

Appendix A

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**Existing/Agreed Wind farms**

## A1 Existing/Agreed Wind farms

All wind farms which have been constructed, or are under construction or have a valid planning consent as of June 2005, but which have an output greater than 5MW i.e. they are not "small" as defined by TAN 8, para. 2.12

### Sources

- LUC = Wales Planning and Development Database, Quarterly Planning Review, Prepared for FES by Land Use Consultants – April – June 2005
- BWEA - British Wind Energy Association website – add web address

Offshore proposals at Scarweather Sands and North Hoyle have not been taken into account in the formal visual impact analysis.

Site Name	Status	Grid reference	LUC data	BWEA Data	Local Authority	Number of turbines	Power (MW)	MW capacity	Turbine height (ground to blade tip)	Operational Date
Llyn Alaw	Operational	SH 365875	✓	✓	Anglesey	34	0.6	<b>20.4</b>	53	October 1997
Llangwryfon	Operational	SN 621696	✓	✓	Ceredigion	11	0.85	<b>9.35</b>	42	February 2004
Mynydd Gorddu	Operational	SN 667860	✓	✓	Ceredigion	19	0.5	<b>10.2</b>	50	April 1998
Bryn Du (Cefn Croes)	Operational	SN 805790	✓	✓	Ceredigion	39	1.5	<b>58.5</b>	100	April 2005
Dyffryn Brodyn	Operational	SN 219268	✗	✓	Ceredigion	11	0.5	<b>5.5</b>	53.5	December 1994
Rhyd-y-Groes	Operational		✗	✓	Ceredigion	24	0.3	<b>7.2</b>	45.5	Dec 1992
Moel Maelogen	Operational	SH 849611	✗	✓	Conwy	1	1.3	<b>1.3</b>	74	
Moel Maelogen A	Operational	SH 849611	✓	✓	Conwy	2	1.3	<b>2.6</b>	74	December 2002
Moel Maelogen extension	Consented	SH 852606	✓	✓	Conwy	9	1.3	<b>11.7</b>	91	November 2004
Tir Mostyn and Foel Goch	Operational	SJ 003580	✓	✓	Denbighshire	25	0.85	<b>21.25</b>	75	September 2005
Trysglwyn	Operational	SH 440890	✓	✓	Gwynedd	14	0.4	<b>5.6</b>	43.5	July 1996
Ffynnon Oer	Operational	SS 845990	✓	✗	Neath Port Talbot	16	1.31	<b>21</b>	91	May 2003
Carno A and B	Operational	SN 915960	✓	✓	Powys	56	0.6	<b>33.6</b>	54	October 1996
Mynydd Clogau	Under Construction	SO 030 990	✓	✓	Powys	17	0.85	<b>14.45</b>	71.5	February 2005
Cemmaes II / C	Operational	SH 866068	✓	✓	Powys	18	0.85	<b>15.3</b>	76	March 2002 (A)
Bryn Titli	Operational	SN 930755	✗	✓	Powys	22	0.45	<b>9.9</b>	48.5	July 1994
Llandinam P and L	Operational	SO 038837	✗	✓	Powys	103	0.3	<b>30.9</b>	45.5	Dec 1992
Arts Factory	Consented	SS98996 5	✗	✓	Rhondda Cynon Taff	8	1.3	<b>10.4</b>	76	April 2005
Taff Ely	Operational	SS 980865	✗	✓	Rhondda Cynon Taff	20	0.45	<b>9</b>	53.5	August 1993





Appendix B

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**Wind Farm capacity  
estimates**

## B1 Wind farm capacity estimates

Wind farm capacity estimates As a rule of thumb the potential capacity of each 1km grid square within an SSA is taken as being an average of 8.5MW; based on a conservative approach to the data presented in the Tables A1 and A2 below, which provide a review of existing / proposed wind farm developments to emerge in recent years in Wales and NE England<sup>45</sup>, including scoping reports. The last two most recent data in Table A1 relate to 3MW turbines, hence the larger average energy yields. It should also be noted that the areas immediately surrounding the turbines represent the most favourable/deliverable areas selected by developers and that there will be other land not utilised within the sites.

**Table A1. Capacity performance per unit area of wind farm developments in Wales**

Proposal	SSA	Planning status ( as of June 2006 )	Number of turbines	MW capacity of proposal	Area (approx.) (km <sup>2</sup> ) ( excl. access tracks	MW / km <sup>2</sup>
Mwdwl Eithin (	A	Scoping proposal	19	38	4	9.5
Tir Mostyn	A	Developed	25	21.21	3	7.07
Moel Maelogen extension	A	Developed	12	15.6	2	7.8
Blaengwen Farm, Pencader	G	In planning	10	30	3	10
Carno extension	B	In planning	14	18.2	2	9.1
Ffynnon Oer	F	Just constructed	16	20.8	2	10.4
Mynydd-y-Gwair	E	Scoping proposal	25-50	50-75	7.75	6.5 – 9.7 ( 8 used )
Braich Du	Outside A	Planning permission granted	3	4.5	0.5	9
Mynydd-y-Bettws	E	In planning	16	36.8	4	9.2
Ferndale ( Arts Factory )	Buffer of F	Planning permission granted	8	10.4	1.5	7
<i>Maerdy Wind Farm</i>	<i>F</i>	<i>Scoping</i>	<i>8</i>	<i>24</i>	<i>2</i>	<i>12</i>
<i>Pant-y-Wal</i>	<i>F</i>	<i>In Planning</i>	<i>14</i>	<i>42</i>	<i>3</i>	<i>14</i>
					<b>Average</b>	<b>9.4</b>

<sup>45</sup> These are areas in which Arup has recent working experience and data; no other significance is implied.

**Table A2. Capacity performance per unit area of wind farm developments in North East England**

Proposal	Planning status	Number of turbines	MW capacity of proposal	Area (approx.) (km <sup>2</sup> )	MW / km <sup>2</sup>
Ray	In planning	20	60	6	10
Middlemoor	In planning	18	54-75	6.75	8 - 11.1
Steadings Wind farm	In Planning	22	66 max	9	7.3
Green Rigg	In Planning	18	36	4.5	8
				<b>Average</b>	<b>8.8</b>







Appendix C

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**LANDMAP - Further  
Information**

## C1 LANDMAP – Further Explanation

### C1.1 The LANDMAP Methodology

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LANDMAP separates the landscape into five Aspects:

**Geological Landscape:** this is the study of the geology, geomorphology and hydrology of the area.

**Landscape Habitats:** looks at the distribution of vegetation and habitats and the basis for landscape ecology.

**Visual & Sensory:** this aspect identifies those landscape qualities that are perceived through the senses. It deals with the individual physical attributes of landform and land cover, as well as their visual patterns of distribution and sensory characteristics, and the relationships between them in a particular area.

**Historic Landscape:** focuses on how archaeological and historical sites relate to each other and to the surrounding landscape.

**Cultural Landscape:** this considers the relationship that exists between people and places; how people have given meaning to places, how the landscape has shaped their actions and their actions have shaped the landscape.

Detailed guidance on the LANDMAP methodology is provided in the LANDMAP Information System manual, published in 2001 and updated in June 2003. There is a specific methodology chapter written for each of the five Evaluated Aspects (Geological Landscape, Landscape Habitats, Visual and Sensory, Historic Landscape and Cultural Landscape) that comprise the full set of LANDMAP Information.

Additional guidance to ensure that LANDMAP Information achieves high standards of information accuracy and presentation are detailed in the LANDMAP Quality Assurance Procedure (2003), which is also available from the “useful downloads” section. ( see [www.ccw.gov.uk](http://www.ccw.gov.uk) )

### C1.2 The LANDMAP Process.

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The process for gathering, organising and evaluating LANDMAP Information into a nationally consistent dataset is similar for each of the five Evaluated Aspects and involves the following steps:

- Step 1: Classifying and mapping distinct Aspect Areas
- Step 2: Completing a detailed data capture form for each Aspect Area identified through desk and field work as appropriate
- Step 3: Preparation of an accompanying Technical Report
- Step 4: Submission for Quality Assurance assessment to ensure consistency and accuracy (for studies based upon the 2003 methodology update)

### C1.3 LANDMAP Coverage in 2004

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LANDMAP studies are undertaken at a County or National Park scale throughout Wales. LANDMAP is a partnership programme between the Countryside Council for Wales and the Unitary and National Park Authorities. As such, the timing of the collection of LANDMAP Information in an individual Authority responds to the unique circumstances of each situation. The first LANDMAP studies were initiated in 1997; the LANDMAP programme is now underway in all Welsh Unitary and National Park Authorities.

The five Evaluated Aspects, which comprise the full set of LANDMAP information, are complete for 20 of the 25 Unitary and National Park Authorities. Eleven of these complete sets of LANDMAP Information are also Quality Assured. The remaining five Authorities are in the process of working towards completing the full complement of five Evaluated Aspects (which include the Geological Landscape, Landscape Habitats, Visual and Sensory, Historic Landscape and Cultural Landscape).

#### **C1.4 Visual and Sensory methodology**

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The visual and sensory aspect is a process of mapping what is perceived through our senses, primarily visually, from the physical attributes of landform and land cover to their visible patterns of distribution and their consistent relationships in particular areas. The senses of hearing, smell and touch are also considered as part of the perceived characteristics of the landscape. Partly based on aesthetic and perceptual criteria, this aspect uses many descriptive terms that are similar to the Landscape Character Approach [used in England and Scotland] to ensure familiarity and consistency of application.

Since this aspect may include any visible and/or perceived element within the landscape, it inevitably covers elements and features that are also covered by other Aspects. Thus, for example, the Visual and Sensory Aspect is likely to include references to both the form and type of vegetation within an area which the Biodiversity Aspect will also cover in its own way. The important difference is that the Visual and Sensory Aspect is concerned with the effect the vegetation has on how the area is perceived.

Most people can make subjective comment on what a landscape looks and feels like. However in the LANDMAP Visual and Sensory Aspect, greater objectivity is achieved by using consistent definitions, method of assessment and wording for each area. This makes the assessment more robust and justifiable by the Aspect Specialist who will be an expert in this field.

The process for carrying out the Visual and Sensory aspect is similar to the other evaluated aspects. Initially the study area is classified into different landscape types. These are mapped and data capture forms filled out for each. As with all landscape assessments, this is likely to be an iterative process.

Desk study derived Aspect Areas will be refined by field assessment which will form the basis for data recording. When the assessment is completed, a technical report is prepared to explain judgements and any deviations from the method. A QA procedure is then carried out on the assessment to ensure consistency and for quality control purposes.

The compilation of the LANDMAP Visual & Sensory Aspect therefore involves five main processes:

Step 1: Classifying and mapping Visual & Sensory Aspect Areas

Step 2: Aspect Areas Data Capture - Overview and Description

Step 3: Aspect Areas Data Capture - Evaluation and Recommendations

Tolerance to Change (optional)

Step 4: Technical reporting

Step 5: Quality Assurance

The Visual & Sensory Aspect is less reliant on published data and more reliant on field appraisal than other aspects. The basic information that is likely to be used is as follows:

- 1:25,000 and 1:10,000 OS maps,

- Aerial Photographs at 1:10,000 preferably orthographically corrected and available as continuous digital coverage for a study area [not as individual tiles]
- Unitary Development Plans
- Previous studies and landscape related documentation e.g. landscape assessments and countryside strategies.

The Visual & Sensory Aspect is organised according to a hierarchical classification system. This typology aims to classify the landscape into areas of distinct Visual & Sensory character, and is based on a hierarchy of four levels.

Value is assessed for each aspect area using the following criteria:

Scenic quality	The area will have accessibly-viewed scenes which are of a picturesque quality, demonstrating aesthetically-pleasing elements in composition
Integrity	The area should be generally unspoilt by large-scale, visually intrusive or other inharmonious development
Character	The area should have a distinctive and common character including topographic and visual unity and a clear sense of place
Rarity	The area should exhibit features or qualities that are both rare/representative and valuable for any other Visual & Sensory criteria

The Aspect Specialist also summarises with an overall evaluation and justification. This full information will be available on the CCW LANDMAP website for each local authority area in due course.



Appendix D

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**Treatment of Historic  
landscapes**

## D1 Treatment of historic landscapes

### D1.1 Overview - Register of Landscapes of Historic Interest in Wales

Cadw: Welsh Historic Monuments, the Countryside Council for Wales (CCW) and the four Welsh Archaeological Trusts have for some time been working in partnership on several projects which are aimed at improving the understanding of the historic landscape of Wales, at both the national and local levels.

In 1998 and 2001, as a first step towards raising the profile of historic landscapes in Wales, Cadw, CCW and ICOMOS (UK)(International Council on Monuments and Sites) published the two-volume Register of Landscapes of Historic Interest in Wales Note: put all published texts in italics. This advisory and non-statutory document highlights what are considered to be the best examples of different types of historic landscape in Wales. However, the selection of areas for this Register does not reduce the importance of the rest of Wales's rich historic landscape. A Good Practice Guide explains how the Register should be used in assessing the effect of major developments on the historic landscape<sup>46</sup>. This guidance is primarily aimed at the assessment of individual projects and the development control process ( Para 21. P 9 ). It does however indicate that more strategic studies ( such as the TAN 8 Annex D studies ) should make reference to the principles involved.

### D1.2 Cadw Criteria and sensitivity

The Criteria adopted by Cadw for the derivation of the historic landscapes are set out in **Table A** below<sup>47</sup>. The table also includes a general view of the relationship between these criteria and large-scale wind farms based upon fieldwork and expert judgement gathered during the TAN 8 and subsequent work by the study team.

**Table A – Cadw Criteria for historic landscape definition and sensitivity to large scale wind farm development.**

Criteria	Definition	Relationship to larger scale wind farms
1. Intensively developed or extensively remodelled	Landscapes in which development or change as a result of human activity (land use) has been so intense, resulting in substantial alterations to the natural (landform) and semi-natural (landcover) elements: large towns, cities, conurbations, industrial areas, large-scale civil engineering projects, landscapes showing human endeavour on a grand scale	Sensitive
2. Period	Landscapes in which development or change as a result of human activity has been arrested at one or more stages and subsequent material alteration restricted: relict (or fossil) landscapes showing human activity within one or more periods, perhaps abandoned or essentially unchanged after the principal activity ceased.	Most sensitive
3. Historic diversity/Multi-period	Landscapes in which development or change as a result of human activity continues, and into which past evidence from more than one period has become cumulatively assimilated with the natural (landform) and semi-natural (landcover) elements, with particular regard for those areas in which evolution over time is shown by a variety of archaeological or historic features with one or more of the following attributes:	Sensitive

<sup>46</sup> Cadw - Good Practice Guide on the using the Register of Landscapes of historic Interest in Wales in the Planning and development process

<sup>47</sup> From Cadw, 2001, Register of Landscapes of Outstanding Historic Interest in Wales



	<ul style="list-style-type: none"> <li>• different forms of the same type or class of feature;</li> <li>• a range of different features;</li> <li>• density of related features;</li> <li>• particular group value;</li> <li>• continuity through several periods;</li> <li>• features relating to the development of a particular theme or process</li> </ul>	
4. Buried/Subsumed or destroyed	Landscapes whose past use may usually only be inferred by historical (documentary) or archaeological (remote or intrusive) methods of investigation.	Less sensitive
5. Cultural merit	Landscapes with historic (events, traditions, legends, folklore), artistic, literary, architectural, technological, religious, or other important cultural association, either singly or in combination.	Less sensitive

The approach adopted for the TAN 8 Annex D studies is set out below.

### D1.3 Effects upon historic landscapes of the SSAs

The main direct effects of the relevant SSAs upon the historic landscapes of Wales are summarised in the table below in **Table B**. Two approaches have been taken to the treatment of historic landscape in the TAN 8 Annex D studies ( in terms of the influence on the outcomes of the studies ) depending on the criteria for designation of the historic landscape concerned. These are as follows:-

- Most sensitive/Sensitive - Historic landscape mapped as a variable constraint and SSA zones ranked with respect to extent of Historic landscape resource directly affected by the developable part of the zone ( as a percentage of the whole ) – Approach A in Table B )
- Less sensitive - Historic landscape mapped as a variable constraint only – Approach B in Table B )

**Table B – General effects of the SSAs on the historic landscape resource and the approach taken in the Annex D studies.**

SSA	Historic landscape	Cadw Status	Cadw Criteria for Designation	General spatial impacts	Approach taken in TAN 8 Annex D studies
A – Clocaenog Forest	39 –Denbigh Moors	Special	3	Over 75% of historic landscape within SSA plus buffer	A
B- Carno North	56-Caersws basin	Special	3,4,5	Slight overlap between SSA 5km buffer and historic landscape	A
	57- Clywedog Valley	Special	1,2,5	Slight overlap between SSA 5km buffer and historic landscape	A
D – Nant-y-Moch	4 – Upland Ceredigion	Outstanding	1,2,3,5	Affects northern 20% of historic landscape	A
F – Coed Morgannwg	50 – The Rhondda	Special	1,5	Over 75% of historic landscape within SSA plus buffer	B
	51 – Mynydd Margam	Special	3	Over 75% of historic landscape within SSA plus buffer	A

Appendix E

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**Landscape  
Sensitivity/Capacity  
methodology**

## E1 Landscape Sensitivity/Capacity Methodology

Landscape sensitivity to wind farms is derived from desk study indicators and site assessment as part of this study. Criteria from the LANDMAP assessments for each area were used, for each aspect, with the prime indicators being visual and sensory. In addition, other criteria have been added to help define the capacity of any given landscape for large scale wind turbines. These criteria have been developed from the study of a number of strategic assessments carried out throughout the UK.

