## Site Context and Local Environmental Factors SECTION 5

#### 5.1 Site Context

The Crookwell 3 wind farm sites are separated by the Wollondilly River and Goulburn Crookwell Road corridor. The sites are located on a system of broad ridges and low hills that are separated by a series of creeks generally flowing south. Views from the proposed Crookwell 3 wind farm locations and the context of the surrounding landscape is illustrated in **Figures 5** and **6**.

### 5.2 Climatic and Atmospheric Conditions

Local climatic and atmospheric conditions have the potential to influence the visibility of the Crookwell 3 wind farm from surrounding view locations, and more significantly, from middle ground and distant view locations.

The Bureau of Meteorology has collected meteorological data over the past thirty five years at the Goulburn TAFE weather station which indicates that there are:

- 88.4 clear days (annual mean average);
- 132.3 cloudy days (annual mean average); and
- 75.3 days of rain (annual mean average).

Rainfall would tend to reduce the level of visibility toward the Crookwell 3 wind farm from a number of surrounding view locations, with the degree of visibility tending to decrease over distance. Rain periods may also reduce the number of visitors travelling through the areas from which the Crookwell 3 wind farm may be visible, and potentially decrease the duration of time spent at a particular public view location with a view toward the Crookwell 3 wind farm.

Cloud cover would also tend to reduce the level of visibility of the Crookwell 3 wind farm and lessen the degree of contrast between the wind turbine structures and the background against which the wind turbines may be visible.

On clear or partly cloudy days, the position of the sun would also have an impact on the degree of visibility of the Crookwell 3 wind farm. The degree of impact would be largely dependent on the



#### Photo P1 - From Crookwell 3 South



Photo P2 - From Crookwell 3 South



Photo P3 - From Crookwell 3 South



Photo P4 - From Crookwell 3 East

## CROOKWELL 3 WIND FARM

Extent of wind farm visibility illustrated on panoramic photographs is indicative only



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Photo P5 - Crookwell 3 East



Photo P6 - Crookwell 3 East (Little Vale Hill)



Photo P7 - Crookwell 3 East CW3 South + Peach Hill Little Vale Hill Black Hill (RL900 +/-) Cullerin WF (visible) SOUTH CW2 wind Mount Wayo Pigmans Hill (RL940 +/-) NEST AST mast -Crookwell 3 East Gullen Range (distant ridgeline) Gullen Range (distant ridgeline) Crookwell 1 Crookwell 2 (mid ground)

Photo P8 - Crookwell 3 East



Extent of wind farm visibility illustrated on panoramic photographs is indicative only GREEN BEAN DESIGN landscape architects

UNION FENOSA

WIND AUSTRALIA

CROOKWELL DEVELOPMENT

PTY LTD

gasNatural fenosa relationship between the position and angle of the sun relative to the view location. Late afternoon and early evening views toward the west would result in the wind turbines silhouetted above the horizon line, and with increasing distance would tend to reduce the contrast between the wind turbine structures and the surrounding landform.

**Figure 7** illustrates the extent to which local weather conditions can influence the visibility of wind farm turbine structures.



PHOTO A - Illustrates the visibility of wind turbines against a clear and blue sky backdrop with sunlight from above and to the right of the wind turbines creating a shadow line along the left hand side of the towers as well as portions of the rotor blades.

PHOTO A - DAY TIME VIEW FROM HUME HIGHWAY TOWARD CULLERIN WIND FARM AT AROUND 3.5KM (13th June 2010)



PHOTO B - Illustrates the visibility of wind turbines against a partly cloudy and overcast backdrop. The wind turbines in cloud shadow appear off white to grey in colour.

PHOTO B - DAY TIME VIEW FROM HUME HIGHWAY TOWARD CULLERIN WIND FARM AT AROUND 3.5KM (10th June 2010)



PHOTO C - DAY TIME VIEW FROM HUME HIGHWAY TOWARD CULLERIN WIND FARM AT AROUND 3.5KM (7th July 2010)

**CROOKWELL 3 WIND FARM** 

PHOTO C - Illustrates the visibility of wind turbines in fog/low cloud cover.



