy and the lack of suitable economic data available for calculating flow-on impacts.

8.1 Direct Impacts

There will be a number of direct economic impacts as a result of the development of Crookwell 3 wind farm. These will arise from both:

- the economic activity of the wind farm in the short term as a result of the design, development and subsequent construction and commissioning of the wind farm. The construction phase is expected to take approximately 10 14 months from the commencement of construction and construction economic impacts will be largely limited to this period.
- the ongoing operation of the proposed wind farm which is likely to support a range of expenditure and employment associated with the management, operation and maintenance of the wind farm. The operating phase impacts are expected to last for the duration of the project, approximately 30 years.

The key direct economic impacts on the local economy are separated below into 3 sections covering Employment, Capital Investment and Land Use and Revenue.

8.1.1 Employment

Wind farm developments have the potential to directly create new employment opportunities in rural communities. It has been estimated that in NSW for every megawatt installed 0.5-0.8 jobs are created during construction and 0.05-0.5 in operation phase¹². These jobs tend to be in areas such as manufacturing and transportation.

The construction phase of the Project has the potential to create up to 40 full time jobs for the works within the site boundary as a result of construction activities in the area. There are a host of other supporting roles such as suppliers, logistics, and administration which result in occupational placements and employment in the area. These may have regional employment impacts arising from the establishment of several wind farms in the region and the resulting influx of construction activity in the region.

¹² ACILConsulting,2000, Employment Indicators for Australia's Renewable Energy Industries

During the operational phase of the Project there is the potential for the creation of 6 permanent jobs. These full- time jobs arise from the need for staff to manage the wind farm during normal working hours and provide oncall services out-of-hours. In addition, up to 10 additional contractors could be working on the site once every 10 to 15 years as part of schedule major site overhauls. These jobs may potentially be able to be recruited locally if the skills exist within the community. If more wind farms are constructed in this region, there would be a greater number of skilled labour and professionals that would be experienced in wind farm construction and therefore have continuous employment in the region.

The extent of the impact that this has on the local community is largely dependent upon the employment process of CDPL, the skill base within the community for the range of skilled and un-skilled jobs and the existing level of unemployment within the community. The increased number of employment opportunities has a direct benefit to the NSW and national economy.

In 2006 unemployment levels were at 4.1% and 3.7%, in Crookwell State suburb and Upper Lachlan Statistical local area respectively, both lower than the national average. With two wind farms already located in the region there is the possibility that local capability is developing as a result.

There is the potential for further temporary employment arising out of future decommissioning or re-powering of the site. The impact of this can not be assessed at this stage of the project, but it would be likely to involve further employment of labour.

These impacts are focused on the direct employment benefits; there are additional benefits that will arise from employing staff that are from inside and outside of the local area. These additional benefits are addressed in the indirect impacts on employment (section 9.2.1).

8.1.2 Capital Investment

The total capital investment for the Crookwell 3 wind farm development is estimated to be approximately \$90 - 110 million. There will be an injection of capital investment spending into the region consisting of:

- construction and operation phase wages; and
- the purchase of local materials and services where available.

Associated operating expenditure including site vehicles, minor maintenance and equipment / materials is expected to increase demand for local suppliers and contractors over the operating phase of the project. Local service suppliers would also benefit during the scheduled major overhauls undertaken at the site approximately every 10 to 15 years.
The level of the impact of capital investment into the local, regional, state and national economies is dependent upon the contracting arrangements agreed for the sourcing of materials and services. Although it can not be accurately calculated, it is anticipated that there will be a degree of economic benefit for Crookwell and the Upper Lachlan Shire as a result of the development of Crookwell 3 as well as broader economic benefits for the State and National economies. Previous wind farm construction in the area has involved a significant portion of locally sourced materials and employment due to large distances to other larger population centres.

8.1.3 Land Use and Revenue

The land for Crookwell 3 wind turbines will be leased from landholders, providing an additional source of secure and long-term income to these landholders for the duration of the wind farm. This income will provide an additional local revenue source. Within current environmental conditions this long-term secure income with an opportunity to diversify the local economy base, and hence, provide greater resilience from negative economic changes and environmental impacts.

During the construction phase there will be temporary areas of land that are unable to be farmed due owing to the necessity of fencing off the construction site during construction. Once the wind farm is operational the land can be used to grow crops and graze livestock close to the base of the wind turbines. The lease agreements will reflect these different states of loss of agricultural land, however all reasonable efforts will be made to reduce the disruption to the normal land use and activities.

Some members of the community have expressed concerns that a wind farm development may impact on adjoining landowners' ability to subdivide land or build dwellings where this land is in close proximity to turbines. The area or landowners who may wish to subdivide for dwellings has not been quantified. However, it is noted that the current rural zoning and the location of the land (being a significant distance from a population centre), may provide significant constraints making further subdivision unlikely.

8.2 Indirect Impacts

The direct impacts of the development of Crookwell 3, as summarised above, are the specific economic benefits of the proposed development, arising from the identified value of the capital investment for the Project and the associated employment opportunities. In addition to these direct benefits there would also be a range of flow-on or indirect benefits from the capital investment and associated wind farm operating expenditure. These indirect benefits result from the increase to the demand for goods and services, in turn supporting

existing jobs or creating new ones. Depending on the employment selection and housing location of staff the flow-on effects would be generated by expenditure of income by construction staff (albeit in the short term) and permanent staff in the local economy. If the labour force resides within the local community, either as locals or those re-located, the positive impact on the local economy will be higher than if employees are located in purpose built housing sites.

Further indirect economic impacts of the Project are set out below:

8.2.1 Indirect Employment Impacts

It is likely that there will be indirect employment benefits to Crookwell, Upper Lachlan and the broader region as a result of the construction and operation of the wind farm.

The provision of wages to locally based labour (and contractors) has the potential to increase household spending and demand for goods and services in the local area, resulting in local businesses, (e.g. retailers, accommodation facilities, entertainment) experiencing a short-term positive impact on their business cash flow as a result of the influx of contracting employees. The impact will be highest in the construction phase but will also continue during the operational phase. The level of impact at a local or regional specific level will be dependent on the proportion of labour sourced locally or are re-located to the region.

8.2.2 Tourism Impacts

Wind farm developments currently provide an opportunity to draw more tourists to the area to visit the operations, in turn bringing in additional expenditure on local services such as accommodation and retail.