It is important to note that the LANDMAP values are based on assessments by others in accordance with LANDMAP guidance as set out in **Appendix C**. These studies have been undertaken recently and most are quality assured. The data is therefore regarded as sound.

The term *landscape sensitivity* is used in order not to confuse the reader with the technical capacity [energy output] of any given zone/sub-area. The assessment sheet actually assesses the *landscape capacity* of any given area for large scale strategic windfarm development as defined by best practice guidance.

The definitions of sensitivity are as follows:

Landscape Sensitivity definitions	
Landscape Sensitivity	Definition
High	Key characteristics of landscape are very vulnerable to change and are not able to accommodate strategic scale development without conflict directly with, and dominance of landscape character
Medium – high	Key characteristics of landscape are vulnerable to change and are generally not able to accommodate strategic scale development without likely conflict and dominance of landscape character
Medium	Key characteristics of the landscape are susceptible to change but with some ability to accommodate strategic windfarm development at an appropriate scale.
Medium – low	Key characteristics of the landscape are fairly robust and are able to accommodate strategic development at an appropriate scale in most situations without conflict.
Low	Key characteristics of landscape are robust and are able to accommodate strategic scale windfarms without conflict.

It should be noted that each criteria entry *eg sense of enclosure: open* does not necessarily relate to *medium* sensitivity or has the same sensitivity as other items in the same column. It is a matter of overall judgement in what capacity rating a given zone/sub-area is given. The criteria are to inform that judgement.

A sample assessment sheet is shown in below.

### SSA: Landscape sensitivity worksheet ZONE F1 Moel ton-mawr

Generally criteria from better to worse for large scale wind farms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	Plateau [note dissected plateau and single ridge]	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of</b>	vast	large	medium	small	intimate

	<b>landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>					
	<b>Sense of enclosure</b>	confined [note ridge has open lowland on both sides]	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements

<b>Overall Sensitivity</b>	<b>Low</b>	<b>Medium-low</b>	<b>Medium</b>	<b>Medium-High</b>	<b>High</b>
<b>Comments</b> Afforested relatively narrow exposed ridge on the edge of the coalfield plateau. Rises from 50-300mAOD getting higher to the west. 100-150 m above the Llynfi valley to the north and 0-200m above the lower land to the south. The ridge acts as setting to Margam Country Park and historic garden.					

### Historic Landscape

<b>Criteria</b>					
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident		Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall</b>	Low	Medium-low	Medium	Medium-high	High

<b>sensitivity</b>	
Comments Margam Mountain to west is a landscape of special historic interest. Bronze Age monuments including tumuli and trackways [Iron Age] spread along the ridge.	

### Landscape habitats/Biodiversity

Criteria					
<b>Presence of habitat sensitive to wind farms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to wind farms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Conifer plantation dominates					

### Cultural landscape/associations

Criteria					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments See history.					

### Geological landscape/Earth sciences

Criteria					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

**Comments**

Plateau, pennant sandstone.

**Landscape Character Sensitivity Summary**

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<p><b>Comments</b>                      Afforested single, relatively narrow exposed ridge on the edge of the coalfield plateau. Rises from 50-300m AOD getting higher to the west. 100-150 m above the Llynfi valley to the north and 0-200m above the lower land to the south. The ridge acts as setting to Margam Country Park and historic garden. The ridge has historic interest continuing from Margam Mountain to the west. Because of its exposed position to the north and the south, and narrow profile and relatively low elevation, the zone is unsuitable for windfarm development.</p>					

**Landscape Value**

Aspect					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

Appendix F

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**Landscape Sensitivity  
and value results for  
the SSA Zones**

# **F1 Landscape Sensitivity and value results for the SSA Zones**

In separate word document





Appendix G

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**GIS and Visual  
Assessment  
Methodology**

## **G1 GIS and Visual Assessment Methodology**

See separate document



Appendix H

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**ZTV Parameters and  
ZTV results**

# H1 Detailed ZTV results for the SSA zones and justification of the Visual analysis

This Appendix provides further details of the visual analysis used in support of the analysis in Section 4.6 of the report.

The visibility of each zone has been divided into the following categories in order to give an appropriate spread and weighting of receptors.

Measurement category	Comments
<b>Overall visual effect</b>	
Overall total additional area that can view turbines up to 20km**	This measurement defines the theoretical area that can view the theoretically placed wind turbines in the SSA zone. It covers all potential receptors including those not covered by categories below such as users of open land, public footpaths and minor roads. It is also a factor which brings in the effects of the turbines on perception of landscapes surrounding the zones.
Additional area that can view turbines per turbine up to 20km**	This factor corrects the effect of different size zones which may be apparent on the above measurement. It shows where a small zone might be visible over a relatively wide area having an unduly large effect for its size and potential productivity.
<b>The ranking of the above categories are combined to form a baseline visual effect ranking</b>	
<b>Landscape/ sensitive outdoor recreation receptors</b>	
Areas of National Park or AONB that can view turbines up to 20km**.	These are sensitive landscapes used by people who may be sensitive receptors such as visitors enjoying its scenic quality. The nature of National Parks and AONBs are such that they often allow broad views, and wind turbines may be viewed at leisure.
National Trail that can view turbines up to 20km**.	These are sensitive routes used by people who will be sensitive receptors-walkers enjoying scenic quality. The National Trails often allow broad views, and wind turbines may be viewed at leisure.
<b>The ranking of the above categories are combined to form a ranking of effect on people at leisure and sensitive landscapes.</b>	
<b>People day to day</b>	
Settlements that can view turbines up to 2km*****	The likelihood of severe effects upon visual amenity and setting, particularly cumulative effects upon valley communities. i.e. the visual effects that developing a zone might have upon adjacent villages and settlement in terms of dominance and sense of enclosure
Settlements that can view turbines up to 5km***	Settlements are the most sensitive receptors. People may see turbines frequently while carrying out their day to day business or whilst residing in or around an SSA. Those most affected will be on the edge of settlements, others gaining glimpses between buildings and other structures.
Settlements that can view turbines up to 20km**	Dwellings up to 20km may also suffer significant effects. Because settlement is the most important receptor it has two distance factors to give it the appropriate weight.
A and B roads that can view turbines up to 10km****	Users of roads are less sensitive than residents generally but may include tourists and turbines will affect visitor's perceptions of an area.
<b>The ranking of the above categories are combined to form a ranking of effect on people.</b>	

*Notes –*

*\*\* 20km is used as a distance that covers the most significant effects on static or slow moving observers. It is accepted that turbines will be visible beyond this distance but the analysis is not taken beyond this distance so the assessment is not skewed by less important effects*

*\*\*\* Within 5km the effects will be the most severe. The number of individual properties within the 5km distance band has also been considered as a visual indicator for “people day to day”, but sensitivity testing suggests the results are*

*not dissimilar to the number of 250x250m grid cells with containing one or properties within 5km and thus this data has not been taken further in the analysis.*

*\*\*\*\* Turbines may have significant effects up to 10km becoming the focus of a view although these may change quickly in a moving car.*

In arriving at an overall summary of the *visual* performance of an SSA zone/sub-area, the disaggregated visual impact data is brought together as follows:

- Overall visual effects ( ranked ) + effects upon people day to day ( ranked )+ landscape/sensitive outdoor receptors ( ranked )+effects on settlements within 2km ( ranked ).

Within the complex incised plateau nature of the South Wales Valleys Coalfield it was felt necessary to further modify the way the above data were combined. This is as following:-

- Overall visual effects ( ranked ) – Effect reduced by 50% - justification = generally longer distance views to sensitive receptors *within ( as opposed to on top of )* the South Wales Valleys Coalfield plateau are limited due to the inter-visibility imposed by the topography. To a certain extent the important elements of this indicator are also encompassed by the other visual factors.
- Effects on settlements within 2km ( ranked ) – Effect increased by 100% - justification = Over 0.5 million people live within or close to SSAs E and F and up to 10000 people live within 2km of some of the zones ( and would potentially be able to see turbines located within those zones ). Regardless of whether turbines are viewed as positive or negative elements in the landscape, the potential for significant visual dominance over valley settlements given the scale of the proposed structures ( 130m+ to blade tip ) is very high.

## H2 Detailed ZTV results for the SSA zones: SSA E

Note – In all cases raw data for the ZTVs is indicated in numbers of 250x250m grid squares affected.

Table H1 - SSA E - Overall Visual Effects

Zone	Turbine No	Overall total additional up to 20km	Rank overall additional	Additional per turbine up to 20km	Rank additional per turbine	Sum totals of overall ranking	Rank of sum
1	16	3541	4	221	5	9	2
2	22	4580	9	208	3	12	4
3	18	3852	5	214	4	9	2
4	8	3901	6	488	13	19	9
5	29	5072	11	175	1	12	4
6	5	4085	7	817	15	22	12
7	4	2701	1	675	14	15	7
8	5	5034	10	1007	16	26	15
9	14	5395	13	385	9	22	12
10	11	4439	8	404	10	18	8
11	18	5276	12	293	7	19	9
12	20	8085	15	404	11	26	15
13	24	8270	16	345	8	24	14
14	28	7618	14	272	6	20	11
15	6	2742	2	457	12	14	6
16	18	3324	3	185	2	5	1

Table H5 - SSA F - Overall Visual Effects

Zone	Turbine No	Overall total additional up to 20km	Rank overall additional	Additional per turbine up to 20km	Rank additional per turbine	Sum totals of overall ranking	Rank of sum
Zone 1	15	2344	31	156	20	51	24
Zone 2	24	3114	39	130	14	53	27
Zone 3	23	2580	34	112	12	46	19
Zone 4	4	2407	32	602	44	76	42
Zone 5	17	1681	20	99	9	29	10
Zone 6	6	1007	6	168	24	30	11
Zone 7	13	1612	17	124	13	30	11
Zone 8	19	1600	16	84	6	22	7
Zone 9	22	2878	38	131	15	53	27
Zone 10	9	3630	42	403	40	82	43
Zone 11	31	2657	35	86	7	42	15
Zone 12	19	2491	33	131	16	49	23
Zone 13	10	1031	7	103	10	17	6
Zone 14	6	467	2	78	5	7	3
Zone 15	9	580	3	64	2	5	2
Zone 16	13	927	4	71	3	7	3
Zone 17	13	2222	29	171	25	54	30
Zone 18	14	4031	45	288	38	83	44
Zone 19	12	1968	25	164	23	48	22
Zone 20	24	1741	22	73	4	26	9
Zone 21	7	1290	12	184	27	39	14
Zone 22	4	1625	18	406	41	59	35
Zone 23	12	1912	23	159	21	44	16
Zone 24	4	168	1	42	1	2	1
Zone 25	18	2801	37	156	19	56	31
Zone 26	26	3473	41	134	17	58	34
Zone 27	12	3262	40	272	34	74	41
Zone 28	6	1685	21	281	35	56	31
Zone 29	28	3966	43	142	18	61	36
Zone 30	13	2768	36	213	30	66	39
Zone 31	4	1677	19	419	42	61	36
Zone 32	7	2013	26	288	37	63	38
Zone 33	6	1438	14	240	33	47	21
Zone 34	4	1128	9	282	36	45	17
Zone 35	6	1425	13	238	32	45	17
Zone 36	12	1289	11	107	11	22	7
Zone 37	7	1552	15	222	31	46	19
Zone 38	8	1281	10	160	22	32	13
Zone 39	6	2244	30	374	39	69	40
Zone 40	10	1922	24	192	28	52	26
Zone 41	6	4015	44	669	45	89	45
Zone 42	11	5626	46	511	43	89	45
Zone 43	12	2137	27	178	26	53	27
Zone 44	1	930	5	930	46	51	24
Zone 45	12	1064	8	89	8	16	5
Zone 46	11	2203	28	200	29	57	33



**Table H2 - SSA E- Landscape/sensitive outdoor recreation receptors**

Zone	Nat Park up to 20km	Npark rank	AONB up to 15km	AONB rank	National Trail up to 20km	National Trail rank	Sum of ranks	Rank sum all
1	1660	15	0	1	0	1	17	15
2	1862	16	0	1	0	1	18	16
3	1494	12	0	1	0	1	14	12
4	1553	14	0	1	0	1	16	14
5	1237	10	0	1	0	1	12	10
6	1005	8	0	1	0	1	10	8
7	668	3	0	1	0	1	5	3
8	518	1	0	1	0	1	3	1
9	592	2	0	1	0	1	4	2
10	967	7	0	1	0	1	9	7
11	1041	9	0	1	0	1	11	9
12	946	6	0	1	0	1	8	6
13	921	5	0	1	0	1	7	5
14	831	4	0	1	0	1	6	4
15	1330	11	0	1	0	1	13	11
16	1510	13	0	1	0	1	15	13

**Table H6 - SSA F- Landscape/sensitive outdoor recreation receptors**

Zone	Nat Park up to 20km	Npark rank	AONB up to 15km	AONB rank	National Trail up to 20km	National Trail rank	Sum of ranks	Rank sum all
Zone 1	0	1	0	1	0	1	3	1
Zone 2	0	1	0	1	0	1	3	1
Zone 3	0	1	0	1	0	1	3	1
Zone 4	0	1	0	1	0	1	3	1
Zone 5	0	1	0	1	0	1	3	1
Zone 6	0	1	0	1	0	1	3	1
Zone 7	64	25	0	1	0	1	27	25
Zone 8	389	31	0	1	0	1	33	31
Zone 9	1413	42	0	1	0	1	44	42
Zone 10	1752	46	0	1	0	1	48	46
Zone 11	1338	38	0	1	0	1	40	38
Zone 12	1359	39	0	1	0	1	41	39
Zone 13	46	22	0	1	0	1	24	22
Zone 14	98	27	0	1	0	1	29	27
Zone 15	41	21	0	1	0	1	23	21
Zone 16	451	32	0	1	0	1	34	32
Zone 17	1211	37	0	1	0	1	39	37
Zone 18	106	28	0	1	0	1	30	28
Zone 19	0	1	0	1	0	1	3	1
Zone 20	28	18	0	1	0	1	20	18
Zone 21	0	1	0	1	0	1	3	1
Zone 22	59	23	0	1	0	1	25	23
Zone 23	30	20	0	1	0	1	22	20
Zone 24	28	18	0	1	0	1	20	18
Zone 25	1381	41	0	1	0	1	43	41
Zone 26	1492	44	0	1	0	1	46	44
Zone 27	1528	45	0	1	0	1	47	45
Zone 28	733	35	0	1	0	1	37	35
Zone 29	671	34	0	1	0	1	36	34
Zone 30	148	29	0	1	0	1	31	29
Zone 31	73	26	0	1	0	1	28	26
Zone 32	60	24	0	1	0	1	26	24
Zone 33	13	17	0	1	0	1	19	17
Zone 34	0	1	0	1	0	1	3	1
Zone 35	0	1	0	1	0	1	3	1
Zone 36	0	1	0	1	0	1	3	1
Zone 37	0	1	0	1	0	1	3	1
Zone 38	0	1	0	1	0	1	3	1
Zone 39	0	1	0	1	0	1	3	1
Zone 40	606	33	0	1	0	1	35	33
Zone 41	1363	40	0	1	0	1	42	40
Zone 42	1455	43	0	1	0	1	45	43
Zone 43	0	1	0	1	0	1	3	1
Zone 44	0	1	0	1	0	1	3	1
Zone 45	190	30	0	1	0	1	32	30
Zone 46	968	36	0	1	0	1	38	36