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## **Panoramic Photographs (Existing views)**

#### 6.1 Panoramic Photographs

A series of digital photographs were taken during the course of the fieldwork to illustrate existing views in the vicinity of a number of view locations inspected and assessed as part of this LVIA.

The photographs were taken with a tripod mounted digital Nikon D90 SLR camera with a prime 50mm lens. Individual photographs were digitally stitched together to form a segmented panoramic image to provide a visual illustration of the existing view from each photo location.

The real world coordinate location for each panorama photograph was recorded with a hand held GPS unit to an accuracy of around plus or minus four meters. Additional information including the bearing or direction of each photograph, time of day and prevailing weather conditions was also recorded.

The panoramic photographs presented in this LVIA have been annotated to identify key features or structures located within the existing view, and indicatively illustrate the general extent and location of potentially visible wind turbines or portions of turbine structures associated with the Crookwell 1, Crookwell 2, Gullen Range and Crookwell 3 wind farms.

The panoramic photograph locations are illustrated in **Figure 8**, and the panoramic photographs illustrated in **Figures 9** to **16**.

The panoramic photographs should not be confused with the photomontages. The panoramic photographs do not include a representation or model of the wind turbine structures. The photomontages are discussed in **Section 11** of this LVIA report, and are illustrated in **Figures 26** to **70**.



# **CROOKWELL 3 WIND FARM**

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3km

gasNatural fenosa



Photo Location C1 - View north west from Forest Siding Road



Photo Location C2 - View north west from Middle Arm Road



Photo Location C3 View west from Mount Pedlar Road



Photo Location C4 - View west from Middle Arm Road

# CROOKWELL 3 WIND FARM

Extent of wind farm visibility illustrated on panoramic photographs is indicative only gasNatural fenosa

CROOKWELL DEVELOPMENT PTY LTD

GREEN BEAN DESIGN



Photo Location C5 - View west from Middle Arm Road



Photo Location C6 - View south west from Middle Arm Road



Photo Location C7 - View south west from Middle Arm Road



Photo Location C8 View south from Middle Arm Road

# CROOKWELL 3 WIND FARM

Extent of wind farm visibility illustrated on panoramic photographs is indicative only



CROOKWELL DEVELOPMENT PTY LTD

GREEN BEAN DESIGN



Photo Location C9 - View south to south east from Woodhouselee Road



Photo Location C10 - View south to south east from Woodhouselee Road



Photo Location C11 - View south from Woodhouselee Road



Photo Location C12 - View south to south east from Woodhouselee Road

# CROOKWELL 3 WIND FARM

Extent of wind farm visibility illustrated on panoramic photographs is indicative only



CROOKWELL DEVELOPMENT PTY LTD

#### GREEN BEAN DESIGN



Photo Location C13 View south from Middle Arm Road



Photo Location C14 - View north to east from Woodhouselee Road



Photo Location C15 - View north west to north east from Woodhouselee Road



Photo Location C16 - View north west to north east from Woodhouselee Road

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## CROOKWELL 3 WIND FARM

Extent of wind farm visibility illustrated on panoramic photographs is indicative only GREEN BEAN DESIGN



Photo Location C17 - View west to north west from St. Stephens Road



Photo Location C18 View west to north west from St. Stephens Road



Photo Location C19 - View west to north from Crookwell Road



Photo Location C20 - View north west to north from Pejar Dam (above boat ramp)

## CROOKWELL 3 WIND FARM

Extent of wind farm visibility illustrated on panoramic photographs is indicative only UNION FENOSA WIND AUSTRALIA gasNatural fenosa

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Photo Location C21 - View south from Crookwell Road