Currently in Australia, a large numbers of visitors tour wind farms every year, including 50,000 visitors per year to Codrington wind farm in Victoria, 30,000 visitors in 3 months to the Windy Hill wind farm in the Atherton Tablelands, and 400-500 people to an open day at the existing Crookwell wind farm (Passey, 2003). As one of the larger wind farms in NSW, it is anticipated that additional visitors would be attracted to the Crookwell area with associated indirect benefits to the local economy. Crookwell I is already advertised by both Upper Lachlan Tourism and NSW Tourism websites as one of the top tourist activities in Crookwell. As wind farm developments become more common in Australia, it is possible that competition for tourists may reduce the number of visitors.

Critics of wind farms have expressed concern that wind farms may discourage tourists from visiting due to the visual impact on the landscape.

8.2.3 Impact on Property Values

The proposed site and surrounding lands are located in a rural area approximately 17 km south east of Crookwell, which is generally used for agricultural activities such as livestock production.

The value of this land is normally determined by a range of economic factors including commodity prices, interest rates, existing improvements on agricultural land, infrastructure and services and the supply of land and /or availability of similar land for sale. The establishment of the proposed wind farm on such rural lands would be only one consideration in determining price.

The main finding of the 2009 Preliminary Assessment of the Impact of Wind Farms on Surrounding Land Values in Australia provided for the NSW Valuer General¹³ was that wind farms do not appear to have negatively affected property values in most cases. The study results also suggest a property's underlying land use may affect its sensitivity to price impacts. Of the properties studied, no reductions in sale price were evident for rural properties or residential properties located in nearby townships with views of the wind farm.

International reports and surveys show that proximity to wind farms has not had a material effect on property values. The points raised in these reports are as follows:

The Renewable Energy Policy Project, an extensive survey project in the USA that looked at potential impacts on property values for 10 wind farm developments, assessing price changes for properties within the view shed of the development and comparable properties in the community away from the development, both before and after. Thirty separate analyses were carried out, and the results showed that in twenty six of those, property values in the affected view shed performed better than the comparable properties;¹⁴

¹³ As is stated in the executive summary of the study: "the study investigated eight wind farms across varying land uses (rural, rural residential, residential) using conventional property valuation analysis. Forty (40) of the 45 sales investigated did not show any reductions in value. Five properties were found to have lower than expected sale prices (based on a statistical analysis). While these small number of price reductions correlate with the construction of a wind farm further work is needed to confirm the extent to which these were due to the wind farm or if other factors may have been involved. The results for rural residential properties (commonly known as 'lifestyle prop's') were mixed and inconsistent; there were some possible reductions in sale prices identified in some locations alongside properties whose values appeared not to have been affected. Consequently, no firm conclusions can be drawn on lifestyle properties. Overall, the inconclusive nature of the results is consistent with other studies that have also considered the potential impact of wind farms on property values."

¹⁴ Sterzinger, G et al (2003). The effect of wind development on local property values. Renewable Energy Policy Project. Washington, USA.

- National Wind Power, a major wind developer based in the UK commissioned an independent market researcher to conduct two public opinion surveys, based on two wind farm developments in Scotland and Wales. The results from Scotland reported that "none of the respondents" say house prices have decreased because of the wind farm" and the results from Wales reported that "more than three in four (78%) say the wind farm has had no effect, with a further 15% saying 'don't know';"¹⁵
- The Danish Institute of Local Government Studies, in a social assessment of wind power concluded that the "the economic expenses in connection with noise and visual effects from wind farms are minimal;"¹⁶
- The Royal Institution of Chartered Surveyors in the UK found no studies to suggest an effect on property values as result of the establishment of wind farms; and
- A report for the Phoenix Economic Development Group in the US used rigorous research to determine the impact of wind farms on property prices concluded that "no evidence was found to support the claim that views of wind farms decrease property values."17

From a technical perspective, the empirical research does not link wind farm developments as having negative impacts on land values where they are developed.

Despite this, some members of the community have reported that the proposed wind farm development has created some uncertainty in the property market with potential purchasers waiting until the exact nature of the wind farm development is known. This level of uncertainty will be removed once the project application has been determined.

8.2.4 Community Investment

CDPL is in the process of negotiating a planning agreement under which it is proposed that:

CDPL will contribute an annual monetary contribution of amount of \$1,666 (adjusted annually to changes in the CPI) per operating turbine forming part of the Crookwell 3 wind farm; and

¹⁵ Novar Residents Survey, Robertson Bell Associates, July 1988. at http://www.bwea.com/ref/novar.html.

Taff Ely Residents Survey, Robertson Bell Associates, December 1997 at

http://www.bwea.com/ref/taffely.html. ¹⁶ Quaade, AHT (1996) Projection of the employment situation for engineers 1995-2010 at http://www.akf.dk/udgivelser en/96/fremskriv beskaeftigelse/#top

¹⁷ ECONorthWest (2002) Economic impacts of wind power in Kittitas County. November 2002 at http://www.phoenixgroupedc.org/docs/Kittitas%20Wind,%20final.pdf.

 these annual contributions will be paid into a Community Enhancement Fund which will fund local projects within a radius of 30km of the Crookwell 3 wind farm, including projects aimed at ameliorating any impacts from the Crookwell 3 wind farm.

8.2.5 Visual and Noise Impacts

Detailed visual and noise assessments have been undertaken as part of the environmental assessment for the Project. Please refer to the separate reports prepared in relation to these visual and noise assessments. CDPL is committed to implementing the recommendations made in these reports.

The results of this assessment indicate that the addition of 30 new wind turbines into the Upper Lachlan region will add to the visual impact of the current and proposed wind farms.

The issues associated with negative visual impact for those in the view shed of the wind farm include blade glint and shadow flicker and in a wider area the inclusion of obstacle lighting to selected turbines. Shadow Flicker issues have been addressed and the turbine layout revised to reduce impact and achieve compliance with the government standards. Obstacle night lighting is a concern to the majority of the landowners, including some of the participating landowners. This issue has not yet been resolved by the Civil Aviation Safety Authority (CASA). If this issue has not resolved prior to a project approval, CPDL is committed to turn the lights on, or if time permits, not install them at all. It is important for CPDL to go through the planning process with these lights proposed in order to avoid costly requests for this to be added at a later stage of the project.

The noise impact of wind turbines has been decreasing as the technology has been improving. Therefore the main noise impact (e.g. heavy vehicle traffic and excavation activities) will be during the construction phase, including heavy vehicle traffic, the construction of access roads, excavation of turbine locations, installing of the turbines and other buildings associated with the development of the site. In order to reduce disturbance of the local residents' respectable hours of construction will be maintained. This will be addressed as part of the Construction Environmental Management Plan (CEMP) that is required prior to the commencement of construction.

8.2.6 Road Upgrades

A detailed traffic assessment has been undertaken as part of the environmental assessment for the Project. Please refer to the separate report prepared in relation to this traffic impact assessment.