**Table H3 - SSA E- People: day to day sensitive receptors**

Zone	Roads up to 10km	Roads rank		Settlement rank(10)		Settlement rank		Sum all rank	Rank sum all
			Settlement up to 10km		Settlement up to 5km				
1	223	3	368	2	197	5	10	2	
2	362	10	522	7	251	8	25	8	
3	334	8	516	6	185	4	18	6	
4	236	4	426	5	117	1	10	2	
5	475	12	875	11	496	13	36	11	
6	343	9	638	9	342	10	28	9	
7	238	5	425	4	220	6	15	5	
8	508	14	1008	12	607	15	41	15	
9	552	16	1060	13	619	16	45	16	
10	201	2	550	8	285	9	19	7	
11	250	6	645	10	386	12	28	9	
12	362	10	1108	14	507	14	38	13	
13	501	13	1314	16	363	11	40	14	
14	524	15	1275	15	235	7	37	12	
15	154	1	254	1	127	2	4	1	
16	290	7	375	3	177	3	13	4	

**Table H7 - SSA F- People: day to day sensitive receptors**

Zone	Roads up to 10km	Roads rank		Settlement rank(10)		Settlement rank ( 5)		Sum all rank	Rank sum all
			Settlement up to 10km		Settlement up to 5km				
Zone 1	251	35	541	39	270	37	111	38	
Zone 2	313	41	629	42	332	41	124	41	
Zone 3	264	37	482	37	220	35	109	36	
Zone 4	207	32	409	34	213	34	100	34	
Zone 5	145	17	251	21	171	29	67	22	
Zone 6	93	9	150	8	103	16	33	13	
Zone 7	155	20	193	14	127	24	58	18	
Zone 8	106	12	126	6	84	13	31	10	
Zone 9	201	31	299	28	106	17	76	25	
Zone 10	276	39	374	32	140	26	97	33	
Zone 11	182	25	249	20	122	21	66	21	
Zone 12	159	22	207	17	102	15	54	16	
Zone 13	91	8	134	7	70	9	24	6	
Zone 14	28	3	44	3	19	3	9	3	
Zone 15	27	2	47	4	12	1	7	2	
Zone 16	70	5	0	1	28	4	10	4	
Zone 17	226	33	279	26	119	19	78	26	
Zone 18	384	43	657	43	420	43	129	43	
Zone 19	277	40	564	40	308	40	120	40	
Zone 20	185	29	299	28	178	31	88	31	
Zone 21	160	23	270	24	154	28	75	24	
Zone 22	128	14	150	8	72	10	32	12	
Zone 23	182	25	298	27	173	30	82	29	
Zone 24	3	1	17	2	12	1	4	1	
Zone 25	184	28	272	25	131	25	78	26	
Zone 26	268	38	474	36	285	38	112	39	
Zone 27	251	35	429	35	295	39	109	36	
Zone 28	99	11	167	11	93	14	36	14	
Zone 29	453	45	803	45	438	44	134	45	
Zone 30	342	42	572	41	332	41	124	41	
Zone 31	153	19	209	18	124	23	60	19	
Zone 32	193	30	267	23	122	21	74	23	
Zone 33	129	15	199	16	80	12	43	15	
Zone 34	96	10	169	12	48	7	29	8	
Zone 35	158	21	251	21	112	18	60	19	
Zone 36	108	13	184	13	42	5	31	10	
Zone 37	148	18	318	31	186	32	81	28	
Zone 38	84	6	198	15	58	8	29	8	
Zone 39	248	34	524	38	197	33	105	35	
Zone 40	140	16	213	19	121	20	55	17	
Zone 41	387	44	698	44	531	45	133	44	
Zone 42	568	46	964	46	591	46	138	46	
Zone 43	183	27	375	33	151	27	87	30	
Zone 44	89	7	155	10	74	11	28	7	
Zone 45	63	4	89	5	47	6	15	5	
Zone 46	176	24	308	30	224	36	90	32	

**Table H9 - SSA E Visual Dominance on Settlement**

	Turbine No	Number of Grid Cells	Number of OS Address Points (250m Grid)	Normalised Settlement per turbine	2km Normalised Ranking	2km Normalised Ranking X2
Zone 1	16	73	1456	91.0	4	8
Zone 2	22	74	2133	97.0	5	10
Zone 3	18	85	1932	107.3	7	14
Zone 4	8	75	1753	219.1	12	24
Zone 5	29	157	3681	126.9	8	16
Zone 6	5	70	1109	221.8	13	26
Zone 7	4	45	410	102.5	6	12
Zone 8	5	216	10375	2075.0	16	32
Zone 9	14	234	10190	727.9	15	30
Zone 10	11	56	504	45.8	3	6
Zone 11	18	146	2393	132.9	9	18
Zone 12	20	172	3323	166.2	11	22
Zone 13	24	50	69	2.9	1	2
Zone 14	28	78	366	13.1	2	4
Zone 15	6	75	1557	259.5	14	28
Zone 16	18	100	2820	156.7	10	20

**Table H10 - SSA F Visual Dominance on Settlement**

	Turbine No	Grid Number	Number of Settlements	Normalised Settlement per turbine	2km Normalised Ranking	2km Normalised Ranking X2
Zone 1	15	66	388	25.9	6	12
Zone 2	24	60	1870	77.9	13	26
Zone 3	23	91	3718	161.7	20	40
Zone 4	4	67	3986	996.5	43	86
Zone 5	17	85	3850	226.5	24	48
Zone 6	6	52	2581	430.2	35	70
Zone 7	13	43	2196	168.9	22	44
Zone 8	19	33	1271	66.9	11	22
Zone 9	22	12	509	23.1	5	10
Zone 10	9	13	257	28.6	7	14
Zone 11	31	33	976	31.5	8	16
Zone 12	19	6	100	5.3	3	6
Zone 13	10	31	416	41.6	9	18
Zone 14	6	15	666	111.0	14	28
Zone 15	9	5	4	0.4	1	2
Zone 16	13	7	60	4.6	2	4
Zone 17	13	68	1837	141.3	19	38
Zone 18	14	203	13251	946.5	42	84
Zone 19	12	104	1624	135.3	18	36
Zone 20	24	117	6848	285.3	25	50
Zone 21	7	75	3647	521.0	37	74
Zone 22	4	23	1570	392.5	30	60
Zone 23	12	92	4891	407.6	31	62
Zone 24	4	12	467	116.8	16	32
Zone 25	18	20	1138	63.2	10	20
Zone 26	26	43	3078	118.4	17	34
Zone 27	12	36	929	77.4	12	24
Zone 28	6	23	1791	298.5	26	52
Zone 29	28	192	11558	412.8	33	66
Zone 30	13	181	10415	801.2	39	78
Zone 31	4	43	3600	900.0	41	82
Zone 32	7	33	2240	320.0	27	54
Zone 33	6	26	2465	410.8	32	64
Zone 34	4	30	1714	428.5	34	68
Zone 35	6	152	10640	1773.3	45	90
Zone 36	12	63	1971	164.3	21	42
Zone 37	7	102	795	113.6	15	30
Zone 38	8	104	3688	461.0	36	72
Zone 39	6	49	1051	175.2	23	46
Zone 40	10	159	13556	1355.6	44	88
Zone 41	6	114	3803	633.8	38	76
Zone 42	11	164	8966	815.1	40	80
Zone 43	12	125	4525	377.1	29	58
Zone 44	1	42	4157	4157.0	46	92
Zone 45	12	15	214	17.8	4	8
Zone 46	11	55	3816	346.9	28	56

**Table H4 - SSA E Summary Matrix - Landscape and Visual Performance**

Zone	Ranking: LANDMAP visual and sensory value	Ranking: Landscape sensitivity	ranking: Overall visual effects	Ranking : Landscape/Sensitive outdoor receptors visual effects	Ranking: People day by day sensitive receptors	Ranking: Visual Dominance on settlement X2	Sum of Ranks	Summary rank	Capacity (MW )
1	2	2	2	15	2	8	31	1	23
2	2	2	4	16	8	10	42	3	17
3	2	2	2	12	6	14	38	2	14
4	2	2	9	14	2	24	53	11	10
5	2	2	4	10	11	16	45	7	32
6	2	2	12	8	9	26	59	13	2
7	2	13	7	3	5	12	42	3	2
8	11	13	15	1	15	32	87	16	1
9	2	13	12	2	16	30	75	15	1
10	11	13	8	7	7	6	52	10	7
11	11	2	9	9	9	18	58	12	16
12	11	2	15	6	13	22	69	14	18
13	11	1	14	5	14	2	47	8	40
14	11	2	11	4	12	4	44	6	28
15	1	2	6	11	1	28	49	9	0
16	2	2	1	13	4	20	42	3	13

**Table H8 - SSA F Summary Matrix - Landscape and Visual Performance**

Zone	LANDMAP visual and sensory value	Landscape sensitivity	ranking: Overall visual effects	Ranking : Landscape/Sensitive outdoor receptors visual effects	Ranking: People day by day sensitive receptors	Ranking: Visual Dominance on settlement	Sum of Ranks	Summary rank	Capacity ( MW )
Zone 1	1	40	24	1	38	12	116	15	9
Zone 2	1	26	27	1	41	26	122	16	12
Zone 3	1	13	19	1	36	40	110	14	11
Zone 4	31	40	42	1	34	86	234	44	1
Zone 5	1	13	10	1	22	48	95	10	9
Zone 6	1	13	11	1	13	70	109	13	4
Zone 7	31	13	11	25	18	44	142	22	7
Zone 8	31	3	7	31	10	22	104	11	27
Zone 9	1	1	27	42	25	10	106	12	31
Zone 10	31	26	43	46	33	14	193	40	12
Zone 11	1	3	15	38	21	16	94	9	41
Zone 12	1	3	23	39	16	6	88	8	20
Zone 13	1	3	6	22	6	18	56	4	16
Zone 14	1	13	3	27	3	28	75	5	6
Zone 15	1	3	2	21	2	2	31	1	7
Zone 16	1	1	3	32	4	4	45	2	6
Zone 17	1	26	30	37	26	38	158	26	7
Zone 18	1	40	44	28	43	84	240	45	11
Zone 19	31	40	22	1	40	36	170	31	7
Zone 20	1	13	9	18	31	50	122	16	19
Zone 21	1	26	14	1	24	74	140	21	4
Zone 22	31	26	35	23	12	60	187	36	7
Zone 23	31	26	16	20	29	62	184	35	16
Zone 24	1	26	1	18	1	32	79	6	0
Zone 25	1	3	31	41	26	20	122	16	33
Zone 26	1	3	34	44	39	34	155	25	43
Zone 27	31	13	41	45	36	24	190	38	6
Zone 28	1	3	31	35	14	52	136	19	12
Zone 29	1	13	36	34	45	66	195	41	39
Zone 30	1	26	39	29	41	78	214	42	9
Zone 31	1	13	36	26	19	82	177	32	3
Zone 32	31	13	38	24	23	54	183	34	9
Zone 33	31	13	21	17	15	64	161	27	12
Zone 34	31	13	17	1	8	68	138	20	7
Zone 35	1	26	17	1	19	90	154	24	6
Zone 36	1	26	7	1	10	42	87	7	16
Zone 37	31	40	19	1	28	30	149	23	5
Zone 38	31	40	13	1	8	72	165	29	9
Zone 39	31	26	40	1	35	46	179	33	4
Zone 40	1	26	26	33	17	88	191	39	3
Zone 41	1	26	45	40	44	76	232	43	5
Zone 42	1	26	45	43	46	80	241	46	19
Zone 43	31	40	27	1	30	58	187	36	19
Zone 44	31	13	24	1	7	92	168	30	4
Zone 45	1	3	5	30	5	8	52	3	5
Zone 46	1	3	33	36	32	56	161	27	3



Appendix I

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**Qualitative Visual  
Effects Analysis**

# **I1 Qualitative Visual effects Analysis**

See separate document





Appendix J

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**Micro-siting guidance  
for wind farms in SSAs**

## J1 Micro-siting guidance for wind farms within SSAs

### Initial Guidelines to minimise the landscape and visual impacts of wind farms within the Strategic Search Areas

Aim	Guideline	Comment
Optimise location of wind farm	Site large wind farms on large-scale and simple landscapes with simple, smooth skylines	Avoid <i>complex</i> ridgelines and areas of <i>complex land cover</i> .
	Where views are possible towards wind farms site them back from the edge of plateaux, valley sides, hill fringes.	Site turbine a distance of around 5 times its height to blade tip from top of break of slope where possible
	Avoid breaking skylines when viewed from <i>sensitive landscapes</i> and viewpoints	
Optimise layout of wind farm	Lay out wind turbines in apparently random pattern. Avoid straight lines unless in highly rectilinear field pattern or industrial landscape.	
	Where possible break small wind farms into small groups in <i>finer grain</i> field landscapes.	Break up into small visually separate groups of around 5 turbines where possible.
	Avoid a cluttered appearance without spreading out	
Optimise wind turbine design and size	All turbines in one wind farm must be of the same appearance and size. It is commonly accepted that the three bladed wind turbines with a solid evenly tapering tower is the most elegant design.	Colour turbines off-white or light grey with a matt finish
	Respect scale of landscape where there is pronounced topography by using wind turbines sizes and numbers that do not dwarf hills / ridges <sup>48</sup> .  Consider where possible not using wind turbines that are higher than a third of the height of the landform they are placed on, (or likely to be viewed against), where breaks of slope and heights are well defined. (Note: in gently undulating or flat landscapes this is irrelevant).	
Optimise design and layout of ancillary equipment	Site ancillary equipment below the skyline including buildings, sub-stations and transmission lines.	Locate transmission lines underground in exposed parts of the site. Use timber poles to support higher voltage over-ground lines on lower slopes, where voltage allows.
	House all clutter within wind turbine structure.	
	Design access roads so they are not widely visible using local quarried crushed stone where possible.	

<sup>48</sup> Larger wind turbines (>100m) could potentially have the effect of being out of scale with the appropriate topography, particularly where the receiving landform is pronounced and smaller in scale (say up to 200m change in level). In these circumstances a lower number of turbines eg. 3-5, could potentially reduce the potential visual and landscape impact





Appendix K

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**Wildlife Trust Sites**

# K1 Wildlife Trust Sites

## K1.1 Introduction

There are six Wildlife Trusts in Wales; as follows:

- Brecknock,
- Gwent,
- Montgomeryshire,
- North Wales,
- Radnorshire and
- South and West Wales.

These broadly coincide with the administrative boundaries of local authorities in Wales, with the exception of the Gwent/South and West Wales boundary. The location of Wildlife Trust sites in relation to the boundaries of the SSAs has been determined.

Only those wildlife sites that are greater than 25ha in size (i.e. ¼ of the area of a 1km<sup>2</sup> grid square) will be taken forward for consideration in the analysis section (these have been colour-coded green in **Table J1** below).

Wildlife Trust Reserves found to be in proximity of the SSA boundaries and above the 25ha size threshold have been digitised, prior to being taken forward to inform final capacity estimates. In this way, land under designation as a County Wildlife Site (reserve) can be used to moderate final capacity estimates, rather than excluding such areas in absolute terms. To avoid confusion, an area of land (habitat) that has been afforded statutory protection, e.g. as a SSSI, but practically is under the management of a named Wildlife Trust, is classified as being an absolute constraint to onshore wind farm development.

**Table J1 – Relevant Wildlife Trust Reserves in Wales**

Wildlife Trust Area	Reserve name	Size (ha)	Grid Reference	SSSI status (Yes/No)	Commentary
Brecknock	Not Applicable				
Gwent	Not Applicable				
Montgomeryshire	Dyfnant Meadows	9.5	SJ005155	No	Open land within a forest plantation. Already dealt with in the constraint analysis due to the presence of settlement which is buffered by 500m. Site falls within the settlement buffer.
	Llyn Mawr	12	SO006972	Yes	Dealt with in the environmental constraint analysis
	Glaslyn	280	SN822939	Yes	Dealt with in the environmental constraint analysis
North Wales	Blaen-y-Weirglodd	4.04	SH914633	Yes	A peat bog near Llansannan, Denbighshire dealt with as an environmental constraint (SSSI) in the analysis.