Photo Location C22 - View south from Crookwell Road (adjacent Crookwell 1 Wind Farm)



Photo Location C23 View east to south east from Third Creek Road



Photo Location C24 - View south to south east from Dawsons Creek Road

# **CROOKWELL 3 WIND FARM**

Extent of wind farm visibility illustrated on panoramic photographs is indicative only



CROOKWELL DEVELOPMENT PTY LTD

GREEN BEAN DESIGN



Photo Location C25 - View east to south east from Dawsons Creek Road



Photo Location C26 - View east to south east from Dawsons Creek Road



Photo Location C27 - View east to south east from Pejar Road



Photo Location C28 View east to south east from Pejar Road

# **CROOKWELL 3 WIND FARM**



CROOKWELL DEVELOPMENT PTY LTD

GREEN BEAN DESIGN

Extent of wind farm visibility illustrated on panoramic

photographs is indicative only



Photo Location C29 - View east from Range Road



Photo Location C30 - View east from Range Road



CROOKWELL DEVELOPMENT PTY LTD

#### GREEN BEAN DESIGN

landscape architects

# CROOKWELL 3 WIND FARM

Extent of wind farm visibility illustrated on panoramic photographs is indicative only

# Landscape Character Areas and Sensitivity Assessment SECTION 7

#### 7.1 Landscape Character Areas

As part of the LVIA process it is important to understand the nature and sensitivity of different components of landscape character, and to assess them in a clear and consistent process. For the purpose of this LVIA, landscape character is defined as *'the distinct and recognisable pattern of elements that occur consistently in a particular type of landscape'* (The Countryside Agency and Scottish Natural Heritage 2002).

This LVIA has identified six Landscape Character Areas (LCA's), which generally occur within the viewshed of the Crookwell 3 wind farm site. The LCA's represent areas that are relatively consistent and recognisable in terms of their key landscape elements and physical attributes; which may include a combination of topography/landform, vegetation/landcover, land use and built structures (including settlements and local road corridors).

The LCA's are not definable as discrete areas, and characteristics within one LCA may well occur within adjoining or surrounding LCA's. The LCA's have not been assessed, described or illustrated as singular 'landscape units'. For the purpose of this LVIA the LCA's have been identified as:

- LCA 1 Undulating grasslands;
- LCA 2 River valley and drainage lines;
- LCA 3 Water bodies;
- LCA 4 Simple slope and ridgeline areas;
- LCA 5 Timbered areas (cultural and remnant native); and
- LCA 6 Settlements.

#### 7.2 Landscape Sensitivity Assessment

The British Landscape Institute describes landscape sensitivity as 'the degree to which a particular LCA can accommodate change arising from a particular development, without detrimental effects on its character'.

The assessment of landscape sensitivity is based upon an evaluation of the physical attributes identified within each LCA, both singularly and as a combination that gives rise to the landscape's overall robustness and the extent to which it could accommodate the wind farm. The criteria used to determine landscape sensitivity are outlined in **Table 6** and based on current good practice employed in the assessment of some wind farm developments and draws on the Land Use Consultants report on landscape sensitivity for wind farm developments on the Shetland Islands (March 2009). Landscape sensitivity is a relative term, and the intrinsic landscape values of the surrounding landscape may be considered of a higher or lower sensitivity than other areas in the New South Wales Southern Tablelands region.

Whilst the assessment of landscape sensitivity is largely based on a systematic description and analysis of landscape characteristics, this LVIA acknowledges that some individuals and other members of the local community will place higher values on the local landscape. These values may transcend preferences (likes and dislikes) and include personal, cultural as well as other parameters.