The results of this assessment indicate that there are parts of the current road network which provide access to the site that will need to be upgraded from

the current level of infrastructure to be able to accommodate the construction vehicles and equipment that needs to be transported. It is however noted, that the majority of required upgrades would be completed as part of the Crookwell 2 wind farm Project.

The in-direct benefits of upgrading the roads for the community will exist primarily in the operational phase. These include potential increased road safety and reduced vehicle maintenance costs which result from driving on poor quality roads. During the construction phase the addition of heavy vehicles and site traffic may result in these positive impacts not becoming evident until the operational phase.

8.3 Economic Impact Analysis Conclusion

The Crookwell 3 wind farm development has the potential to provide a positive economic contribution to the economy and the local community. The positive effects arise mainly as a result of the capital investment associated with the proposed development, which provides direct and flow-on economic benefits, through permanent and temporary employment and the associated contracting, supplies and services needs of the workforce. These positive effects would be most apparent, particularly during the construction and major maintenance phases, but also to a lesser extent, but over a longer duration, during the operational phase.

It is also anticipated that the proposed development would provide flow on economic benefits in terms of employment and commercial opportunities from the economic investment along with the benefits of up-skilling of the local workforce within a growing energy market. Some landowners with lease agreements are expected to benefit directly form additional income.

Anticipated visitors to the proposed wind farm development could also contribute to the ongoing development of the tourism industry to the area.

It is expected that the positive economic contributions of the project will outweigh potential negative economic impacts, such as concerns about subdivision and property prices.

9 Public Policy Context

The Crookwell 3 wind farm is being proposed in a complex and challenging public policy context. CDPL and UFWA's reputation is dependent on its ability to manage activist and community expectations and position itself within the public policy context as a preferred supplier of wind farms.

This section explains the federal, state, and local public policy context and how the proposed wind farm can complement and enhance the existing policy objectives.

The proposed wind farm at Crookwell is aligned with state and federal policy commitments to shifting Australia's energy supply to a greater percentage of renewable energy power sources such as wind. Reductions in electricity sources that generate greenhouse gas emissions could have beneficial social and economic outcomes through supporting national and international efforts to reduce the potential impacts of global warming and climate change.

The social and policy context in this section is based on a desktop review of current local, regional and state policy initiatives associated with renewable energy, wind-farms in particular, and community concerns regarding wind-farms.

9.1 Federal Policy

The proposed wind farm will help reduce Australia's greenhouse gas emissions in alignment with the Federal Government's renewable energy policies.

The Australian Federal Government is highly supportive of renewable energy technology and has provided draft guidelines and a policy statement to ensure the potential impacts of developing wind farms are managed.

In August 2009, the Australian Government implemented the Renewable Energy Target (RET) Scheme, which is designed to deliver on the Government's commitment to ensure that 20 per cent of Australia's electricity supply will come from renewable sources by 2020.¹⁸

The 2010-2011 Australian Government Federal Budget committed \$652 million to a Renewable Energy Future Fund as part of a larger A\$5.1 billion Clean-Energy Initiative to assist projects in attaining the 20 percent of

¹⁸ http://www.orer.gov.au/publications/pubs/mret-thebasics-0709.pdf

Australia's energy needs met from sources such as solar, wind and geothermal heat by 2020.¹⁹

On 29, June 2010, the Australian Government finalised changes to the RET scheme to provide greater for certainty large-scale renewable energy projects. As a result, the existing RET scheme was separated into two parts – the Small-scale Renewable Energy Scheme (SRES) and the Large-scale Renewable Energy Target (LRET).²⁰ The LRET will deliver the majority of the 2020 target; with annual targets set to reach 41,000 GWh by 2020 (See Table 12 – Revised Annual Renewable Energy Targets). The Crookwell Project (Crookwell 1, 2, and 3 combined) will provide 390GWh of energy per year towards the LRET target and beyond.

	07		
Year	Revised targets		
	(GWh)		
2011	10,400		
2012	12,300		
2013	14,200		
2014	16,100		
2015	18,000		
2016	22,600		
2017	27,200		
2018	31,800		
2019	36,400		
2020 - 2030	41,000		

Table 12 – Revised Annual Renewable Energy Targets

The proponent of the Crookwell 3 wind farm is compliant with both

- the Draft National Wind Farm Development Guidelines July 2010, prepared by the National Environment Protection Council which outline certain technical and social expectations for proposed wind farms; and
- the 2009 EPBC Act Policy Statement 2.3 Wind Farm Industry issued pursuant to the Environment Protection and Biodiversity Conservation Act 1999 (Cth).

The proponent is beyond compliant with regards to its commitment to prefeasibility community consultation.

¹⁹ http://www.businessweek.com/news/2010-05-11/australia-to-establish-a-652-million-fund-forrenewable-energy.html

²⁰ http://www.climatechange.gov.au/en/government/initiatives/renewable-target.aspx

9.2 State Policy

The proposed wind farm will help reduce NSW's greenhouse gas emissions in alignment with the NSW's renewable energy policies.

In line with Federal Government Policy, the NSW Government has set targets through its State Plan aimed at ensuring 10 per cent of electricity consumed in NSW is from renewable sources by 2010, rising to 15 per cent by 2020. The Crookwell 3 Project will supply up to 209 GWh (depending on the turbine model) of energy per year towards the NSW target and beyond.

The Draft NSW Wind Energy Environmental Impact Assessment Guidelines were prepared by the former Department of Planning NSW in 2002 to guide wind farm proponents regarding the necessary assessment and approval requirements pursuant to the Environmental Planning and Assessment Act 1979 (NSW).

The Draft Guidelines stipulate that a major function of the environmental impact assessment process is to provide information to the community and decision-makers on the potential environmental impacts of a proposal. They also outline the matters that an environmental assessment of a wind energy proposal may need to address.

The Draft Guidelines consider the following specific matters:

- factors to be considered in the location of a wind farm
- issues relevant to the environmental assessment of wind farms
- community and stakeholder consultation to provide for an informed and transparent process.

The proponents of the Crookwell 3 wind farm have complied with the Draft Guidelines and are highly committed to understanding the full-range of community perspectives in the Crookwell area. As such, the proponents have engaged in 2 rounds of consultation with the local community, including an indepth set of interviews with the few highly-opposed community members.

9.3 Local Policy

With an existing wind farm near Crookwell, and an increase in the number of applications in the region, the Upper Lachlan Shire Council has implemented a Development Control Plan (DCP) to control how and where future wind farm developments are proposed. The application of the DCP to the project is further explained in the Environmental Assessment Report.