	Gors Maen Llwyn	280	SH 975580	Yes	Gors Maen Llwyd, a heather moorland. This habitat is part of the Mynydd Hiraethog SSSI, hence the area has been dealt with as part of the environmental constraint analysis.
Radnorshire	Beacon Hill	1889	SO176767	Yes (part)	Included in the constraint analysis as a county wildlife site, i.e. <i>variable constraint</i> . The reserve comprises all of the common land of Beacon Hill belonging to the Crown Estate. The pool on Pool Hill (the source of the Lugg) and the River Lugg are notified Sites of Special Scientific Interest.
South and West Wales	Blaenant-y-Gwyddyl	10.1	SN885076	No	An upland area of ancient broadleaved woodland, stream and waterfalls
	Craig Cilhendre Woods	16.1	SN719022	No	Semi-natural broadleaved woodland, part of which is ancient in origin
	Llyn Fach	16.2	SN905033	Yes	Forming part of the Craig-y-Llyn. Designated as a SSSI. Dealt with in the environmental constraint analysis
	Melincwrt Waterfalls	5.2	SN825017	No	Ancient broadleaved woodland, stream and waterfall.
	Parc Slip Nature Reserve	123.2	SS880840	No	An entirely restored site which historically suffered from industrial dereliction emanating from a large deep mine.  Not within technically feasible part of SSA 5km buffer so does not affect zones taken forward for further analysis ( nearest zone is F19 )
	Pwll Waun Cynon (Mountain Ash)	7.2	ST034997	No	Pond, meadow, scrub and acidic woodland

## SSA F: Landscape sensitivity worksheet

### ZONE F1 Moel ton-mawr

Generally criteria from better to worse for large scale wind farms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	Plateau [note dissected plateau and single ridge]	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined [note ridge has open lowland on both sides]	enclosed	open	exposed	
	Diversity	uniform	simple	diverse	complex	
PERCEPTUAL	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
	Other criteria					
	Skyline	smooth multiple		rounded		complex single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements

Overall Sensitivity	Low	Medium-low	Medium	Medium-High	High
Comments	<p>Afforested relatively narrow exposed ridge on the edge of the coalfield plateau. Rises from 50-300m AOD getting higher to the west. 100-150 m above the Llynfi valley to the north and 0-200m above the lower land to the south. The ridge acts as setting to Margam Country Park and historic garden.</p>				

#### Historic Landscape

Criteria			
Survival of historic	Not evident	Moderately evident	Highly evident



<b>patterns of landscape</b>					
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b> Margam Mountain to the west is a landscape of special historic interest. Bronze Age monuments including tumuli and trackways [Iron Age] spread along the ridge.					

#### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to wind farms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to wind farms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b> Conifer plantation dominates					

#### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b> See history.					

#### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall</b>	Low	Medium-low	Medium	Medium-high	High

<b>sensitivity</b>	
Comments	
Plateau, pennant sandstone.	

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is a single, relatively narrow exposed ridge on the edge of the coalfield plateau only 100-150 m above the Llynfi valley to the north and 0-200m above the lower land to the south. The ridge rises from 50-300mAOD getting higher to the west and acts as setting to Margam Country Park and historic garden. It is covered in forest plantation. The ridge has historic interest continuing from Margam Mountain to the west. Because of its exposed position to the north and the south, and narrow profile and relatively low elevation, the zone is unsuitable for strategic windfarm development.</p>					

### Landscape Value

<i>Aspect</i>				
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding
<b>Historic landscape</b>	Low	Moderate	High	Outstanding
<b>Biodiversity</b>	Low	Moderate	High	Outstanding
<b>Cultural associations</b>	Low	Moderate	High	Outstanding
<b>Geology</b>	Low	Moderate	High	Outstanding

## SSA F: Landscape sensitivity worksheet

### ZONE F2 Mynydd Margam

Generally criteria from better to worse for large scale wind farms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	Plateau [note dissected plateau and single ridge]	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic clustered	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm		urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined [note ridge has open lowland on both sides]	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
	<b>Other criteria</b>					
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements

Overall Sensitivity	Low	Medium-low	Medium	Medium-High	High
Comments	<p>Afforested upland on the edge of the coalfield plateau with a gently rounded smooth skyline. Rises to 349m AOD, 50-200m above lower land to south. Upland continues north but the area acts as setting to Margam Country Park and historic garden to the south. The area is incised by narrow minor valleys.</p>				

## Historic Landscape

<b>Criteria</b>					
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident		Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b> Margam Mountain is a landscape of special historic interest. Bronze Age monuments including tumuli and trackways [Iron Age] spread along the ridge.					

## Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to wind farms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to wind farms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b> Conifer plantation dominates					

## Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b> See history.					

## Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive

<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Plateau, pennant sandstone.					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is afforested upland on the edge of the coalfield plateau which acts as setting to Margam Country Park and historic garden to the south. The area rises to 349mAOD, 50-200m above lower land to south with a gently rounded smooth skyline. The area is incised by narrow minor valleys. The upland continues north and becomes less sensitive.</p>					

### Landscape Value

<i>Aspect</i>				
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding
<b>Historic landscape</b>	Low	Moderate	High	Outstanding
<b>Biodiversity</b>	Low	Moderate	High	Outstanding
<b>Cultural associations</b>	Low	Moderate	High	Outstanding
<b>Geology</b>	Low	Moderate	High	Outstanding

## SSA F: Landscape sensitivity worksheet

### ZONE F3 Mynydd Bach

Generally criteria from better to worse for large scale wind farms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	Plateau [note dissected plateau and single ridge]	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic clustered	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm		urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined [note ridge has open lowland on both sides]	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements

Overall Sensitivity	Low	Medium-low	Medium	Medium-High	High
Comments	<p>Afforested upland on the southern fringes of the coalfield plateau with a gently rounded smooth skyline. Rises to 319mAOD, 50-150m above lower land to east and west. The area is incised by narrow minor valleys. Upland continues north and south. The most sensitive areas on the edge of the ridges especially to the east [medium high].</p>				

## Historic Landscape

<b>Criteria</b>					
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident		Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b> Margam Mountain is a landscape of special historic interest. Bronze Age monuments including tumuli and trackways [Iron Age] spread along the ridge.					

## Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to wind farms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to wind farms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b> Conifer plantation dominates					

## Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b> See history.					

## Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive

<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Plateau, pennant sandstone.					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is an afforested upland on the southern fringes of the coalfield plateau with a gently rounded smooth skyline as part of area of upland area running north south. It rises to 319mAOD, 50-150m above lower land to the east and west. The area is incised by narrow minor valleys. The most sensitive areas on the edge of the ridges to the east [medium high].</p>					

### Landscape Value

<i>Aspect</i>				
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding
<b>Historic landscape</b>	Low	Moderate	High	Outstanding
<b>Biodiversity</b>	Low	Moderate	High	Outstanding
<b>Cultural associations</b>	Low	Moderate	High	Outstanding
<b>Geology</b>	Low	Moderate	High	Outstanding



**SSA F: Landscape sensitivity worksheet**  
**ZONE: F4 Ergyd Isaf (Mynydd Margam West )**

Generally criteria from better to worse for large scale windfarms, left to right.

**Visual and Sensory**

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm [in LANDMAP but not in this zone]	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements

Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High
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Comments

Prominent edge to upland coalfield plateau behind scarp slope which falls to coastal plain. The land rises to 257m AOD, 240m above the plain and has a smooth rounded profile but with some pillow mounds. The landcover is upland pasture.

**Historic Landscape**

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Busy historical landscape, covered by Landscape of special historic interest with tumuli, enclosures and pillow mounds.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Improved grassland					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments See history					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Top of scarp

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments	The area has the sensitivity above because it is a prominent edge to upland coalfield plateau behind scarp slope which falls to coastal plain. The land rises to 257mAOD, 240m above the plain and has a smooth rounded profile but with some pillow mounds. The landcover is upland pasture.				

### Landscape Value

Aspect					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

### ZONE: F5 Afan Argoed South East

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	Forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Afforested upland on the southern fringes of the coalfield plateau dissected with valleys as part of upland area running south. Combination of ridge and hills with rounded skylines incised by narrow minor valleys. It rises to 363mAOD, 100-150m above lower land to the east, upto 200m to the south and 150m to the west. The most sensitive areas are the edges of the ridges [medium high].

#### Historic Landscape

Criteria				
Survival of historic patterns of	Not evident		Moderately evident	Highly evident

<b>landscape</b>					
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Bronze Age/Iron Age plus medieval evidence of use.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Crossbill habitat?					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
See history					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Pennant sandstone					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is afforested upland on the southern fringes of the coalfield plateau dissected with valleys as part of upland area running south. It is a combination of ridge and hills with rounded skylines incised by narrow minor valleys with the most sensitive areas on the edge of the ridges [medium high]. It rises to 363mAOD, 100-150m above lower land to the east, upto 200m to the south and 150m to the west.</p>					

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F6 Foel Trawsnant

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
<b>PERCEPTUAL</b>	<b>Diversity</b>	uniform	simple	diverse	complex	
	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

Simple rounded upland hill, rising to 369mAOD, 150-200m above narrow valley floor to north and west and 150m to east. The hill is open and unenclosed with a landcover dominated by rough grassland.

### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Bronze/Iron Age plus medieval remains evident in area.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Mire and acid grasslands, possible upland heath or purple moor grass.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
See historic					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High



Comments

Pennant formation

### Landscape Character Sensitivity Summary

Overall sensitivity	Low	Medium-low	Medium	Medium-high	High
Comments	The area has the sensitivity above because it is a simple rounded upland hill, rising to 369mAOD, 150-200m above narrow valley floors to north and west and 150m to east. The hill is open and unenclosed with a landcover dominated by rough grassland.				

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
Visual and sensory	Low	Moderate	High	Outstanding	
Historic landscape	Low	Moderate	High	Outstanding	N/A
Biodiversity	Low	Moderate	High	Outstanding	
Cultural associations	Low	Moderate	High	Outstanding	
Geology	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F7 Mynydd y Gelli

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	Enclosed [in LANDMAP but only relates to valley bottom]	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High
<p>Comments</p> <p>Simple rounded large scale landform indented with small tributary valleys, forming northern edge of upland massif, rising to 520/550mAOD, 250-350m above valley floor to the north. The land rises to the conical landform of Mynydd Caerau to the south and to Werfa to the east-both sensitive high points. The landcover is open, unenclosed rough grassland.</p>						

### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident

<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Evidence of use since the Mesolithic period, tumuli and dyke.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Upland grassland and mire predominantly					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
See historic.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because though is a large scale simple rounded landform it rises to the conical landform of Mynydd Caerau to the south and to Werfa to the east- both sensitive high points with steep slopes in places. It is indented with small tributary valleys, forming northern edge of upland massif, rising to 520/550mAOD, 250-350m above valley floor to the north. The landcover is open, unenclosed rough grassland.</p>					

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

### ZONE: F8 Mynydd Blaengwynfi

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Part of the higher large scale coalfield plateau with small incised valleys, rising to 528mAOD, 150-300m above valley floor to the south. The skyline is simple and gently undulating. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.

#### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness of historic	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Extensive patterns from the Mesolithic period exist but are hidden beneath forestry.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Crossbill possible.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments See historic.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant formation

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is part of the large scale higher coalfield plateau with a simple and gently undulating skyline with small incised valleys, rising to 528mAOD, 150-300m above valley floor to the south. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.</p>					

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

### ZONE: F9 Mynydd Blaenrhondda ( West )

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Core of the higher large scale coalfield plateau with small incised valleys, rising to 550m AOD, 200m above minor tributary valley floor to the west. The skyline is simple and gently undulating. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.

#### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness of historic	Not evident	Patches	Cohesive over parts of the area	Highly cohesive



<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Extensive patterns from the Mesolithic period exist but are hidden beneath forestry.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Crossbill possible.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments See historic.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant formation

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments	<p>The area has the sensitivity above because it is the core of the large scale higher coalfield plateau with a simple and gently undulating skyline with small incised valleys, rising to 550mAOD, 200m above minor tributary valley floor to the west. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.</p>				

### Landscape Value

Aspect					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F10 Mynydd Pen-y-Cae - Llyn Fach

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

The most prominent northern edge of the large scale coalfield plateau, rising to 600m AOD, 200-450m above the Nedd valley floor to the north. The landform distinctly rises to this elevated area and the skyline is simple. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places. Just to the north, the scarp falls sharply to the lower land at the heads of the valleys before rising more gently to the Brecon Beacons.

### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness	Not evident	Patches	Cohesive over	Highly cohesive

of historic patterns of landscape			parts of the area		
Presence of designated features eg SAM's, listed buildings etc	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Extensive patterns from the Mesolithic period exist but are hidden beneath forestry.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
Presence of habitat sensitive to windfarms	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
Presence of species sensitive to windfarms	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Crossbill possible.					

### Cultural landscape/associations

<b>Criteria</b>					
Recorded expressions [eg featured in painting or poem]	None known		Moderately sensitive		Highly sensitive
notional associations [eg with famous people, events]	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments See historic.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
Exposed rock/ outcrops	None known		Moderately sensitive		Highly sensitive
Other geological features	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant formation

### Landscape Character Sensitivity Summary

Overall sensitivity	Low	Medium-low	Medium	Medium-high	High
Comments	<p>The area has the sensitivity above because it is the most prominent northern edge of the large scale coalfield plateau, rising from the west to 600mAOD, 200-450m above the Nedd valley floor. Just to the north, the scarp falls sharply to the lower land at the heads of the valleys before rising more gently to the Brecon Beacons. The landform distinctly rises to this elevated area and the skyline is simple. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.</p>				

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
Visual and sensory	Low	Moderate	High	Outstanding	
Historic landscape	Low	Moderate	High	Outstanding	N/A
Biodiversity	Low	Moderate	High	Outstanding	
Cultural associations	Low	Moderate	High	Outstanding	
Geology	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F11 Glyncoirwg West

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

Part of the higher large scale coalfield plateau with small incised valleys, rising to 550m AOD, around 250m above valley floor to the east. The skyline is simple and gently undulating. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.

### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness of historic	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Extensive patterns from the Mesolithic period exist but are hidden beneath forestry.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Crossbill possible.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments See historic.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant formation

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is part of the higher large scale coalfield plateau with small incised valleys, rising to 550mAOD, around 250m above valley floor to the east. The skyline is simple and gently undulating. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.</p>					

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	



## SSA F: Landscape sensitivity worksheet

### ZONE: F12 Coed Morgannwg Way

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Part of the higher large scale coalfield plateau with small incised valleys, rising to 493mAOD, around 150- 450m above the Neath valley floor to the north west. The landform falls from the simple and gently undulating skyline towards the valley in a series of slopes which are more sensitive. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.

#### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness	Not evident	Patches	Cohesive over	Highly cohesive

of historic patterns of landscape			parts of the area		
Presence of designated features eg SAM's, listed buildings etc	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Extensive patterns from the Mesolithic period exist but are hidden beneath forestry.					

### Landscape habitats/Biodiversity

<i>Criteria</i>					
Presence of habitat sensitive to windfarms	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
Presence of species sensitive to windfarms	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Crossbill possible.					

### Cultural landscape/associations

<i>Criteria</i>					
Recorded expressions [eg featured in painting or poem]	None known		Moderately sensitive		Highly sensitive
notional associations [eg with famous people, events]	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments See historic.					

### Geological landscape/Earth sciences

<i>Criteria</i>					
Exposed rock/outcrops	None known		Moderately sensitive		Highly sensitive
Other geological features	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant formation

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is part of the higher large scale coalfield plateau with small incised valleys, rising to 493mAOD, around 150- 450m above the Neath valley floor to the north west. The landform falls from the simple and gently undulating skyline towards the valley in a series of slopes which are more sensitive falling towards the valley. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.</p>					

### Landscape Value

<b>Aspect</b>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

**SSA F: Landscape sensitivity worksheet**  
**ZONE: F13 Mynydd Nant-y-bar**

Generally criteria from better to worse for large scale windfarms, left to right.

**Visual and Sensory**

<b>Criteria from LANDMAP assessment</b>						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
	<b>Other criteria</b>					
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

**Comments**

Part of the higher large scale coalfield plateau with small incised valleys, rising to 370mAOD, around 250m above valley floor to the south. The skyline is simple and gently undulating. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.

**Historic Landscape**

<b>Criteria</b>				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Extensive patterns from the Mesolithic period exist but are hidden beneath forestry.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Crossbill possible.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments See historic.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant formation

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is part of the higher large scale coalfield plateau with small incised valleys, rising to 370mAOD, around 250m above valley floor to the south. The skyline is simple and gently undulating. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.</p>					

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F14 Glyncorrwg East

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
<b>PERCEPTUAL</b>	<b>Diversity</b>	uniform	simple	diverse	complex	
	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

Predominantly convex slopes of the large scale coalfield plateau, with some plateau top, rising to 490m AOD, 50- 270m from narrow valley bottom of Cwm Corrwg. The skyline is simple and gently undulating. The landcover is simple unenclosed rough grassland.

### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Evidence of use since Mesolithic period.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Upland acid grassland					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
See historic					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High



Comments

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
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Comments

The area has the sensitivity above because it is predominantly convex slopes of the large scale coalfield plateau, with some plateau top, rising to 490mAOD, 50- 270m from narrow valley bottom of Cwm Corrwg. The skyline is simple and gently undulating. The landcover is simple unenclosed rough grassland.