Landscape Sensitivity Assessment Criteria						
Characteristic	Aspects indicating lower sensitivity to the wind farm development	<ul> <li>↔ Aspects indicating higher sensitivity to the wind farm development</li> </ul>				
Landform and scale: patterns, complexity and consistency	<ul> <li>Large scale landform</li> <li>Simple</li> <li>Featureless</li> <li>Absence of strong topographical variety</li> </ul>	<ul> <li>↔ Small scale landform</li> <li>Distinctive and complex</li> <li>Human scale indicators</li> <li>Presence of strong topographical variety</li> </ul>				
Landcover: patterns, complexity and consistency	<ul><li>Simple</li><li>Predictable</li><li>Smooth, regular and uniform</li></ul>	<ul> <li>↔ Complex</li> <li>• Unpredictable</li> <li>• Rugged and irregular</li> </ul>				
Settlement and human influence	<ul> <li>Concentrated settlement pattern</li> <li>Presence of contemporary structures (e.g. utility, infrastructure or industrial elements)</li> </ul>	<ul> <li>↔ Dispersed settlement pattern</li> <li>Absence of modern development, presence of small scale, historic or vernacular settlement</li> </ul>				

Table 6 – Criteria for the assessment of L	andscape Sensitivity
--------------------------------------------	----------------------

	Landscape Sensitivity Assessn	nent C	riteria
Characteristic	Aspects indicating lower sensitivity to the wind farm development	$\leftrightarrow$	Aspects indicating higher sensitivity to the wind farm development
Movement	Prominent movement, busy	$\leftrightarrow$	No evident movement, still
Rarity	Common or widely distributed example of landscape character area within a regional context	$\leftrightarrow$	Unique or limited example of landscape character area within a regional context
Intervisibility with adjacent landscapes	Limited views into or out of landscape	$\leftrightarrow$	Prospects into and out from high ground or open landscape
	Neighbouring landscapes of low sensitivity		<ul> <li>Neighbouring landscapes of high sensitivity</li> </ul>
	Weak connections, self contained		Contributes to wider landscape
	<ul><li>area and views</li><li>Simple large scale backdrops</li></ul>		Complex or distinctive backdrops

The criteria set out in **Table 6** have been used to evaluate each of the LCA's using sensitivity grades of higher, medium or lower. The sensitivity grades are illustrated in **Tables 7** to **12** using shading against each of the criteria set out in **Table 6**.

The sensitivity of overall grades of higher, medium or lower were determined using the following definitions:

**High (Rating of 19** to **30)** – Key characteristics of the LCA may be adversely impacted by the wind farm, and may result in major alterations to perceived characteristics of the landscape. The degree to which the landscape may accommodate the wind farm development would potentially result in a number of perceived uncharacteristic and significant changes.

**Medium (Rating of 12** to **18)** – Some characteristics of the LCA may be altered by the wind farm, although the landscape may have the capability to absorb some change. The degree to which the landscape may accommodate the wind farm development would potentially result in the introduction of prominent elements but may be accommodated to some degree.

**Lower Rating (11** or **less)** – The characteristics of the LCA are generally robust, and would be less affected by the wind farm. The degree to which the landscape may accommodate the wind farm would not significantly alter existing landscape character.

## 7.3 Analysis of Landscape Sensitivity

The following section of this LVIA provides an analysis of landscape sensitivity within the Crookwell 3 10km viewshed and considers each of the six LCA's.