The *Upper Lachlan Shire Strategy: 2020 Vision* assesses the current context and a growth strategy. The key community themes used to shape the direction of the Strategy include:²¹

- Ensuring that infrastructure services, utility capacity, soil, slope, contamination, flora, fauna, community services, open space and heritage clearly define the basis for growth.
- Determining whether existing town boundaries have the capacity to accommodate future growth and limiting need to expand beyond these boundaries.
- Preserving and protecting natural and built heritage values.
- Creating more employment opportunities in Upper Lachlan and identifying designated areas for commercial and industrial developments.
- Advantages and disadvantages of infill and fringe development.
- Strengthening the commercial focus of Main streets and creating a sense of place.
- The provision of current entertainment and cultural facilities.
- The promotion of recreation and tourism in the Upper Lachlan.
- Identification of minimum rural lot sizes and locations for intensive rural and rural residential development.
- Ability for new developments to be self-sufficient (e.g. water storage and sewerage infrastructure).
- Minimise land use conflicts arising from new or existing land uses and developments.

These community themes present an opportunity for the Crookwell 3 proposed wind farm to build its development and Community Enhancement Program in line with areas of community interest.

9.4 Analysis of Community Attitudes and Perceptions

The *Draft National Wind Farm Guidelines* – July 2010 and the NSW Director General Requirements and the Upper Lachlan Shire Council DCP require wind farm proponents to consult with communities prior to development. CDPL has taken a beyond compliance approach to consulting the community stakeholders for the Project.

²¹ http://upperlachlan.local-

e.nsw.gov.au/files/12358/File/Upper_Lachlan_Strategy_2020_Vision.pdf

CDPL has developed a community consultation and engagement program aimed at providing the community with factual information about the project and gathering feedback from the community and stakeholders about their concerns and interests, which can subsequently be addressed in the approvals process and feedback into the project design where appropriate. Please refer to Appendix A for the overview of the Consultation Strategy.

The consultation program involves:

- a door-knock consultation survey,
- a second independent round of consultation with concerned community members,
- community newsletters, and
- community information days.

Details of these activities are set out below.

9.4.1 Door-knock Consultation Survey

On April 28, 29, and 30, 2010, CDPL conducted a door knock consultation survey in relation to the Crookwell 3 Wind Farm. The door-knock consultation survey, where the proponent visited households within a 3 to 5 kilometre radius of the proposed wind farm, provided stakeholders with detailed information about the project and the approvals process. The aim of this survey was to ensure local residents were informed about the project and their ability to have input as part of the assessment process. The proponent also sought to further understand the concerns stakeholders may have. Prior to the consultation, over 100 community members within this distance (along with over 2000 households in the surrounding region) were sent a community newsletter with an introduction to the consultation process as well as an update about the proposed wind farm development.

A record of correspondence was maintained for each door-knock meeting, as these were conducted confidentially the records and names will not be disclosed to protect the opinions of the individuals; however the template of the form used is shown in Appendix B. In the event that the community member(s) were not home at the time of the door-knock the resident(s) were provided with an opportunity for follow-up consultation via a letter with the time and date of the visit and contact details as shown in Appendix C. CDPL representatives visited 118 properties. Of these about 50 had no property owner present or there was no house or ability to enter the property (e.g. gate was locked and entry to property was prohibited). CDPL followed up with 7 of these property owners between May and June 2010 either over the phone or in person. All properties visited where owners were not present and which had a mailbox had a note left with a brief purpose of visit and contact number to ensure the owner was able to contact CDPL if they had any concerns or questions.

The community survey found the following:

- Of the respondents who were either supportive or highly supportive, a large number still had high levels of concerns about a range of issues, including electro magnetic interference, land values and noise.
- 100% of the respondents, who indicated they were neutral towards the project, representing 26% of all respondents, were concerned or very concerned about a range of issues. Given the level of concerns that existed amongst this cohort, there is significant risk that they may oppose the project if these risks are not adequately addressed.
- A number of respondents concerned about the project met as a group had their comments recorded collectively. However, had the meetings occurred individually, the number of people opposed would have been higher.
- Opponents indicated areas where they would like to see improvements from wind farm developers, namely responsiveness, transparency, compensation, community investment and regional planning and development. This provides an opportunity for CDPL to consider these issues and respond in a way that improve CDPL's standing with these stakeholders and the management of their concerns as the wind farm developer of choice.

Residents of the Upper Lachlan Shire Council were asked in the September 13, 2008 local government elections about their support for the development and construction of wind farm turbines in the area. While there are a number of concerned and vocal citizens, the result of the wind farm poll was 70.04% for and 29.96% against with every polling booth registering a yes vote majority.²²

9.4.2 Second Round of Consultation with Highly-concerned Stakeholders

To further inform the strategy for managing community concerns relating to the proposed wind farm, CDPL hired an independent consultant, Futureye Pty. Ltd, to interview a select group of 6 highly-concerned community members to further understand the issues which underpin their concerns.

²² Upper Lachlan Shire's New Councillors. *The Voice of Upper Lachlan Shire, The Shire of Villages* October 2008. pp. 1.

Futureye conducted interviews with these people by phone between June 14 and 18, 2010 and in-person on July 8, 2010.

Due to the nature of the interviews, the context being assessed, and survey research ethics, the interviewees have not been named in this report. The aim of this synthesis is to provide CDPL with an independent assessment of the issues that have been raised through a series of interviews with selected concerned stakeholders. These stakeholders were selected based on recommendations by CDPL and a Futureye analysis of the concerns raised during the initial CDPL door-knock surrounding the proposed Crookwell 3 development.

Futureye has developed a synthesis of the highly-concerned community members' issues and categorised them using nine (9) thematic headings followed by a synthesis of the insights gained. CDPL has developed initial responses to address these concerns. These responses are explained after each synthesis. CDPL is committed to taking further action on these concerns depending on the consultation and engagement requirements delineated in any future licence that might be approved.

The thematic headings, synthesis, and CDPL responses are as follows:

9.4.2.1 Corporate engagement and information

Some residents raised concerns about CDPL's approach to community engagement. This was based on their concerns regarding:

- The quality of information provided by CDPL. Some residents claimed inaccuracies in information presented during information days²³ and that the information provided is not necessarily what was included in the final report that was lodged with DOP.
- Some residents expressed their dissatisfaction with the company's responsiveness and feedback to enquiries they had made.
- Some residents believe CDPL's approach was not particularly sensitive to issues arising between neighbours. This has the potential to contribute to community divisions and some believe this has already occurred.
- Subject experts provided by CDPL did not meet the expectations of some community members on some topics (e.g. fauna).