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F15 Mynydd Fforch dwm

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
<b>PERCEPTUAL</b>	<b>Diversity</b>	uniform	simple	diverse	complex	
	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

Comments

On the falling slopes of the coalfield plateau rising to 311mAOD, incised by the Blaen Pelenna, but surrounded by other high ground away from broader valley edges. The skyline is simple and gently rounded. The landcover is simple pasture and unenclosed rough grassland/heath.

### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Patterns of Mesolithic period exist					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Mix of upland rough grasses/heath and improved grassland					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
See history					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant formation

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is on the falling slopes of the coalfield plateau rising to 311mAOD, but surrounded by other high ground away from broader valley edges. The area is incised by the Blaen Pelenna but the skyline is simple and gently rounded. The landcover is simple pasture and unenclosed rough grassland/heath.</p>					

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F16 Ffynnon Oer (wind farm )

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
<b>PERCEPTUAL</b>	<b>Diversity</b>	uniform	simple	diverse	complex	
	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

Comments

Part of the coalfield plateau rising to 464mAOD, incised by the Melin Court Brook. The skyline is simple and gently rounded and the area is generally set back from the Neath valley to the north west. The landcover is simple unenclosed rough grassland/heath. The Ffynnon Oer windfarm is located here.

### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>					
Patterns of Mesolithic period exist					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>					
Mix of upland rough grasses/heath and improved grassland					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>					
See history					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant formation

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is part of the coalfield plateau rising to 464mAOD, incised by the Melin Court Brook but generally set back from the Neath valley to the north west. The skyline is simple and gently rounded. The landcover is simple unenclosed rough grassland/heath. The Ffynnon Oer windfarm is located here.</p>					

### Landscape Value

<b>Aspect</b>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F17 Mynydd Resolven

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

An outlier hill of the coalfield plateau separated from the main massif by an incised valley, rising to 383m AOD, around 150-340m above the Neath valley floor to the north west. The separation of rounded profile hill is particularly noticeable from the north. The landcover is part of the vast scale forest plantation with clearings. The forest creates abrupt edges in places.

### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness of historic	Not evident	Patches	Cohesive over parts of the area	Highly cohesive



<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Extensive patterns from the Mesolithic period exist but are hidden beneath forestry.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Crossbill possible.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
See historic.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant formation

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	<b>Medium-high</b>	High
Comments					
<p>The area has the sensitivity above because it is an outlier hill of the coalfield plateau separated from the main massif by an incised valley, rising to 383mAOD, around 150-340m above the Neath valley floor to the north west. The separation of rounded profile hill is particularly noticeable from the north. The landcover is part of the vast scale forest plantation with clearings. The forest creates abrupt edges in places.</p>					

### Landscape Value

<b>Aspect</b>					
<b>Visual and sensory</b>	Low	<b>Moderate</b>	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	<b>N/A</b>
<b>Biodiversity</b>	Low	<b>Moderate</b>	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	<b>High</b>	Outstanding	
<b>Geology</b>	Low	<b>Moderate</b>	High	Outstanding	

**SSA F: Landscape sensitivity worksheet**  
**ZONE: F18 Mynydd-y-Gaer and Foel Fynyddau**

Generally criteria from better to worse for large scale windfarms, left to right.

**Visual and Sensory**

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth multiple		rounded		complex single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

**Comments**

Two hills and a valley on the prominent southern edge of the coalfield plateau rising to 314 and 370m AOD. These are 100-300m above the Neath valley floor to the west and 150-300m above Afan valley to the south. The hills are rounded and the landcover is upland pasture, some enclosed and some open rough grassland with conifer plantation on the hillside and deciduous riparian vegetation in the valley. There are farmsteads and dwellings in the area. A hillfort lies on Mynydd y Gaer. Wireless masts lie on the hill to the east.

**Historic Landscape**

Criteria			
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident
<b>Cohesiveness</b>	Not evident	Patches	Cohesive over

of historic patterns of landscape			parts of the area		
Presence of designated features eg SAM's, listed buildings etc	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Hillforts prevalent- late prehistory. Area used over significant period, late enclosure.					

### Landscape habitats/Biodiversity

<i>Criteria</i>					
Presence of habitat sensitive to windfarms	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
Presence of species sensitive to windfarms	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Semi-improved upland farming					

### Cultural landscape/associations

<i>Criteria</i>					
Recorded expressions [eg featured in painting or poem]	None known		Moderately sensitive		Highly sensitive
notional associations [eg with famous people, events]	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
See historic					

### Geological landscape/Earth sciences

<i>Criteria</i>					
Exposed rock/ outcrops	None known		Moderately sensitive		Highly sensitive
Other geological features	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant formation

### Landscape Character Sensitivity Summary

Overall sensitivity	Low	Medium-low	Medium	Medium-high	High
Comments	<p>The area has the sensitivity above because it is two prominent hills and a valley on the prominent southern edge of the coalfield plateau rising to 314 and 370mAOD. These are 100-300m above the Neath valley floor to the west and 150-300m above Afan valley to south. The hills are rounded and the landcover is upland pasture, some enclosed at a medium/fine grain parts and some open rough grassland with conifer plantation on the hillside and deciduous riparian vegetation in the valley. There are farmsteads and dwellings in the area which add to its sensitivity as does the historic interest such as the hillfort which lies on Mynydd y Gaer. Wireless masts lie on the hill to the east.</p>				

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
Visual and sensory	Low	Moderate	High	Outstanding	
Historic landscape	Low	Moderate	High	Outstanding	N/A
Biodiversity	Low	Moderate	High	Outstanding	
Cultural associations	Low	Moderate	High	Outstanding	
Geology	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

### ZONE F19 Mynydd Baedan

Generally criteria from better to worse for large scale wind farms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	Plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
<b>PERCEPTUAL</b>	<b>Diversity</b>	uniform	simple	diverse	complex	
	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements

Overall Sensitivity	Low	Medium-low	Medium	Medium-High	High
Comments	<p>Prominent relatively narrow exposed single ridge on the edge of the coalfield plateau with valleys to the north, south and east. The ridge rises to only 251mAOD, 50-150m above lower land to south and 50-100m above Llynfi valley to north. There is a single mast and some settlement in the area.</p>				

#### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Enclosures and medieval platform houses and ridgeway walk. Bronze Age monuments including tumuli and trackways [Iron Age] spread along the ridge.					

**Landscape habitats/Biodiversity**

<b>Criteria</b>					
<b>Presence of habitat sensitive to wind farms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to wind farms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Improved grassland					

**Cultural landscape/associations**

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments See history.					

**Geological landscape/Earth sciences**

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant sandstone.

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
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Comments

The area has the sensitivity above because it is a prominent relatively narrow exposed single ridge on the edge of the coalfield plateau with valleys to the north, south and east. The ridge rises to only 251mAOD, 50-150m above lower land to south and 50-100m above Llynfi valley to north. There is a single mast and some settlement in the area.

### Landscape Value

<i>Aspect</i>				
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding
<b>Historic landscape</b>	Low	Moderate	High	Outstanding
<b>Biodiversity</b>	Low	Moderate	High	Outstanding
<b>Cultural associations</b>	Low	Moderate	High	Outstanding
<b>Geology</b>	Low	Moderate	High	Outstanding



## SSA F: Landscape sensitivity worksheet

ZONE: F20 Mynydd Caerau

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Ridge running from the sensitive conical northern highpoint of Mynydd Caerau, south to separate the Llynfi and Garw valleys. Forms part of the dissected coalfield plateau. The area rises to 556mAOD, 350m above valley floor to the north and to 350mAOD at its southern end, around 250m above the Llynfi valley floor. The ridge encloses a lower bowl to the north west. The landcover is forest plantation, cleared in places, interspersed with open, unenclosed grassland.

### Historic Landscape

Criteria				
Survival of historic patterns of	Not evident		Moderately evident	Highly evident

<b>landscape</b>					
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Tumuli on Mynydd Caerau.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Coniferous plantation and grassland					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
See History					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Some minor outcrops. Pennant sandstone.					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is a ridge running from the more sensitive conical northern highpoint of Mynydd Caerau [medium-high], south to separate the Llynfi and Garw valleys. Forms part of the dissected coalfield plateau. The area rises to 556m AOD, 350m above valley floor to the north and to 350m AOD at its southern end, around 250m above the Llynfi valley floor. The ridge encloses a lower bowl to the north west which is intrinsically less sensitive [medium] [leaving aside the effect on the nearby settlement]. The landcover is forest plantation, cleared in places, interspersed with open, unenclosed grassland.</p>					

### Landscape Value

<i>Aspect</i>	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F21 Moel Cynhordy

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

Prominent end of a ridge top as part of the dissected coalfield plateau running up from 280-350mAOD, 190-260m above the Llynfi valley floor to the south west. The landcover is enclosed upland pasture with fridd. The skyline is simple and rounded and the area is open to view from the broad valley.

### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness of historic	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Heathland, improved grassland and bracken in area.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments No info					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant sandstone

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments	<p>The area has the sensitivity above because it is the prominent end of a ridge top as part of the dissected coalfield plateau running up from 280-350mAOD, 190-260m above the Llynfi valley floor to the south west. The landcover is enclosed upland pasture with fridd. The skyline is simple and rounded and the area is open to view from the broad valley.</p>				

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F22 Werfa

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	Diverse [in LANDMAP but should be simple]	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High
<p>Comments</p> <p>Gently rounded simple high point on the southern fringe of the core dissected plateau area rising to 568mAOD around 400m above steep incised valleys to the south east and south west. The area is exposed with long views south and north. The landcover is rough grazing with some enclosure of old stone walls in the area. The existing wireless mast and associated infrastructure is a detractor.</p>						

### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident

<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high High
Comments				
Ridgeway walk from church to the south, some tumuli and cairns with a stronger historic sense than other areas.				

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Marshy acid grasslands and wet/dry heath in area.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive



<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Pennant sandstone upper plateau					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is a gently rounded simple high point on the southern fringe of the core dissected plateau area exposed with long views south and north. It rises to 568mAOD around 400m above steep incised valleys to the south east and south west. The landcover is rough grazing with some enclosure of old stone walls in the area and there are historic features of some importance. The existing wireless mast and associated infrastructure is a detractor.</p>					

### Landscape Value

<b>Aspect</b>	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

### ZONE: F23 Mynydd Llangeinwyr

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	Diverse [in LANDMAP but should be simple]	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
Other criteria						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Narrow linear ridge on the southern fringe of the core dissected plateau area rising to 530mAOD around 360m above steep incised valleys to the east and west. The area is exposed with long views south and north. The landcover is rough grazing with some enclosure of old stone walls in the area.

#### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Ridgeway walk from church to the south, some tumuli and cairns with a stronger historic sense than other areas.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Marshy acid grasslands and wet/dry heath in area.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant sandstone upper plateau

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	<b>Medium-high</b>	High
<b>Comments</b>					
<p>The area has the sensitivity above because it is a narrow linear ridge on the southern fringe of the core dissected plateau area rising to 530mAOD around 360m above steep incised valleys to the east and west. The area is exposed with long views south and north. The landcover is rough grazing with some enclosure of old stone walls in the area and there are historic features of some importance.</p>					

### Landscape Value

<b>Aspect</b>					
<b>Visual and sensory</b>	Low	Moderate	<b>High</b>	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	<b>N/A</b>
<b>Biodiversity</b>	Low	Moderate	<b>High</b>	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	<b>No info</b>
<b>Geology</b>	Low	Moderate	<b>High</b>	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F24 Mynydd Corrwg Fechan

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land [in LANDMAP but part enclosed]	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
Other criteria	Wildness	Human intervention				Wild
	Skylines	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements

Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High
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Comments

A prominent rounded hill at the head of Cwm Corrwg rising to 410mAOD, 50-200m above the narrow valley bottom. The landcover is a combination of simple unenclosed rough grassland and enclosed upland pasture. The southern face and top of the hill are most prominent and sensitive facing down the valley.

### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness of historic	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Evidence of use since Mesolithic period- sheepfolds and some enclosure.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Upland acid grassland					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
See historic					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	<b>Medium-high</b>	High
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Comments

The area has the sensitivity above because it is a prominent rounded hill at the head of Cwm Corrwg rising to 410mAOD, 50-200m above the narrow valley bottom. The landcover is a combination of simple unenclosed rough grassland and enclosed upland pasture. The southern face and top of the hill are most prominent and sensitive facing down the valley.

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	<b>Moderate</b>	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	<b>N/A</b>
<b>Biodiversity</b>	Low	<b>Moderate</b>	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	<b>High</b>	Outstanding	
<b>Geology</b>	Low	Moderate	<b>High</b>	Outstanding	

## SSA F: Landscape sensitivity worksheet

### ZONE: F25 Mynydd Blaenrhondda

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Part of the large scale higher coalfield plateau with a simple and gently undulating skyline with small incised valleys, rising to 450-550mAOD, 250-300m above the valley floor to the east. On the eastern boundary there are major rock outcrops at the head of the valley which are sensitive as is the highest land to the north [medium high]. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.

#### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive



<b>landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Conifer plantation with marshy grassland					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive	Highly sensitive	
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive	Highly sensitive	
<b>Other geological features</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Rock outcrops to the east are sensitive

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>					
<p>The area has the sensitivity above because it is part of the large scale higher coalfield plateau with a simple and gently undulating skyline with small incised valleys, rising to 450-550mAOD, 250-300m above the valley floor to the east. On the eastern boundary there are major rock outcrops at the head of the valley which are sensitive as is the highest land to the north [medium high]. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.</p>					

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

### ZONE: F26 Mynydd Tynewydd

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

Part of the large scale higher coalfield plateau with a simple and gently undulating skyline with contained upland valley, rising to 516mAOD, 250-300m above the valley floor to the west. On the western boundary there are rock outcrops at the head of the valley which are sensitive as are the northern fringes close to the scarp slope[medium high]. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.

#### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Conifer plantation with marshy grassland					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive	Highly sensitive	
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive	Highly sensitive	
<b>Other geological features</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Rock outcrops to the east are sensitive

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is part of the large scale higher coalfield plateau with a simple and gently undulating skyline with a contained upland valley, rising to 516m AOD, 250-300m above the valley floor to the west. On the western boundary there are rock outcrops at the head of the valley which are sensitive as are the northern fringes close to the scarp slope [medium high]. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.</p>					

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

**SSA F: Landscape sensitivity worksheet**  
**ZONE: F27 Mynydd Bwlfa**

Generally criteria from better to worse for large scale windfarms, left to right.

**Visual and Sensory**

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	Mountains [in LANDMAP but not true]
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

**Comments**

On the northern edge of the large scale higher coalfield plateau with a simple and gently undulating skyline and a dramatic scarp slope to the north and rock outcrop to the east. The area rises from 380mAOD in the south to 515mAOD, around 300m above the valley floor to the west. The landcover is simple, dominated by rough grassland. The most sensitive areas are the northern and eastern edges whilst the western facing areas [medium high], back from the edge are moderate to low sensitivity.

## Historic Landscape

<b>Criteria</b>					
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident		Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Some stone features such as cairns are in evidence.					

## Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Peregrine falcon, some BAP habitat upland heath, but mostly molinia and unimproved acid grassland.					

## Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info					

## Geological landscape/Earth sciences

Criteria					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Rock outcrops to east and steep slopes to Cynon valley sensitive					

## Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because its south western facing slopes have a simple and gently undulating skyline as part of the large scale higher coalfield plateau with a simple landcover, dominated by rough grassland. The dramatic scarp slope to the north and rock outcrop to the east are sensitive and their environs should not be developed. The area rises from 380mAOD in the south to 515mAOD, around 300m above the valley floor to the west.</p>					

## Landscape Value

Aspect					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High [to east]	Outstanding	



## SSA F: Landscape sensitivity worksheet

### ZONE: F28 Cefn y Rhondda (north)

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys [in LANDMAP but not true]	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic [in LANDMAP but not true]	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm [in LANDMAP but not true]	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Part of the large scale higher coalfield plateau with a simple and gently undulating skyline at the head of the Rhondda Fach which twists to meet this area north of Maerdy. The area rises to 464mAOD around 160m above the valley floor to the west and 200mAOD above the minor tributary valley of the Rhondda to the south. The landcover is simple, dominated by rough grassland. The most sensitive area is the southern edge where turbines may intrude on the Rhondda.