## 7.3.1 LCA 1 Undulating grassland



Plate 1 – Typical view across undulating grassland landscape

	Lower Sensitivity		$\leftrightarrow$	Highe	er Sensitivity		
	Low	Low to Med	Medium	Med to High	High		
Rating	1	2	3	4	5		
Landform and Scale							
	undulating land	form. The structure	urge scale and ope e of the landform is e of any strong to	simple containing	g few distinct		
Landcover							
			and predictable ware of the Southerr		f widespread		
	The overall lands uniform.	cape pattern creat	ed by the grass pa	sture is <b>smooth, r</b>	egular and		
	Areas of cultural windbreaks.	planting surround t	he majority of rural	dwellings in the fo	orm of evergreen		
Settlement and human							
influence	A <b>dispersed settlement</b> pattern occurs across the landscape and comprises rural farm homesteads including documented local historical structures.						
	There is a general <b>absence of modern development</b> throughout this landscape, excluding agricultural structures and local roads and access tracks.						
Movement							
	Movement is generally <b>restricted</b> to occasional passing traffic, livestock as well as agricultural machinery.						
Rarity							
	Undulating grassland is generally <b>well represented and a common feature</b> across the regional area of the Southern Tablelands.						
Intervisibility							
	elevated areas. L		as a <b>simple back</b> on n can retain and co der landscape.		-		
Overall Sensitivity Rating	Medium (Score 1	8 out of 30)					

Table 7 – LCA 1 - Undulating grassland -Landscape Sensitivity

#### 7.3.2 LCA 2 River Valley and Drainage Lines



Plate 2 – Typical view across river valley and drainage lines landscape

	Lower Sens	sitivity		$\leftrightarrow$		Highe	r Sensitivity	
	Low	Low to Me	ed	Medium	Med to High		High	
Rating	1	2		3	4		5	
Landform and Scale								
	River valley and landform resulting	-		by the gently	y sloping			
	The landform is simple containing few distinct features and has an absence of any							
	strong topograp	phical element	ts.					
Landcover								
		-		and predictable v egional area of the				
	The overall lands	cape pattern c	reate	ed by grass pasture	e withi	n this landso	ape is <b>smooth,</b>	
	regular and unif	<b>form</b> , although	mos	aics of timbered st	ands o	on adjoining	slopes and	
	hillsides create se	ome diversity	and	contrast in pattern	n.			
Settlement and human								
influence	There is a general absence of settlement within this landscape with a small and							
	dispersed number of agricultural structures (some abandoned), minor access tracks and							
	fences occurring	throughout. So	ome	modifications to lar	ndscap	e have bee	n carried out to	
	accommodate ro	ad access and	l the	former railway line	-			
Movement								
	A lack of any sig	gnificant mov	emei	nt gives this landso	cape a	n overall stil	character.	
Rarity								
	River valleys and drainage lines are generally well represented and a common feature							
	across the broad	er regional are	a of	the Southern Table	elands			
Intervisibility								
	Intervisibility is <b>limited</b> as views from within this landscape are often contain landform rising above the river valley and drainage lines. Views along drain well as views from areas above and across river valley and drainage lines <b>p</b> with adjoining landscape areas.						ainage lines, as	
Overall Sensitivity Rating	Medium (Score 1	6 out of 30)						

Table 8 – LCA 2 - River Valley and Drainage Lines - Landscape Sensitivity

### 7.3.3 LCA 3 Water bodies



Plate 3 – Typical view across the Pejar Dam

	Lower Sens	sitivity	tivity		Highe		r Sensitivity	
	Low	Low to N	1ed	Medium	Med to High		High	
Rating	1	2		3	4		5	
Landform and Scale								
	Water bodies are moderate scale		ontaine	ed by the gently slo	ping la	andform resu	lting in a	
	The landform is simple containing few distinct features and has an absence of a							
	strong topograp	hical eleme	nts.					
Landcover								
		,	•	and predictable v the Southern Table			f water bodies	
	The overall lands	cape patterr	withir	this landscape is	smoot	th, regular a	nd uniform,	
	•			s on adjoining slop	es and	d hillsides cre	eate some	
	diversity and co	ntrast in pat	tern.					
Settlement and human								
influence	Settlement is occasional and dispersed within this landscape and does not generally							
	occur along the top of ridgelines or on elevated and exposed slopes. The main influences							
	of human activity	are the effe	cts of a	agricultural impro	vemei	nt within the	landscape, the	
	dam construction	and the 330	kV tra	nsmission line.				
Movement								
	A lack of any significant movement gives this landscape an overall still character;							
	however some movement is apparent with the frequency of traffic passing over the Pejar							
	Dam wall along th	he Goulburn	Crook	well Road.				
Rarity								
	Water bodies are generally well represented across the broader regional area of the							
	Southern Tablelands.							
Intervisibility								
	Intervisibility is <b>lir</b> landform rising al			n within this landso n.	ape a	re often cont	ained by sloping	
Overall Sensitivity Rating	Medium (Score 1	6 out of 30)						