It is also noted that some of these criticisms may apply to the preliminary illustrations that were displayed during the Crookwell 2 wind farm information

²³ This was in particular reference to visual images of the wind farm layout and a perception that the images were misleading.

day that was held prior to the finalisation and lodgement of the modification application.

CDPL is committed to preparing information that is accurate, addresses the environmental assessment requirements and is relevant to the community's needs.

CDPL will seek to validate that the information provided meets the community's needs through ongoing consultation.

CDPL has also reviewed some communications with community members and has sought advice on how it may better ensure its responses to the community's queries address these concerns.

9.4.2.2 Health / Noise

The issue of noise impacting human health and the rural sounds cape was raised by a number of stakeholders. This concern stems from media articles and conflicting academic reports.

CDPL is committed to addressing community-specific concerns and educating the public about noise related impacts and is committed to hosting a forum about noise with the company's sound specialist as part of a future information day. CDPL will also seek to provide the community with more information about noise related impacts by providing information sheets.

9.4.2.3 Wind farm technology

Some residents are sceptical about the environmental benefits of wind farm technology and consider it to be an old form of technology that is inefficient and ineffective at meeting energy requirements.

CDPL recognises that wind power is one of the only scalable commercial forms of renewable energy that can be deployed in a short timeframe to address state, federal, and international energy challenges. The company will provide further information about this energy source at its future community information day.

9.4.2.4 Community development and regional planning

There is a concern about the cumulative impacts caused by a range of wind turbines being built in close proximity to the town of Crookwell. Some residents believe the state government's regional planning should consider community impacts when approving a wind farm. Some residents suggested turbines could be placed in less dense areas with government-subsidised funding to extend a transmission line to connect wind turbines to existing electricity infrastructure.

Some residents are critical of some structures and governance of community enhancement funds and believe there should be a greater linkage between expenditure from the funds and the impacts of the wind farm.

As mentioned in Section 10.3 Local Policy, the DCP requires the development of a Community Enhancement Program The proponent is to prepare the program in consultation with the local community and the Upper Lachlan Shire Council. CDPL is in the process of negotiating a planning agreement under which it is proposed that:

- CDPL will contribute an annual monetary contribution of amount of \$1,666 (adjusted annually to changes in the CPI) per operating turbine forming part of the Crookwell 3 wind farm; and
- these annual contributions will be paid into a Community Enhancement Fund which will fund local projects within a radius of 20-30km of the Crookwell 3 wind farm, including projects aimed at ameliorating any impacts from the Crookwell 3 wind farm.

9.4.2.5 Flora and fauna

A few community members raised some concerns about impacts on flora and fauna, particularly on specific bird species, such as the wedge tail eagle.

Some community members are concerned not only about bird mortality, but about potential impacts within families of birds, which is believed to potentially impact breeding cycles and future populations.

CDPL is committed to monitoring and developing baseline data with regards to specific bird species and communities and off-setting any potential flora and fauna impacts arising from the proposal.

Flora and fauna assessments have been undertaken as part of the environmental assessment for the Project. Please refer to the separate report prepared in relation to these assessments. CDPL is committed to implementing the recommendations made in this report.

9.4.2.6 Property values

There is a perception among some residents that the wind farm proposals for Crookwell 2 and 3 have negatively impacted on property values. There is a perceived detraction to the landscape and fears about other impacts wind farms may cause. Some stakeholders have raised concern following withdrawing their properties from the market after being unable to sell which was attributed to be the result of uncertainties about the development's impacts on their property prices. See section 9.2.3 for further technical information about these concerns. Due to the Upper Lachlan Shire's DCP, residents believe they cannot construct dwellings within 2 kilometres of a wind turbine and that this diminishes the potential to subdivide land thereby reducing the value of the land. The recent court case decision outlined in Section 10.3 may go some way in clarifying this issue.

CDPL acknowledges there may be both negative and positive impacts on property prices, but notes that these are generally confined to the short term due to buyer uncertainty about future developments in the region.

CDPL is committed to working with the local community and council to address the underlying issues behind the DCP buffer zones that is noise, health and impacts on amenity, in order to get a positive outcome for landholders interested in subdividing their homes.

9.4.2.7 Community divisions

Some community members believe proposed wind farm developments have created divisions and tensions within the community and that wind farm developers are not helping to address these issues.

One potential reason for tensions is the 'commercial in confidence' negotiations with landholders that result in some members of the community knowing more about the proposal than others. Unfortunately this is unavoidable due to the nature of the process and its commerciality.

CDPL will investigate how it can provide information and engage with landholders in a manner which mitigates any potential tension caused in the community arising from the proposed wind farm development.

9.4.2.8 Buffer zones and proximity issues

Some residents have requested the enforcement of a two kilometre buffer area between any wind turbine and a residential property as outlined in the DCP.

Some residents have mentioned the Van Den Berg effect and studies by Nina Pierpont as a scientific explanation for how noise can have an effect on residential homes living along a valley where wind turbines are located. Many of these issues are linked to the health impacts which residents have heard about from other sites in the area (e.g. Toora Wind Farm, Waubra Wind Farm).

These residents are also interested in understanding the visual impacts on their properties and site extensive views of landscapes. It is feared by some that the visual impact will change the whole 'look and feel' of the region. They believe the visual issues will discourage people from wanting to locate in the area.

CDPL acknowledges community concerns about issues of proximity to wind farms. The company is committed to a minimum of 1 kilometre buffer from all non-host landowner dwellings. This is perceived by the company as good practice. Detailed noise and visual impact assessments have been undertaken as part of the environmental assessments. CDPL is committed to implementing the recommendations made in these reports.

9.4.2.9 Distribution of benefits

While some landowners receive lease payments to offset any potential negative impact from a proposed wind farm, some community members believed that it was unfair that neighbours who are perceived as being equally impacted received no financial benefit. This was particularly prevalent where the lease recipient was absent from the property, while the non-participating neighbour was in residence.

The proposed Community Enhancement Program has the potential to be an opportunity for the local community and the potentially directly impacted landholders to benefit from the project.

9.4.3 Changes made to the Project

The results of the door knock, combined with a second round of consultation with key stakeholders, and additional consultant studies, resulted in changes being made to the project to address some of the major technical issues raised. The non-technical community concerns raised are to be addressed through future consultation activities explained in the next section (9.4.4. Future Consultation). Changes to the project since its inception have included:

- removing 3 turbines from the initial proposed layout to reduce the potential visual impact and shadow flicker exposure to the nearby dwellings;
- relocating turbines to increase buffer distances to houses to reduce the potential noise and visual impact to nearby dwellings;
- increased screening vegetation to reduce the potential visual impact to the nearby dwellings;
- changes to the access tracks for avoidance or reduction in native vegetation removal;
- changes to the access road entrances to avoid disturbance to nearby dwellings; and
- changes to the proposed powerline and cabling connecting the project to the approved Crookwell 2 substation, to reduce potential visual impact and removal of native vegetation;

9.4.4 Future Consultation

The EA report provided by CDPL aims to address many of the general community issues as well as some of the in-depth stakeholder issues raised. Community views have been taken into account when developing the final plan for the site. Future consultation will include a further community information day, newsletters and the public exhibition period during which any person may make a submission in relation to the project.