#### Historic Landscape

Criteria				
<b>Survival of historic</b>	Not evident		Moderately evident	Highly evident

<b>patterns of landscape</b>					
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Upland grassland including acid grassland, molinia, bilberry.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological</b>	None known		Moderately sensitive		Highly sensitive

<b>features</b>					
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
U shaped valley edge					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is part of the large scale higher coalfield plateau with a simple and gently undulating skyline at the head of the Rhondda Fach which twists to meet this area north of Maerdy. The area rises to 464mAOD around 160m above the valley floor to the west and 200mAOD above the minor tributary valley of the Rhondda to the south. The landcover is simple, dominated by rough grassland. The most sensitive area is the southern edge where turbines may intrude on the Rhondda.</p>					

### Landscape Value

<b>Aspect</b>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F29 St Gwynno Forest

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
	Diversity	uniform	simple	diverse	complex	
PERCEPTUAL	Level of human access	Rare [in LANDMAP but not true as minor road]	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High
<p>Comments</p> <p>Afforested upland ridged plateau on the eastern fringes of the SSA dissected with a high valley basin as part of upland area running south east. The ridge rises to around 450mAOD in the north west from 317m in the south with the lower valley areas to the east around 250mAOD. The ridge lies upto 250m above valley floor to west and north, 100m to south east. The main ridge to the west is complemented by a dissected parallel ridge to the east which gives some breadth to the area, particularly to the north. The area becomes more sensitive to the south sloping gradually eastwards [fairly high]. The landcover is forestry, cleared in places , with some broadleaves in areas and some scattered settlement including a pub and a linking minor road. The area is used for informal recreation such as walking.</p>						

## Historic Landscape

<b>Criteria</b>					
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident		Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

## Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Varied conifer plantation					

## Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info					

## Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Tributary hanging valley in sandstone dominated coal measures					

## Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is afforested upland ridged plateau with a high contained valley/basin to the north. The potential of the area is countered by the popularity of the area for recreation and the presence of scattered settlement and deciduous trees and the sensitivity of the landform to the south which slopes towards the valley bottom [medium high]. The zone is on the eastern fringes of the SSA and rises to around 450mAOD in the north west from 317mAOD in the south with the lower valley areas to the east around 250mAOD. The ridge lies upto 250m above valley floor to west and north, 100m to south east. The main ridge to the west is complemented by a dissected parallel ridge to the east which gives some breadth to the area, particularly to the north. The landcover is forestry, cleared in places, with some broadleaves in areas and some scattered settlement including a pub and a linking minor road. The area is used for informal recreation such as walking. Any windfarm development should be located to the north of the church avoiding affecting its setting.</p>					

## Landscape Value

<b>Aspect</b>	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

**SSA F: Landscape sensitivity worksheet**  
**ZONE: F30 St Gwynno Forest (South)**

Generally criteria from better to worse for large scale windfarms, left to right.

**Visual and Sensory**

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
	<b>Other criteria</b>					
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

Comments

Prominent western edge and end of a plateau ridge on the eastern fringes of the SSA as part of upland area running south east. The ridge rises to around 450mAOD in the north west from 250m AOD in the south east. The ridge lies upto 250m above the valley floor to west and 130m to south east. The landcover is a mix of open rough grassland on the western edge and enclosed upland pasture with stone walls and occasional deciduous trees to the south and east. A minor road runs up from the south and north.

**Historic Landscape**

Criteria				
<b>Survival of historic patterns of</b>	Not evident		Moderately evident	Highly evident

<b>landscape</b>					
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low ?	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Cairns and other features evident.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Improved grassland, semi improved grassland and rhos pasture.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive	Highly sensitive	
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive	Highly sensitive	
<b>Other geological features</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall</b>	Low	Medium-low	Medium	Medium-high	High



<b>sensitivity</b>	
Comments	Outcrops to south east of area- sensitive. Pennant sandstone.

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	<b>Medium-high</b>	High
Comments	<p>The area has the sensitivity above because it consists of a prominent ridge edge dominating the adjacent valleys to the west and enclosed upland pasture with stone walls falling and exposed to the south east at the end of the ridge. The area lies on the eastern fringes of the SSA as part of upland area running south east. The ridge rises to around 450mAOD in the north west from 250m AOD in the south east and lies upto 250m above the valley floor to west and 130m to south east. The landcover is a mix of open rough grassland on the western edge and farmland and occasional deciduous trees to the south and east. A minor road runs up from the south and north.</p>				

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

### ZONE: F31 Mynydd William Meyrick ( NE)

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains[in LANDMAP but should be hills and valleys]
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Relatively level ridge top on the southern fringe of the core dissected plateau area reaching 535mAOD, around 300m above steeply incised valley floors to the east and west. The ridgetop is a relatively limited in size with very steep slopes on the fringes, particularly to the west. The landcover is uniform coniferous plantation.

#### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Conifer plantation					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant sandstone

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>					
<p>The area has the sensitivity above because though it is simple level ridge top with a simple landcover, it is relatively limited in size with very steep slopes on the fringes, particularly to the west. The area lies on the southern fringe of the core dissected plateau area reaching 535mAOD, around 300m above steeply incised valley floors to the east and west. The landcover is uniform coniferous plantation.</p>					

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F32 Mynydd William Meyrick (SW)

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains[in LANDMAP but should be hills and valleys]
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
	Diversity	uniform	simple	diverse	complex	
PERCEPTUAL	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth multiple		rounded		complex single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Western edge of ridge on the southern fringe of the core dissected plateau area rising to 517mAOD from 430mAOD around 340m above the steep incised Ogmores Vale to the west. The ridge broadens and falls to the south into a hand with incised fingers. The northern edge is sensitive [fairly high]. The south eastern part of the zone approaches the core of the ridge [moderate]. The landcover is simple dominated by rough grazing.

### Historic Landscape

Criteria	Not evident		Moderately evident	Highly evident
Survival of historic patterns of landscape				

<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Stone features and cairns.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Marshy/acid grassland, limited wet/dry heath, blanket bog in area.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Rock outcrops on the north western fringes.

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
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Comments

The southern part of the area has medium sensitivity above because it broadens and has a simple landcover. The northern finger and western side on the edge of the valley is medium-high sensitivity. The zone is on the southern fringe of the core dissected plateau area rising to 517mAOD from 430mAOD around 340m above the steep incised Ogmere Vale to the west. The ridge broadens and falls to the south into a hand with incised fingers. The south eastern part of the zone approaches the core of the ridge. The landcover is simple dominated by rough grazing.

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

**SSA F: Landscape sensitivity worksheet**  
**ZONE: F33 Mynydd Maesteg (North)**

Generally criteria from better to worse for large scale windfarms, left to right.

**Visual and Sensory**

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains[in LANDMAP but should be hills and valleys]
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth multiple		rounded		complex single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

**Comments**

Part of the southern fringe of the core dissected plateau area rising to 430mAOD from 380mAOD in the east around 150m above the steep incised Ogwr fach to the east. The ridge broadens and falls to the south into a 'hand' with incised fingers. This area is part of the core of the ridge. It also borders a small, twisting incised forested valley to the south. The landcover is simple, dominated by rough grazing.

**Historic Landscape**

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident



<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Stone features and cairns.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Marshy/acid grassland, limited wet/dry heath, blanket bog in area.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Rock outcrops on the north western fringes.

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
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Comments

The area has the sensitivity above because it is part of a ridge which broadens and has a simple landcover. It is on the southern fringe of the core dissected plateau area rising to 430mAOD from 380mAOD in the east around 150m above the steep incised Ogwr fash to the east. The ridge broadens and falls to the south into a 'hand' with incised fingers. This area is part of the core of the ridge. It also borders a small, twisting incised forested valley to the south. The landcover is simple, dominated by rough grazing.

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
Visual and sensory	Low	Moderate	High	Outstanding	
Historic landscape	Low	Moderate	High	Outstanding	N/A
Biodiversity	Low	Moderate	High	Outstanding	
Cultural associations	Low	Moderate	High	Outstanding	No info
Geology	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

### ZONE: F34 Mynydd Maesteg (South)

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains [in LANDMAP but should be hills and valleys]
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
	Diversity	uniform	simple	diverse	complex	
PERCEPTUAL	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth multiple		rounded		complex single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Part of the southern fringe of the core dissected plateau area rising to 400mAOD from 360mAOD in the east around 120m above the steep incised Cwm Dyfolog to the east. The ridge broadens and falls to the south and east into a 'hand' with incised fingers. This area is on of the fingers lying between Cwm Dyfolog and the upper reaches of Ogwr fach. Its eastern extremity is therefore prominent and more sensitive [fairly high]. The landcover is simple, dominated by rough grazing.

#### Historic Landscape

Criteria				
Survival of historic	Not evident		Moderately evident	Highly evident

<b>patterns of landscape</b>					
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Stone features and cairns.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Marshy/acid grassland, limited wet/dry heath, blanket bog in area.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Rock outcrops on the north western fringes.

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
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Comments

The area has medium sensitivity because it is part of a ridge which broadens to the south and has a simple landcover. It is on the southern fringe of the core dissected plateau area rising to 400mAOD from 360mAOD in the east around 120m above the steep incised Cwm Dyfolog to the east. The ridge broadens and falls to the south and east into a 'hand' with incised fingers. This area is on of the fingers lying between Cwm Dyfolog and the upper reaches of Ogwr fach. Its eastern part is therefore prominent and more sensitive [medium high]. The landcover is simple, dominated by rough grazing.

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F35 Mynydd y Glifach ( Trane )

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

End of a ridge top as part of the dissected coalfield plateau running up from 200-415mAOD, 70m above wide valley to the south east, 220m above Rhondda valley to north east and upto180m above the Ogwr fach valley floor to the west. The landcover is rough grassland, heath, enclosed upland pasture and conifer plantation. The skyline is simple and rounded but the area is open to view from the surrounding valleys which are wide in parts.

### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness of historic	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Improved grassland and conifer plantation					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive	Highly sensitive	
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive	Highly sensitive	
<b>Other geological features</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant sandstone

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	<b>Medium-high</b>	High
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Comments

The area has the sensitivity above because it is the end of a ridge top open to view from the surrounding valleys which are wide in parts. It is part of the dissected coalfield plateau running up from 200-415m AOD, 70m above wide valley to the south east, 220m above Rhondda valley to north east and upto 180m above the Ogwr Fach valley floor to the west. The landcover is rough grassland, heath, enclosed upland pasture and conifer plantation. The skyline is simple and rounded.

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	



## SSA F: Landscape sensitivity worksheet

ZONE: F36 Mynydd Maendy Gilfach Goch

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
<b>PERCEPTUAL</b>	<b>Diversity</b>	uniform	simple	diverse	complex	
	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

South facing hillside which is the end of a ridge top as part of the dissected coalfield plateau running up from 200 to 391mAOD, 50-240m above the valley of Cwm Ogwr fach to the south. The landcover is enclosed upland pasture with medium sized rectilinear fields, conifer plantation and rough grassland. The skyline is simple and rounded but the area is open to views from the valley and other areas to the south.

### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Cairn on the higher northern area.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Improved grassland, conifer plantation					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant sandstone

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is an exposed south facing hillside which is the end of a ridge top as part of the dissected coalfield plateau running up from 200 to 391mAOD, 50-240m above the valley of Cwm Ogwr fach to the south. The landcover is enclosed improved upland pasture with medium sized rectilinear fields, conifer plantation and rough grassland. The skyline is simple and rounded but the area is open to views from the valley and other areas to the south.</p>					

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate <i>[not known?]</i>	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F37 Mynydd y Gaer

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	Mountains <i>[in LANDMAP but not true]</i>
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic <i>[in LANDMAP but not true for zone]</i>	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm <i>[in LANDMAP but not true for zone]</i>	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse <i>[in LANDMAP but not true for zone]</i>	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Prominent relatively narrow exposed single ridge on the edge of the coalfield plateau with valleys to the north, south and west. The ridge rises to 295mAOD, around 225m above lower land to the south and 135m above Cwm Ogwr valley bottom to the north and has a rounded profile. The landcover is a combination of upland grazing with some field boundaries, rough grazing and bracken.

## Historic Landscape

<b>Criteria</b>					
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident		Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

## Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Bracken dominated common [fritillary butterfly] with marshy molinia grassland, acid grassland [plus improved pasture].					

## Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info					

## Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Pennant sandstone					

## Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is a prominent relatively narrow exposed single ridge on the edge of the coalfield plateau with valleys to the north, south and west. The ridge rises to 295mAOD, around 225m above lower land to the south and 135m above Cwm Ogwr valley bottom to the north and has a rounded profile. The landcover is a combination of upland grazing with some field boundaries, rough grazing and bracken. The scale and single ridge form of the area make it unsuitable for strategic windfarm development.</p>					

## Landscape Value

<b>Aspect</b>	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

**SSA F: Landscape sensitivity worksheet**  
**ZONE: F38 Mynydd Maendy (Taff Ely wind farm)**

Generally criteria from better to worse for large scale windfarms, left to right.

**Visual and Sensory**

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains [in LANDMAP but not true]
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse [in LANDMAP but not true]	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth multiple		rounded		complex single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

**Comments**

The zone is a prominent relatively narrow exposed single ridge on the edge of the coalfield plateau with a valley to the north and low land to the south. The ridge rises to 300m AOD, around 225m above land to the south and 135m above Cwm Ogwr valley bottom to the north and has a rounded profile. The landcover is a combination of upland grazing with some field boundaries, rough grazing and bracken. Visually, the area is dominated by the Taff Ely windfarm which has relatively small scale wind turbines.

**Historic Landscape**

Criteria				
<b>Survival of historic</b>	Not evident		Moderately evident	Highly evident

<b>patterns of landscape</b>					
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>					
Bronze Age funerary monuments.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>					
Improved grassland, with hedgerows in places.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>					
Windfarm most significant cultural feature.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive



<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Pennant sandstone					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is a prominent relatively narrow exposed single ridge on the edge of the coalfield plateau with a valley to the north and low land to the south. The ridge rises to 300mAOD, around 225m above land to the south and 135m above Cwm Ogwr valley bottom to the north and has a rounded profile. The landcover is a combination of upland grazing with some field boundaries, rough grazing and bracken. Visually, the area is dominated by the Taff Ely windfarm which has relatively small wind turbines. The scale and single ridge form of the area make it unsuitable for strategic windfarm development.</p>					

### Landscape Value

<b>Aspect</b>	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate <i>not known?</i>	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet ZONE F39 Mynydd Margam (East)

Generally criteria from better to worse for large scale wind farms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	Plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements

Overall Sensitivity	Low	Medium-low	Medium	Medium-High	High
Comments	<p>Edge of a ridge on the southern part of the coalfield plateau with the relatively wide Llynfi valley to the east. The ridge rises from 250m to 291mAOD, 140-190m above the main valley bottom. The landcover is pasture with rough grassland and a number of prehistoric features. The area has a backcloth of forest plantation to the west.</p>				

### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness of historic	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Enclosures and medieval platform houses and ridgeway walk. Bronze Age monuments including tumuli and trackways [Iron Age] spread along the ridge.					

#### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to wind farms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to wind farms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Improved grassland					

#### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments See history.					

#### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant sandstone.

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
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Comments

The area has the sensitivity above because it is the narrow edge of a ridge on the southern part of the coalfield plateau with the relatively wide Llynfi valley to the east. The ridge rises from 250m to 291mAOD, 140-190m above the main valley bottom. The landcover is upland improved grassland with field boundaries with some rough grassland and a number of prehistoric features. The area has a backcloth of forest plantation to the west.

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

### ZONE: F40 Cefn y Rhondda

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic <i>[in LANDMAP but not true for this zone]</i>	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm <i>[in LANDMAP but not true for this zone]</i>	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High
<b>Comments</b> Narrow linear ridge on the eastern fringe of the core dissected plateau area rising to 481mAOD around 200-250mAOD above the steep incised valleys to the east and west. There are some rock outcrops on the Rhondda Fach valley edge which are sensitive. The landcover is rough grazing with some forestry. The Artworks windfarm will be constructed on the southern fringes of this area.						

#### Historic Landscape

Criteria				
<b>Survival of historic</b>	Not evident		Moderately evident	Highly evident

<b>patterns of landscape</b>					
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Cairns and other hilltop features.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Part upland grassland on peat, some bilberry.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological</b>	None known		Moderately sensitive		Highly sensitive

<b>features</b>					
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Outcrops on Rhondda Fach. East side of asymmetric Rhondda valley.					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is a narrow linear ridge unable to conceal wind turbines from the adjacent valley floors. It is on the eastern fringe of the core dissected plateau area rising to 481mAOD, around 200-250mAOD above the steep incised valleys to the east and west. There are some rock outcrops on the Rhondda Fach valley edge which are sensitive. The landcover is rough grazing with some forestry. The Artworks windfarm will be constructed on the southern fringes of this area.</p>					

### Landscape Value

<b>Aspect</b>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

### ZONE: F41 Mynydd Merthyr (North -East)

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
	<b>Other criteria</b>					
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Narrow linear ridge with undulating skyline on the north eastern fringe of the SSA rising to 457mAOD around 200m above Taff valley to the east and 250 m above the Cynon valley to the west. The landcover is heathland with coniferous plantation to the south and some rough grazing. Two wireless masts lie on the ridge.

#### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive



<b>landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Cairns evident.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Unenclosed common of dry heath, acid grassland and some bracken.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive	Highly sensitive	
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive	Highly sensitive	
<b>Other geological features</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant sandstone.

### Landscape Character Sensitivity Summary

Overall sensitivity	Low	Medium-low	Medium	Medium-high	High
Comments	<p>The area has the sensitivity above because it is a narrow linear ridge with undulating skyline unable to conceal wind turbines from the adjacent valley floors. It is on the north eastern fringe of the SSA rising to 457mAOD around 200m above Taff valley to the east and 250 m above the Cynon valley to the west. The landcover is heathland with coniferous plantation to the south and some rough grazing. Two wireless masts lie on the ridge.</p>				

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
Visual and sensory	Low	Moderate	High	Outstanding	
Historic landscape	Low	Moderate	High	Outstanding	N/A
Biodiversity	Low	Moderate	High	Outstanding	
Cultural associations	Low	Moderate	High	Outstanding	No info
Geology	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

ZONE: F42 Mynydd Merthyr

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	Mountains [in LANDMAP but should be hills and valleys]
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

Comments

Narrow linear ridge with undulating skyline on the north eastern fringe of the SSA rising to 493mAOD around 275-350m above Taff valley to the east and the Cynon valley to the west. The landcover is heathland with coniferous plantation to the north in simple blocks.

### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness</b>	Not evident	Patches	Cohesive over	Highly cohesive

of historic patterns of landscape			parts of the area		
Presence of designated features eg SAM's, listed buildings etc	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Landscape habitats/Biodiversity

<i>Criteria</i>					
Presence of habitat sensitive to windfarms	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
Presence of species sensitive to windfarms	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Largely plantation with bracken with some dry heath and acid grassland to the south.					

### Cultural landscape/associations

<i>Criteria</i>					
Recorded expressions [eg featured in painting or poem]	None known		Moderately sensitive	Highly sensitive	
notional associations [eg with famous people, events]	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info					

### Geological landscape/Earth sciences

<i>Criteria</i>					
Exposed rock/outcrops	None known		Moderately sensitive	Highly sensitive	
Other geological features	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant sandstone

### Landscape Character Sensitivity Summary

**Overall sensitivity**      Low                      Medium-low                      Medium                      Medium-high                      High

Comments

The area has the sensitivity above because it is a narrow linear ridge with undulating skyline unable to conceal wind turbines from the adjacent valley floors. It is on the north eastern fringe of the SSA rising to 493m AOD around 275-350m above the Taff valley to the east and the Cynon valley to the west. The landcover is heathland with coniferous plantation to the north in simple blocks.

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

**SSA F: Landscape sensitivity worksheet**  
**ZONE: F43 Mynydd Portref ( Taff Ely wind farm east )**

Generally criteria from better to worse for large scale windfarms, left to right.

**Visual and Sensory**

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains [in LANDMAP but not true]
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse [in LANDMAP but not true]	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth multiple		rounded		complex single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

**Comments**

The zone is a prominent relatively narrow exposed single ridge on the edge of the coalfield plateau with a valley to the north and low land to the south. The ridge rises to 277m AOD, around 200m above land to the south and 135m above the upper Ely valley bottom to the north and has a rounded profile. The landcover is a combination of upland grazing with some field boundaries, rough grazing and bracken. Visually, the area is dominated by the Taff Ely windfarm to the west which has relatively small scale wind turbines.

**Historic Landscape**

Criteria				
<b>Survival of historic</b>	Not evident		Moderately evident	Highly evident

<b>patterns of landscape</b>					
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Bronze Age funerary monuments.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Improved grassland, with hedgerows in places.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Windfarm most significant cultural feature.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Pennant sandstone					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is a prominent relatively narrow exposed single ridge on the edge of the coalfield plateau with a valley to the north and low land to the south. The ridge rises to 277mAOD, around 200m above land to the south and 135m above the upper Ely valley bottom to the north and has a rounded profile. The landcover is a combination of upland grazing with some field boundaries, rough grazing and bracken. Visually, the area is dominated by the Taff Ely windfarm to the west which has relatively small wind turbines. The scale and single ridge form of the area make it unsuitable for strategic windfarm development.</p>					

### Landscape Value

<b>Aspect</b>	Low	Moderate	High	Outstanding	N/A
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate <i>not known?</i>	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	



## SSA F: Landscape sensitivity worksheet

ZONE: F44 Mynydd Pwllyrhebog

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains[in LANDMAP but should be hills and valleys]
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
	Diversity	uniform	simple	diverse	complex	
PERCEPTUAL	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

Part of the southern fringe of the core dissected plateau area rising to 410mAOD from 350mAOD in the east around 100m above the steep incised Ogwr fach to the south. The ridge broadens and falls to the south and east into a 'hand' with incised fingers. This area is one of the fingers, lying north of Ogwr fach and south west of the Rhondda. Its southern and eastern edges are therefore potentially prominent and more sensitive [fairly high]. The landcover is simple, dominated by rough grazing.

### Historic Landscape

Criteria				
Survival of historic patterns of	Not evident		Moderately evident	Highly evident

<b>landscape</b>					
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Stone features and cairns.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Marshy/acid grassland, limited wet/dry heath, blanket bog in area.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive	Highly sensitive	
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/outcrops</b>	None known		Moderately sensitive	Highly sensitive	
<b>Other geological features</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Rock outcrops on the north western fringes.

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
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Comments

The area has medium sensitivity because it is part of a ridge which broadens to the south and has a simple landcover. It is on the southern fringe of the core dissected plateau area rising to 410mAOD from 350mAOD in the east around 100m above the steep incised Ogwr fach to the south. The ridge broadens and falls to the south and east into a 'hand' with incised fingers. This area is one of the fingers, lying north of Ogwr fach and south west of the Rhondda. Its southern and eastern edges are therefore potentially prominent and more sensitive [medium high]. The landcover is simple, dominated by rough grazing.

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

**SSA F: Landscape sensitivity worksheet**  
**ZONE: F45 Ffynnon Oer (west )**

Generally criteria from better to worse for large scale windfarms, left to right.

**Visual and Sensory**

<b>Criteria from LANDMAP assessment</b>						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

**Comments**

Part of the higher large scale coalfield plateau with small incised valleys, rising to 360m AOD, around 310m above Neath valley floor to the north. The area is set back from the main valley edge and slopes. The skyline is simple and gently undulating. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.

**Historic Landscape**

<b>Criteria</b>				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Extensive patterns from the Mesolithic period exist but are hidden beneath forestry.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Crossbill possible.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments See historic.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant formation

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is part of the higher large scale coalfield plateau with small incised valleys, rising to 360m AOD, around 310m above Neath valley floor to the north but the area is set back from the main valley edge and slopes. The skyline is simple and gently undulating. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places.</p>					

### Landscape Value

<b>Aspect</b>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA F: Landscape sensitivity worksheet

### ZONE: F46 Mynydd Bwllfa (south east)

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Eastern edge of SSA coalfield plateau with a simple and gently undulating skyline with contained upland valley, rising to 430mAOD, 200m above the valley floor to the south. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places. The edge bordering the Cynon valley is the most sensitive as are the those of the tributary valley in which Cwmaman lies [fairly high].

#### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Varied conifer plantation					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive	Highly sensitive	
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive	Highly sensitive	
<b>Other geological features</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High



Comments

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The area has the sensitivity above because it is the eastern edge of SSA coalfield plateau with a simple and gently undulating skyline which links across the head of the Rhondda Fach to other parts of the upland dissected plateau giving depth. It surrounds a contained upland valley, rising to 430mAOD, 200m above the valley floor to the south. The landcover is part of a vast scale forest plantation with clearings. The forest creates abrupt edges in places. The edge bordering the Cynon valley is the most sensitive as are the those of the tributary valley in which Cwmaman lies [medium high].</p>					

### Landscape Value

<b>Aspect</b>	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High [?]	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

GIS Methodology: TAN 8 Annex D Studies of Strategic Search Areas  
**Dr. Helen Dunsford**

Centre for Environmental and Spatial Analysis  
School of Applied Sciences, Ellison Building D Block  
University of Northumbria, Newcastle upon Tyne, NE1 8ST.

Helen Dunsford contact details:

Tel: 0191 243 7155  
Fax: 0191 227 4715  
E-mail: helen.dunsford@northumbria.ac.uk

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## 1. Introduction

This document presents the methods and techniques adopted using Geographical Information Systems (GIS) to aid Arup and White Consultants in the process of identifying 'Preferred Area or Areas' for siting wind farms within the TAN 8 Annex D studies strategic search areas. Data and maps were generated in order to address three key information needs. Identifying potential zones for development within the Strategic Search Area (SSA) by reviewing the technical and environmental constraints of the SSA and assessing visual impact if the zones identified were developed to establish:

1. the potential for additional "extra over" visual impact
2. the degree to which sensitive receptors are influenced by any additional visual impact
3. the degree to which settlement is affected visually by hypothetical zone development

Data has been compiled from a number of sources listed below.

- CartoGraphics: The National Assembly for Wales (includes supply of Ordnance Survey data)
- Countryside Council for Wales (CCW)
- CADW
- Ordnance Survey
- [http://www.bbc.co.uk/reception/tv\\_transmitters/region\\_wales.shtml](http://www.bbc.co.uk/reception/tv_transmitters/region_wales.shtml)
- <http://www.torfaen-objectiveone.org.uk/bil/site/site.htm>
- <http://www.emairport.co.uk/aerocharts/aerochart.htm>
- Data from appropriate LPA
- RSPB

Sources of data and its metadata (information about the data) are given in Appendix A. Please note that all maps produced in this report are based upon the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationary Office. Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Welsh Assembly Government O.S. Licence No. 100017916 and O.S. Licence No.s of appropriate Unitary Authorities.

## 2. Reviewing the technical and environmental constraints of the SSA

**Table 1** provides a summary constraints used in this study. Each criteria listed in the table exists as a layer of data in GIS either in point, line or polygon format. The data compiled for each format has then been modified according to the parameters specified in **Table 1**. There are three different types of parameters, footprints, buffers and Line of Sight (LOS).

**Table 1.** List of data compiled for the GIS constraints model

Constraints	Format (Raw Data)	Source	Parameters
<b>Technical and Environmental Constraints</b>			
Windspeed at 45m Above Ground Level	Polygon	DTI	<=6.9ms-1
Settlement	Polygon (Point)	C-NAW	Buffer - 500m Radius
Slope greater than 15 degrees	Polygon	C-NAW	Footprint
National Parks	Polygon	CCW	Footprint
Areas of Outstanding Natural Beauty	Polygon	CCW	Footprint
SPAs	Polygon	CCW	Footprint
RAMSAR	Polygon	CCW	Footprint
pSAC	Polygon	CCW	Footprint
SAC	Polygon	CCW	Footprint
National Nature Reserves	Polygon	CCW	Footprint
Dyfi Valley Biosphere site	Polygon	CCW	Footprint
Major TV Transmitter Masts (10km radius)	Polygon (Point)	Website	Buffer – 10km Radius
Scheduled Ancient Monuments	Polygon (Point)	CADW	Buffer – 300km Radius*
SSSIs	Polygon	CCW	Footprint
<b>Variable Technical and Environmental Constraints</b>			
MoD Low Flying Area 7T	Polygon	C-NAW	Footprint
Safeguarded Civil Aerodromes: Cardiff	Polygon (Point)	Website	LOS 30km Radius
Local nature reserves	Polygon	CCW	Footprint
RSPB Reserves	Polygon	CCW	Footprint

RSPB Bird Data	Polygon	RSPB	Footprint (1km grid)
National Trails	Polygon (Line)		Buffer – 250m Radius
Historic Landscapes	Polygon	CCW	Footprint
Country Parks (Historic Parks and Gardens )	Polygon (Point)	CCW	Buffer – 2km Radius*
<b>Key:</b> CCW: Countryside Council for Wales C-NAW: CartoGraphics – National Assembly for Wales DTI: Department of Trade and Industry LOS: Line of Sight <sup>†</sup> NG: National Grid RAMSAR: Wetlands		RSPB: Royal Society for the Protection of Birds pSAC: Proposed Special Areas of Conservation SAC: Special Areas of Conservation SPA: Special Protection Areas SSSI: Sites of Special Scientific Interest Website: see Appendix A for website addresses	

\* Buffer is applied to aid in the differentiation of features at the scale of representation

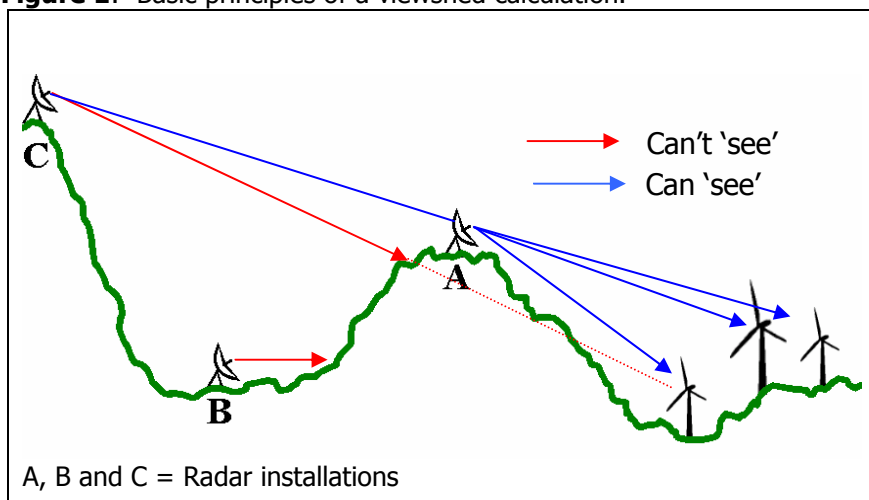
† See elsewhere in report for specifications and methods of calculation of Line of Sight

**Footprint** is used to describe the actual location of designated sites/areas and other factors.

**Buffers** represent areas that lie within a specified distance or radius of the actual location of the feature be it a country park, a TV transmitter or civil aerodrome. Please note that for some of the data (as identified in **Table 1**) a buffer with a defined radius has been applied as a cartographic tool to aid in the differentiation of features at the scale of cartographic representation or the data.

The third type of parameter represents the results of a viewshed calculation – **Line of Sight (LOS)**. It is not possible to locate a wind turbine that is visible or within the line of sight of a radar installation (**Figure 1**).

**Figure 1:** Basic principles of a viewshed calculation.



A viewshed calculation requires:

- A Digital Elevation Model (DEM): a digital map of elevation data made up of equally sized gridded cells each with a value of elevation in metres.<sup>1</sup>
- An observer point: a building, person or in this case radar installation.
- Calculation parameters: - Height offsets: the height of the observer point  
heights of feature that you are trying to 'see'.
- Radius: a limit beyond which visibility is no longer calculated - the effect of radar is no longer restrictive.

Line of Sight has been calculated for Cardiff Airport. The parameters used in the calculation of a viewshed are summarised below.

**Observer point:** Cardiff Airport at 26.82m<sup>2</sup>

**Height offsets:** wind turbines at 110m

**Radius:** Cardiff Airport at 30km

<sup>1</sup> The DEM used in this calculation was supplied by OTCO Welsh Assembly – Landform Profile has a vertical resolution of ±2.5m see <http://www.ordnancesurvey.co.uk/oswebsite/products/landformprofile/>

<sup>2</sup> Source: <http://www.emairport.co.uk/aerocharts/aerochart.htm>

Using all data compiled within a GIS it is possible to:

- Switch off individual layers representing technical and environmental constraints in order to assess the impact of each parameter upon the feasibility of windfarm development within the SSA
- Change the parameters, of all of the layers used in the GIS constraints model and for the two visibility scenarios, in line with technological advances.

For information upon how the data were used please see main report. The zone boundaries were defined by others independently of the GIS work undertaken for the study. Please note that this data has been used in concert with all of the constraints that were used to identify the boundaries of the SSA detailed in Facilitating Planning for Renewable Energy in Wales: Meeting the Target – ARUP Final Report of August 2004.