### Table 9 – LCA 3 - Water bodies - Landscape Sensitivity

#### 7.3.4 LCA 4 Simple slopes and ridgelines



Plate 4 – Typical views along simple slope and ridgeline landscape

	Lower Sensitivity		$\leftrightarrow$	Highe	er Sensitivity		
	Low	Low to Med	Medium	Med to High	High		
Rating	1	2	3	4	5		
Landform and Scale							
		0	re represented by a le from elevated are	0 , ,	•		
	The landform is s	simple containing	few distinct featur	es and has a gene	eral absence of		
	any strong topographical elements.						
Landcover							
	Landcover is pre- across the South		e and predictable <b>v</b>	within the context o	of similar areas		
	The overall lands	scape pattern crea	ted by grass pastur	e within this lands	cape is <b>smooth</b> ,		
	regular and unif	f <b>orm</b> , although mo	saics of timbered a	reas on surroundir	ng slopes and		
	cultural planting	surrounding dwelli	ngs create some <b>di</b>	versity and contr	ast in pattern.		
Settlement and human							
nfluence	Settlement is occasional and dispersed within this landscape and does not generally						
	occur along the top of ridgelines or on elevated and exposed slopes. The main influences						
	-			Preserve a sprease second	e main influence		
	of human activity	are the effects of	agricultural impro				
Movement	of human activity	are the effects of	agricultural impro				
Movement			agricultural impro	wement within the			
Movement				wement within the			
				wement within the			
	Movement is gen	nerally <b>limited</b> to le		ess tracks.	landscape.		
	Movement is gen Simple slopes an	nerally <b>limited</b> to lo	ocal roads and acce	ess tracks.	landscape.		
Movement Rarity	Movement is gen Simple slopes an	nerally <b>limited</b> to lo	ocal roads and acce	ess tracks.	landscape.		
Rarity	Movement is gen Simple slopes an across the broad	nerally <b>limited</b> to long the second	ocal roads and acce	ess tracks.  sented and a com elands.  cape are often con vever, potential dis	Iandscape.		

Table 10 – LCA 4 - Simple slopes and ridgelines - Landscape Sensitivity

#### 7.3.5 LCA 5 Timbered Areas



Plate 5 – Typical views across timbered areas

	Lower Sensitivity		$\leftrightarrow$	Highe	er Sensitivity				
	Low	Low to Med	Medium	Med to High	High				
Rating	1	2	3	4	5				
Landform and Scale									
	Timbered areas occur across a range of landform types that are generally defined gently sloping or undulating landform resulting in a <b>moderate scale</b> landform.								
	The landform is <b>simple</b> containing <b>few distinct features</b> and has an <b>absence of any strong topographical elements</b> .								
Landcover									
	-	dominantly <b>simple</b> Southern Tablelar		within the context o	f similar timbered				
			•	eas creates <b>diversi</b> nd cultivated areas	-				
	The darker coloured foliage of timbered areas contrast against the surrounding backdrop of lighter toned pasture and cultivated areas.								
Settlement and human									
influence	Settlement is <b>occasional</b> and <b>dispersed</b> within timbered areas with the majority dwellings visually screened from surrounding landscape areas. The main influe human activity are the effects of <b>agricultural improvement</b> within the landscape								
Movement									
	Movement is generally <b>limited</b> to local roads and access tracks.								
Rarity									
	Timbered areas are reasonably well represented and an established feature across broader regional areas of the New South Wales Southern Tablelands.								
Intervisibility									
	adjoining areas is g a relative to view lo pe are constrained I or lightly timbered	cations, but on by vegetation,							
Overall Sensitivity Rating	Medium (Score	g landscape areas. 16 out of 30)							