The community information day session(s) are planned to be held in the Crookwell Township. They will not be public meetings, but rather information sessions where interested members of the community have the opportunity to talk directly with the consultant team and CDPL representatives about the Project.

The sessions also include displays of posters explaining the Project, the approvals process, and how community members can provide input into the process.

The sessions will be advertised in local papers 2 weeks prior to the sessions occurring, and in newsletters to nearby residents.

CDPL representatives and any requested consultant team members will be present at the information sessions to answer any questions and provide further details about the project and process.

The next opportunity for consultation will be the Community Information Day to be held as part of the public exhibition process.

10 Conclusion and Recommendation

The scope of this socio-economic report is to identify the potential social and economic impacts of relevance to the CDPL Crookwell 3 Wind Farm Project. It is recommended that CDPL progress a number of recommendations in consultation with the NSW government, local council, the community at-large, and highly critical community members. In summary, the recommendations include:

- Revise the current consultation strategy with processes which address the issues raised by the highly-concerned stakeholders (including health impacts associated with noise);
- Implement the revised consultation strategy in a coordinated, whole-of project and transparent manner throughout the planning process, construction, operational and closure phases of the project;
- Develop a robust governance structure with roles and responsibilities for the Community Enhancement Program;
- Formalise, maintain and promote a consultation register, grievance mechanism and issue resolution tracking mechanism which is integrated into CDPL day-to-day operations as well as supplier agreements;
- Establish and publicly promote a local employment and purchasing policy for preferentially sourcing labour, services and products from the local community and region wherever practicable; and
- Provide a detailed inventory of employment requirements during project construction, operations and closure to Council and the broader public.

APPENDIX A Consultation Strategy

COMMUNITY ENGAGEMENT STRATEGY

For

Crookwell 3 Wind Farm

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1 PURPOSE & OBJECTIVES

1.1 Purpose

Crookwell Development Pty Ltd (CDPL) acknowledge and understands the need to effectively communicate with residents and all relevant stakeholders through a program of community consultation

This Community Engagement Strategy (CES) has been developed to guide the consultation process, and to ensure that CDPL satisfy any consultation requirements of the eventual approvals process. This strategy will also assist CDPL in maintaining a positive relationship with local residents, stakeholders and wider community. The strategy will also sets out a process of engagement with the community, in order to identify and manage social impacts that may result from the project. Consultation with the community should remain an objective process, delivering facts about the project, listening to community and stakeholder concerns and providing feedback.

1.2 Objectives

The objectives of the community engagement process are:

- To identify stakeholders that should be engaged in the consultation process;
- To identify the appropriate methods and extent of engaging with identified stakeholders;
- To ensure that key stakeholders are aware of the approval process;
- To ensure that the community and stakeholders informed about the project through the provision of factual project information;
- To identity the potential issues or concerns that stakeholders and the community may raise in relation to this project; and
- To provide feedback to the community and stakeholder enquiries and explain that how their input will influence the final project design.

1.3 Methodology

It is recognised that CDPL may also undertake activities to promote the project to the local community and other interested stakeholders. These promotional activities remain distinct from the consultation process outlined in this Strategy, although it is important that project information distributed remains consistent.

CDPL would be responsible for undertaking the majority of stakeholder consultation. This is consistent with the approach adopted on other wind farm projects in the Union Fenosa Wind Australia portfolio.

This Strategy is a working document to inform the CDPL representatives and consultant team of the appropriate methods by which to engage stakeholders and the wider community in the approvals process.

This Strategy outlines a 6-stage process that will occur as part of the approvals process. These stages are:

- Stage 1: Community engagement this includes the initial round of consultation including distribution of a community newsletter, advertising and carrying out community consultation door-knock which includes one to one meetings with interested residents and landholders;
- Stage 2: Compilation of the community engagement material and outcomes;
- Stage 3: Community engagement this includes the second round of consultation which may include distribution of letters or community newsletter;
- Stage 4: Compilation of the community engagement material and outcomes;
- Stage 5: Public Exhibition along with advertisement and carrying out a community information day session for the community and the stakeholders; and
- Stage 6: Providing responses to the submissions after the Development Application has been lodged.

2 IDENTIFICATION OF STAKEHOLDERS AND POTENTIAL ISSUES

2.1 Overview

There are a variety of stakeholders that have the potential to be directly or indirectly affected by this project. Stakeholders have been identified through research, previous experience, and discussions with the regulatory authorities.

It is anticipated that as the project progresses and increases in profile, further stakeholders may be identified and included in this consultation.

2.2 Stakeholders Identified

A list of the identified stakeholders for this project has been compiled and is shown in Table 2.1.

Stakeholders	Description			
Local Community	 Landowners who will host turbines on their land Landowners within a 5km radius of the wind farm Residents of Crookwell Township Other interested community members 			
Government	 Upper Lachlan Shire Council (ULSC) 			
Agencies	 Goulburn Mulwaree Shire Council (GMSC) NSW Department of Planning (DoP) NSW Department of Environment, Climate Change & Water (DECCW) 			
	 Catchment Management Authorities (CMAs) – Hawkesbury Nepean Southern Catchment Area 			
	 NSW Department of Transport and Infrastructure (DTI) 			
	 Road and Traffic Authority (RTA) 			
	 Rail Infrastructure Corporation 			
	NSW Department of Industry and Investment			
	 Livestock Health and Pest Authorities State Management Council 			
	 Electricity Transmission Authority (TransGrid) 			
	 Land and Property Management Authority – Crown 			

Table 2.1 Identified Stakeholders

Stakeholders	Description
	Lands Division
	 Department of the Environment, Water, Heritage and the Arts (DEWHA)
	♦ Rural Fire Service (RFS)
	 Civil Aviation Safety Authority (CASA)
	 Department of Defence (DoD)
	♦ Airservices Australia (AA)
	 Office of Renewable Energy Regulator (ORER)
Non-	 Local Aboriginal Land Councils (LALCs)
Government	 Local tourism Organisation(s)
Organisations	Local Community Group
	 Local Environmental Group(s)
	♦ Industry Groups (ICNNSW)
Media	◆ Local Newspaper(s)

Each of these identified stakeholders potentially have specific concerns that need to be discussed and considered during the Planning Application and Approval process.