Table 11 – LCA 5 - Timbered Areas- Landscape Sensitivity
----------------------------------------------------------

#### 7.3.6 LCA 6 Settlements



Plate 6 – Typical views across settlement areas

	Lower Sensitivity		$\leftrightarrow$		Higher Sensitivity			
	Low	Low to M	ed	Medium	Me	d to High	High	
Rating	1	2		3	4		5	
Landform and Scale								
	Dispersed rural settlement is generally surrounded and contained by gently slopi low undulating landform resulting in an overall <b>small scale</b> rural urban environm							
Landcover								
	The overall landscape pattern is defined by human scale indicators including houses, shops and roads together with a variety of urban structures which create some <b>diversity and contrast</b> in pattern. There are generally no elements that result in the presence of strong topographical variety.							
Settlement and human								
influence	Dwellings are dispersed beyond the main settlement areas of Crookwell and Goulburn							
	and are generally	/ associated v	vith ir	ndividual farms and	rural s	structures.		
Movement								
	Movement is gen	erally limited	l to lo	cal roads and acce	ss trac	ks.		
Rarity								
	Small scale urban settlements are <b>dispersed</b> across the landscape, as well as the broader regional area of the Southern Tablelands.							
Intervisibility								
-	Intervisibility is <b>limited</b> where views are partially contained by buildings and structure although views from elevated areas of the settlement extend beyond and across adj landscape areas.						-	
Overall Sensitivity Rating	Medium (Score 1	8 out of 30)						

Table 12 - LCA 6 - Settlements - Land	scape Sensitivity
	ooupo cononintity

## 7.4 Overall Landscape Sensitivity

In terms of overall landscape sensitivity, this LVIA has determined that the landscape within the viewshed of the proposed Crookwell 3 wind farm has a Medium sensitivity to accommodate change,

and represents a landscape that is reasonably typical of landscape types found in surrounding areas of the Southern Tablelands.

As a landscape with an overall Medium sensitivity to accommodate change, some characteristics are likely to be altered by the wind farm; however, the landscape will have some capability to accommodate change. This capability is largely derived from the presence of predominantly large scale and open landscape across portions of the wind farm, together with the relatively low settlement density within the Crookwell 3 10km viewshed.

This LVIA has determined that the wind farm would not be an unacceptable development within the Crookwell 3 wind farm viewshed, which in a broader context also contains built elements such as roads, agricultural industry, aircraft landing strips, communication towers, power lines as well as approved wind farms within the vicinity of the Crookwell 3 wind farm site.

This LVIA notes that the Gullen Range and Crookwell 2 wind farms have been approved for construction within the Crookwell 3 10km viewshed; however, as these had not been constructed and were not a visible element at the time of this LVIA preparation, they have not been included in the assessment of landscape sensitivity. The presence of existing wind farms would tend to decrease the level of sensitivity of any landscape character area in which it was located subject to an assessment and determination of cumulative impact on landscape sensitivity. Accordingly, the assessment of landscape sensitivity contained in this LVIA is conservative.

The cumulative visual impacts of the proposed Crookwell 3, the existing Crookwell 1 and the approved Gullen Range and Crookwell 2 wind farms are assessed in Section 9 of this LVIA.

Despite being 'naturalistic' in appearance large portions of the Southern Tablelands landscape have been heavily modified by agricultural improvement for pasture and arable production post European settlement. Irrespective of the extent and nature of modifications to the landscape, it is not correct to assume that the landscape surrounding the wind farm should be any less valued as a result of modification. Physical change in the appearance of the landscape is an ongoing and constant process from both human and environmental influences and can result in both positive and negative effects.