3 ENGAGEMENT STRATEGY

3.1 Approach

Essentially, community consultation comprises of 2 aspects:

- Providing the community with factual information about the project; and
- Gathering feedback from the community and stakeholders about their concerns and interests, which can subsequently be addressed in the approvals process.

3.2 Consultation Program

A consultation program for the project would comprise of a variety of the following activities:

- Door-Knock meetings;
- ♦ Group meetings;
- Responding to landowner enquiries throughout the process
- General information provision via newsletters;
- Community information day session(s) at a local community hall;
- Documentation of stakeholder input into the approvals process; and
- An advertisement in the local newspaper advertising the community information day session(s);
- Public Exhibition for the display of the Planning Application and Environmental Assessment.

The following terms have been used to describe the level of stakeholder engagement:

- Direct engagement stakeholders will be sent a letter specifically outlining the project details and inviting feedback through one to one or group meetings; and
- Indirect engagement stakeholders will not be specifically targeted, but will kept informed about the project through newsletters and newspaper advertisings of community information day session which they can attend to learn more about the project.

3.3 Engagement With The Local Community

3.3.1 Landowners Hosting Wind Turbines

In the Crookwell 3 East site there are 2 landholdings that are proposed to host wind turbines. In the Crookwell 3 South site there is 1 landholding that is proposed to host wind turbines.

The relevant landowners in both sites have entered into an Agreement for Lease for hosting the wind farm turbines and associated infrastructure on their properties, and have an understanding of the project overview.

CDPL has an ongoing relationship with these landowners, and will remain in regular contact with these stakeholders throughout the approvals process. These stakeholders will be directly targeted through:

- Regular monthly correspondence;
- Door-knock consultation meetings;
- Community newsletters; and
- Community information day session(s).

3.3.2 Landowners of Properties within a 3 - 5km Radius of the proposed sites

The proposed wind farm sites would be visible from the surrounding public roads. Residents within a 3 - 5km radius of both sites have the potential to be affected by the visual impact of the turbines, and also the noise and heavy vehicle traffic associated with the construction phase.

CDPL will endeavour to contact a large number of residents and landowners in this radius. These stakeholders will continue to be directly targeted in the community engagement process through:

- Door-knock consultation meetings;
- Community newsletters; and
- Community information day session(s).

3.3.3 Other Interested Residents of the Wider Community

This project will be of interest to the wider community. Individual community members not contained within the 5km radius may nevertheless feel strongly about the project.

Members of the wider community will be indirectly targeted in the community engagement process through:

Door-knock consultation meetings (if specifically requested);

- Community newsletters (within a reasonable distance from site boundary; and
- Community information day session(s).

3.4 Engagement with Government Agencies

3.4.1 Upper Lachlan Shire Council

Upper Lachlan Shire Council (ULSC) is a key stakeholder in the approvals process. Regular liaison with the Council should occur throughout the approvals process.

Council will be directly targeted in the consultation process through:

- Regular project liaison; and
- Community newsletter distributions, and informed of any Community information day session(s).

3.4.2 Goulburn Mulwaree Shire Council

The site boundary does not encroach on the Goulburn Mulwaree Shire Council (GMSC) district, however as they are the immediate neighbour of this proposal and the construction vehicles will pass through the roads of this shire, they will be notified of the project and included in the consultation process. Liaison with the Council should occur throughout the approvals process.

Council will be directly targeted in the consultation process through:

- Regular project liaison; and
- Community newsletter distributions, and informed of any Community information day session(s).

3.4.3 Department of Planning

The Department of Planning (DoP) is the main government agency in the approvals process. Regular liaison with the DoP will occur throughout the approvals process.

DoP will be provided with all of the project newsletter distributions and informed of any community information day session(s).

3.4.4 Department of Environment, Climate Change and Water

The Department of Environment, Climate Change and Water (DECCW) is one of the key government agencies in the approvals process. Regular liaison with the DECCW should occur throughout the approvals process.

DECCW will be provided with all of the project newsletter distributions and informed of any community information day session(s).

3.4.5 Other Government Agencies

A range of other government agencies will be involved in the approvals process (refer Table 3.1). It is noted that not all government agencies may be interested in attending meetings, and may provide feedback via letter or telephone conversations.

3.5 Engagement With Non-Government Organisations

3.5.1 Pejar Local Aboriginal Land Council

Pejar Local Aboriginal Land Council (LALC) is the relevant LALC for this region and the Cultural Heritage consultant will be in regular liaison with them through the field survey investigations.

3.5.2 Other Organisations

Specific interest groups within the local and regional community may have an interest in the project. These groups could have a community, environmental or economic focus.

These groups will be directly targeted in the consultation process through:

- Community newsletters; and
- Community Information Day Session(s).

3.6 Engagement with Media

This Strategy does not identify active engagement with the media during the course of the project, with the exception of paid advertising in the local newspaper informing of the door-knock consultation, community information day session(s), and approval process. However the media outlets have been noted as a stakeholder in Table 3.1 in the event that they choose to actively report on the project.

4 ENGAGEMENT ACTIVITIES

4.1 Overview

This Chapter provides more detail regarding the engagement activities discussed in Chapter 3.

CDPL will establish a dedicated community e-mail address, website and a freecall 1800 number that would be included on all project material to allow stakeholders to make contact with CDPL and make enquiries or comments relating to the Crookwell 3 wind farm project.

Any comments or complaints received through these avenues will be recorded on Record of Contact Form and actioned if necessary.

4.2 Door-Knock Consultation Meetings

The purpose of one to one door-knock meetings is to provide stakeholders with detailed information about the project and the approvals process and to provide opportunity for the individuals to have their say and enable CDPL to gather information about their opinions and any concerns they may have.

4.3 Group Meetings

The purpose of group meetings (not general public meetings) is to provide stakeholders with the same information but in a group format. Group meetings are proposed predominantly for government agencies (Planning Focus Meeting) and nongovernment organisations and interest groups.

Key steps in this task include:

- Mailing out introductory letters to inform the relevant stakeholders of the process and to offer them a one to one or group meeting opportunity;
- Following up the letter to schedule a meeting (note some stakeholders may simply wish to comment over a telephone call rather than meet);
- Attending the meeting and providing the stakeholder with a feedback form; and
- Documenting the meeting / telephone call and any follow up actions agreed to (ie. Provision of additional information);

4.4 Newsletters

There will be a minimum of 2 newsletters as part of the community engagement process. The first newsletter will provide general information about the project, the approvals process, and details of the planned community information day session(s), and the second newsletter will provide a project update.

The initial newsletter will be mailed to:

- All landowners and residents within a 5km radius of the wind farm sites;
- The Crookwell Township which is located more than 10km from the site boundaries;
- Relevant government agencies and other identified community interest groups;

The newsletter will also be made available to the wider community at the local Council offices and the information centres.

The second newsletter will go through the same process, but will be expanded to include any additional interested parties identified in the interim period.

4.5 Community Information day Session(s) and Advertising

A community information day session(s) will be held in the Crookwell Township. This will not be public meetings, but rather information sessions where interested members of the community have the opportunity to talk directly with the consultant team who performed the environmental assessment reports as part of the Planning Application report and CDPL representative(s).

The sessions would consist of a static display of posters explaining the project and the approvals process. No video presentations would be made.

The session will be advertised in local papers 2 weeks prior to the session occurring.

CDPL representative(s) and any requested consultant team members will be present at the information session to answer any questions and provide further details about the project and process.

Feedback forms will be available to all attendees, to provide an opportunity for the community to formally comment on the project. Any comments gathered through this avenue will be documented as part of the community consultation process.

4.6 Review and Documentation of Stakeholder Feedback

All records of the correspondence with stakeholder prior to lodgement of the Planning Application will be compiled and distributed to the relevant consultant for their review and consideration in their specific environmental assessment report. All records of the correspondence with stakeholder after the lodgement of the Planning Application will be compiled and reviewed in order form a response to the submissions and also to help with the future community consultation if the proposed project is approved.

5 KEY ASPECTS FOR ENGAGEMENT

5.1 Key Aspects

It is vital that clear and consistent messages about the project and the approvals process are delivered to the community. Anticipation of community issues, and the development of key messages dealing with these issues and other project information will reduce the risk of community discontent or disruption of the process due to misinformation or absence of information.

Key messages include:

- A message clearly indicating CDPL's commitment to public participation in the approvals process. This message should indicate that the consultation process will:
 - (i) keep the community and stakeholders informed,
 - (ii) listen to and acknowledge community and stakeholder concerns, and
 - (iii) provide feedback on how their input will influence the final project and decision; and
- Other messages that respond to the issues and concerns raised by stakeholders and the community.

These key messages will be developed as the approvals and consultation processes progress.

5.2 Frequently Asked Questions

Throughout the consultation process, CDPL will develop a set of Frequently Asked Questions (FAQs). These FAQs will be based around known key issues and concerns, this process will ensure that all project representatives distribute consistent information to the community. The FAQs will be reviewed periodically to ensure they remain reflective of project developments.

5.3 Consultation Timeframe

The consultation activities have commenced from the beginning of the project and will continue throughout the various phases of the project and will run in conjunction with the various field surveys and technical studies.

This timeline will be dynamic and will be updated as required to suit the planning process and feedback from key stakeholders.

APPENDIX B - Door-Knock Meeting Record

Date: April 2010	Time:a	am/pm UFWA R	ер: 🗆 ѕм	🗆 at 🔲 aj		
PROPERTY DETAILS						
GPS Location	Easting:		Northing:			
Property Name (if any):						
Street Address:						
Suburb / Locality:		State: NSW	Post Code:			
RESIDENT DETAIL	_S					
Name(s):						
Phone No: Home	(02)	Fax (02)	Mobile	04		
Email:						
MAILING LIST						
Include on Mailing List? Yes No If yes, Same as property address or detail below						
Mailing Address:						
Introduction and Process Outline						
1) Introduce Union Fenosa Wind Australia and Crookwell Development						
2) Outline Stakeholder Engagement Process						

3) Outline the community involvement and rights regarding the process

GENERAL SURVEY

General View of Wind Farms?	Highly supportive	Supportive	Neutral	Opposed	Highly Opposed
	1	2	3	4	5
→ How have you formed this view? (TV, Radio, Newspaper, Neighbour, etc)					
Do you have any concerns about the windfarm, and if so, what are they?					
Identify Landowner Involvement Category: (CDPL use Only)	Highly Involved / Attentive / Browser / General Public				
Concern about Noise Impact		erned			
→ Are you happy for your house to be used for background noise measurements (if required)?			YES / NC)	
Concern about Landscape Visual Impact		erned			
→ What is the main viewpoint from house (Circle all that apply)	1 2 3 4 5 N NEE SE SSW W NW				
Concern about Shadow Flicker Impact	Not Conc 1	erned		Very (4	
Concern about Land Value	Not Conc 1	erned		Very (4	
Concern about Bush Fire Hazard		erned			
Concern about Impact to Flora & Fauna	Not Conc 1	erned		Very (4	
Concern about Impact to Aerial Agriculture Activities	Not Conc 1	erned	Neutral		Concerned
Concern about Electromagnetic Interference to TV & Radio Reception	Not Conc 1	erned	Neutral	-	Concerned 5
Concern about Impact to Traffic	Not Conc 1	erned	Neutral		Concerned
f the proposal was approved, what type of community projects would you like to see Crookwell Development contribute to as part of the community enhancement program?					
How do you like to be informed in the					

future, newsletters, fact sheets, information days, one on one meetings with UFWA, other?

For each of the landowner concerns ranked 4 or 5,

A) Identify what is it that causing the concern to the landowner.

B) Identify what has triggered those concerns.

C) What can be done to address those concerns.

D) Do others in the community share similar concerns, and what has triggered their concerns.

E) What can be done to address the community concerns.

GENERAL QUESTIONS, CONCERNS & COMMENTS

Landowner's concerns relating to wind farms: (Please List)

······
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•
•
······
······
······
•
•

APPENDIX C Follow-up Conversation Letter

Date _____ Time _____

Dear Resident,

I visited your house today to talk about the proposed Crookwell 3 Wind Farm. Sorry I missed you. I will be in the area until the afternoon of Friday 30th April 2010, so if you would like to call me on the number written under my name below, we can organize a more suitable time.

If this is not possible, and you have any questions or you would like to discuss any aspect of the proposed wind farm, you can call our free call number during business hours (1800 457 181) or visit www.unionfenosa.com.au/project_cw3.htm

The purpose of the door knock is to answer questions and gather information from nearby residents so as to better understand community views in regard to the proposed wind farm project. This information will assist us and our consultants in understanding your views regarding the proposed wind farm project in order to develop a comprehensive environmental assessment for the project.

Thank you for your time, and, once again, I'm sorry I missed you.

Kind Regards,

Name _____

Mobile _____

Union Fenosa Wind Australia Crookwell Development Pty Ltd Suite 4.03, 68 York Street Sydney NSW 2000 Phone: 1800 457 181 Email: info@unionfenosa.com.au