### 3. Visual Capacity Assessment

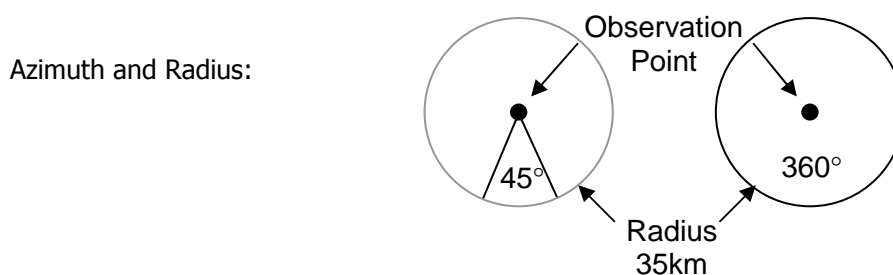
#### 3.1 Introduction

The main aim of the visibility analysis has been to produce maps of relative visibility in order to assess the potential for additional visual impact of zone development and the degree to which sensitive receptors are influenced by any additional visual impact. This data was then used to inform the environmental and landscape performance of the zones in the SSA.

#### 3.2 An Introduction to Visibility Analysis

Visibility Analysis identifies those areas on a map that can see a single or many specified objects, for example, wind turbines. In this study the in-built *Viewshed* function, part of the Spatial Analyst extension in ArcGIS v8.3, has been used to carry out the visibility analysis. *Viewshed* is one of many in-built functions within GIS software that are available for this type of analysis. There is no single description of visibility analysis, various software packages implement it differently. The type of datasets required in a visibility analysis and parameters that can be applied to them are summarised below:

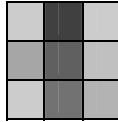
- A Digital Elevation Model (DEM), that describes height over a topographic surface.
- A data set of predefined **observation points** can be used in the analysis. Observation points can take the form of any feature such as ferry routes or viewpoints or the whole land surface. For an area, a grid of observer points that covers the surface has to be created.
- For each observation point it is possible to set the field of view or **azimuth**, i.e. complete at 360° or at a defined azimuth of 45°.



- In any visibility analysis, it is possible to set a distance limit beyond which visibility is no longer calculated. This **radius** can be set at any specified distance or is not set i.e. limitless. This brings in the issue of zones of theoretical limits of visibility (ZTV).
- Height offsets are then chosen above the elevation given by the DEM for the observation points being analysed. One offset is the **subject height** – the height of industrially available wind turbines.
- A second height offset for the observer is also essential, and is known as a **viewing height**.

- The output or results of the analysis, a **visibility surface**, are usually recorded in Raster format.

Raster Format:



1	5	1
2	4	1
1	3	2

Uses a grid structure to store geographic information.

Calculating visibility identifies those cells in an input DEM that can be seen from one or more than one observation point subject to predefined parameters. Using one observation point as an example the output visibility map would contain cells that are classed as:

- A cell that can see the given observer point = 1
- A cell that cannot see the given observer point = 0

The calculation is repeated for each observation point. The cumulative *visibility score* for each grid cells is equal to the number of observation points that that grid cell can 'see'. The number of observation points is controlled by the parameters set for the subject height, viewing height, location and number of observation points and resolution (grid size) of the output visibility surface. The higher the number of observation points a grid cell can 'see', the more visible that given grid cell is.

To summarise there are five key parameters that can be defined:

- subject height: the object being observed
- viewing height: the observer
- radius: distance limit of visibility calculations
- azimuth: field of view
- output grid: resolution of the visibility surface

In terms of the resolution chosen for the output visibility surface created there are two variables to consider:

- The spacing of the observation points covering an area, for example, a point every 500m by 500m
- The resolution of the output grid size or visibility surface. It must be equal to or larger than the resolution of the DEM.

The following section describes how the requirements of the project are reflected in the specification of parameters given above.

### 3.3 Deriving the potential for additional visual impact of individual zone development

**Objective:** for each zone determine the spatial extent of "extra-over" visual influence related to the development of a zone when compared to the current situation and assess the potential for each zone to cause additional visual impact to sensitive receptors: AONB, National Park, Settlement, Major Roads and National Trails.

Each Zone was covered in a blanked grid of points that represent hypothetical wind turbines. These points were generated by overlaying the area with 500m grid squares. Each grid square was then converted to a central point - (the *centroid*) – which forms the observation point of that particular cell. A *visibility score* for each zone was then calculated individually using the following parameters:

- Subject Height: 125m to blade tip
- Viewing Height: 1.72m
- Radius: ZTV (20km)
- Azimuth: 360°
- Output Grid Size: 250m

In addition, a *visibility score* of the existing and approved windfarms, termed the "existing" situation, was also calculated. Each individual turbine location, for existing windfarms and for those with planning permission (using site plans) has been converted into an observation point (**Appendix A Main Report**).

Cumulative visibility is then calculated for the whole of the study area, limited to the outer radius limit of the ZTV at 20km. To allow comparison between the two visibility studies the output resolution is also set at 250m. The visibility surface represents the relative visibility of the current situation for individual turbines within 40km of the centre of SSA (see Appendix A – Main report for further details). The higher the score the more turbines in the current situation the 250m grid square can 'see'. A high score therefore represents a greater cumulative impact or inter-visibility between windfarms.

The method used to establish the number and spatial extent of **additional** 250m by 250m grid squares that would be affected visually by hypothetical wind turbines within each Zone but which are not already affected by the visibility for existing/agreed wind turbines is provided in steps 1 to 3 outlined in **Table 2**.

**Table 2.** Method: Additional effects over existing situation using Zone 1 in Area E as an example

	Method	No of 250m Grid Squares
<b>Step 1</b>	Establishing the maximum extent of cumulative visibility for existing/agreed wind turbines	15266
<b>Step 2</b>	Establishing the maximum extent of visibility for a hypothetically fully developed Zone 1	7111
<b>Step 3</b>	Within the maximum extent of visibility for Zone 1 establish the number and spatial extent of 250m by 250m grid squares that would be affected visually by hypothetical wind turbines within Zone 1 but which are <b>not</b> already affected by the cumulative visibility for existing/agreed wind turbines.	3541

For each zone it was then possible to derive how many of these additional grid cells were spatially consistent with (overlain by) the following receptors.

1. National Parks
2. Areas of Outstanding Natural Beauty
3. Settlement (OS Address Point)
4. Major Roads (OS Strategi, Motorways, A roads and B roads)
5. National Trails

In order to differentiate how many of these cells lie close too (greater visual impact) or far away from the Zone (diminishing visual impact) buffers of distance intervals were associated with each receptor ranging from 10km to 20km. The number of additional cells that lies within a set distance for each receptor were established (**Figure 2**). The results are presented in **Table 3**.

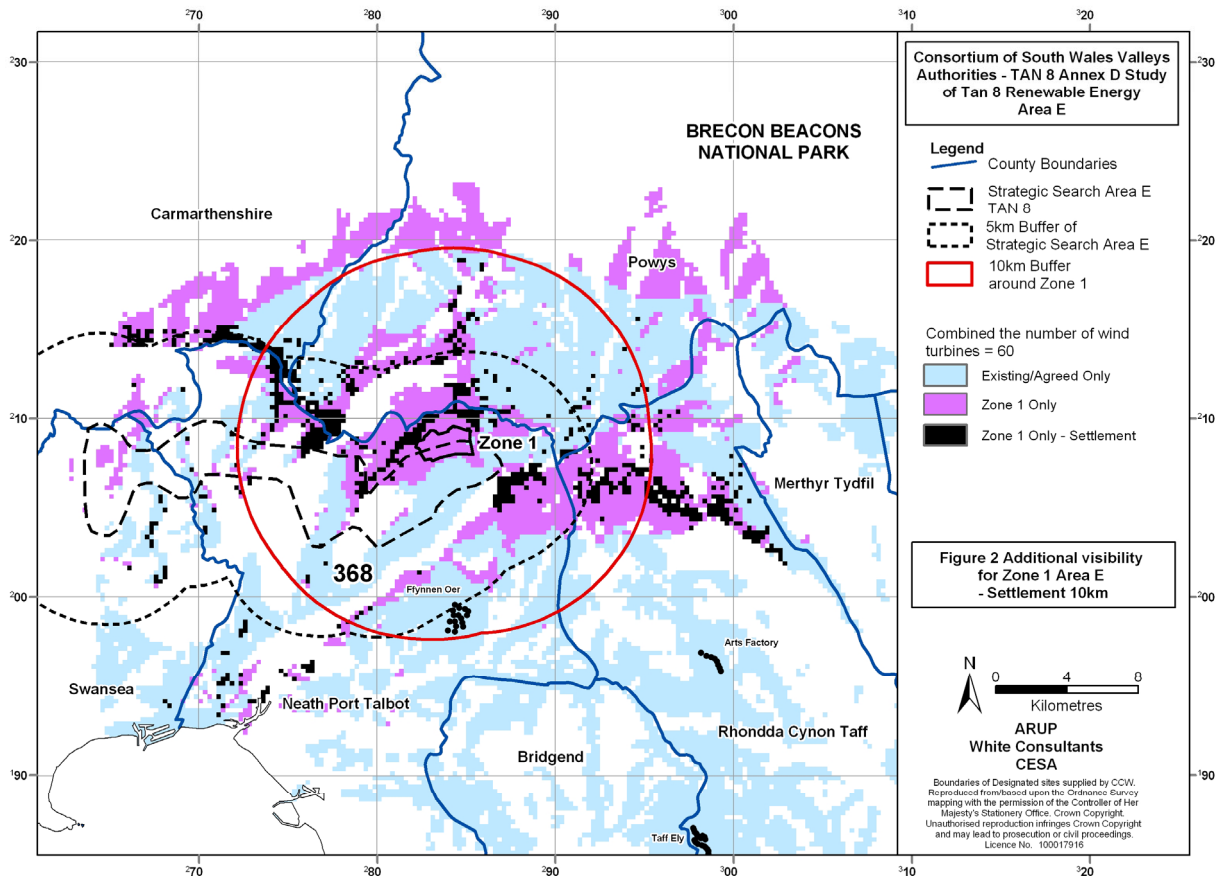
**Table 3.** Additional effects over existing situation

Strategic Search Area Zones	No. of Turbines in each zone	Additional Number of 250m grid cells that cannot already see existing/agreed Windfarms	Sensitive receptors				
			National Park 20km	AONB 15km	Settlement 10km	Roads 10km	National Trails 20km
<b>AREA E</b>							
Zone 1	16	3541	1660	N/A	368	223	N/A
Zone 2	22	4580	1862	N/A	522	362	N/A
Zone 3	18	3852	1494	N/A	516	334	N/A
Zone 4	8	3901	1553	N/A	426	236	N/A
Zone 5	29	5072	1237	N/A	875	475	N/A
Zone 6	5	4085	1005	N/A	638	343	N/A
Zone 7	4	2701	668	N/A	425	238	N/A
Zone 8	5	5034	518	N/A	1008	508	N/A
Zone 9	14	5395	592	N/A	1060	552	N/A
Zone 10	11	4439	967	N/A	550	201	N/A
Zone 11	18	5276	1041	N/A	645	250	N/A
Zone 12	20	8085	946	N/A	1108	362	N/A
Zone 13	24	8270	921	N/A	1314	501	N/A

Zone 14	28	7618	831	N/A	1275	524	N/A
Zone 15	6	2742	1330	N/A	254	154	N/A
Zone 16	18	3324	1510	N/A	375	290	N/A
<b>AREA F</b>							
Zone 1	15	2344	0	N/A	541	251	N/A
Zone 2	24	3114	0	N/A	629	313	N/A
Zone 3	23	2580	0	N/A	482	264	N/A
Zone 4	4	2407	0	N/A	409	207	N/A
Zone 5	17	1681	0	N/A	251	145	N/A
Zone 6	6	1007	0	N/A	150	93	N/A
Zone 7	13	1612	64	N/A	193	155	N/A
Zone 8	19	1600	389	N/A	126	106	N/A
Zone 9	22	2878	1413	N/A	299	201	N/A
Zone 10	9	3630	1752	N/A	374	276	N/A
Zone 11	31	2657	1338	N/A	249	182	N/A
Zone 12	19	2491	1359	N/A	207	159	N/A
Zone 13	10	1031	46	N/A	134	91	N/A
Zone 14	6	467	98	N/A	44	28	N/A
Zone 15	9	580	41	N/A	47	27	N/A
Zone 16	13	927	451	N/A	0	70	N/A
Zone 17	13	2222	1211	N/A	279	226	N/A
Zone 18	14	4031	106	N/A	657	384	N/A
Zone 19	12	1968	0	N/A	564	277	N/A
Zone 20	24	1741	28	N/A	299	185	N/A
Zone 21	7	1290	0	N/A	270	160	N/A
Zone 22	4	1625	59	N/A	150	128	N/A
Zone 23	12	1912	30	N/A	298	182	N/A
Zone 24	4	168	28	N/A	17	3	N/A
Zone 25	18	2801	1381	N/A	272	184	N/A
Zone 26	26	3473	1492	N/A	474	268	N/A
Zone 27	12	3262	1528	N/A	429	251	N/A
Zone 28	6	1685	733	N/A	167	99	N/A
Zone 29	28	3966	671	N/A	803	453	N/A
Zone 30	13	2768	148	N/A	572	342	N/A
Zone 31	4	1677	73	N/A	209	153	N/A
Zone 32	7	2013	60	N/A	267	193	N/A
Zone 33	6	1438	13	N/A	199	129	N/A
Zone 34	4	1128	0	N/A	169	96	N/A
Zone 35	6	1425	0	N/A	251	158	N/A
Zone 36	12	1289	0	N/A	184	108	N/A
Zone 37	7	1552	0	N/A	318	148	N/A
Zone 38	8	1281	0	N/A	198	84	N/A
Zone 39	6	2244	0	N/A	524	248	N/A
Zone 40	10	1922	606	N/A	213	140	N/A
Zone 41	6	4015	1363	N/A	698	387	N/A
Zone 42	11	5626	1455	N/A	964	568	N/A
Zone 43	12	2137	0	N/A	375	183	N/A
Zone 44	1	930	0	N/A	155	89	N/A
Zone 45	12	1064	190	N/A	89	63	N/A
Zone 46	11	2203	968	N/A	308	176	N/A



**Figure 2.** Figure 2 Additional visibility for Zone 1 Area E - Settlement 10km



The total number of additional grid squares identified for each zone allows comparison of the potential visual impact of each zone to be made. Thus it is possible to *rank* each zone, the higher the number of grid cells classed as additional the greater the visual impact of zone development if you assume that the visual impact of seeing 1 new turbine or 50 new turbines is comparable. Please see main report for how this data was used.

### 3.4 Deriving the visual impact of zone development on settlement

**Objective:** to establish the visual impact of zone development on settlement – deriving the number of addresses that can ‘see’ hypothetical turbines within 2km for each zone.

For each zone the extent of its visibility ( with turbines ) has been generated (see section 3.3), termed its **absolute** visibility (please note that the affects of existing and approved wind farms are not taken into account in calculating the visual impact on settlement). The spatial extent of zone visibility is then used to establish how many settlements within 2km of the zone can potentially ‘see’ a hypothetical turbine within each zone. OS Address Point data was used to establish how many address points lay within a 250m by 250m grid cell that could ‘see’ a hypothetical turbine within 2km of a zone. The results are presented in **Table 4**.

**Table 4.** The visual impact within 2km of a zone upon settlement

Strategic Search Area Zones	No. of Turbines in each zone	Settlement 2km Number of Grid Cells	Settlement 2km Number of OS Address Points (250m Grid)
<b>AREA E</b>			
Zone 1	16	73	1456
Zone 2	22	74	2133
Zone 3	18	85	1932
Zone 4	8	75	1753
Zone 5	29	157	3681

Zone 6	5	70	1109
Zone 7	4	45	410
Zone 8	5	216	10375
Zone 9	14	234	10190
Zone 10	11	56	504
Zone 11	18	146	2393
Zone 12	20	172	3323
Zone 13	24	50	69
Zone 14	28	78	366
Zone 15	6	75	1557
Zone 16	18	100	2820
<b>AREA F</b>			
Zone 1	15	66	388
Zone 2	24	60	1870
Zone 3	23	91	3718
Zone 4	4	67	3986
Zone 5	17	85	3850
Zone 6	6	52	2581
Zone 7	13	43	2196
Zone 8	19	33	1271
Zone 9	22	12	509
Zone 10	9	13	257
Zone 11	31	33	976
Zone 12	19	6	100
Zone 13	10	31	416
Zone 14	6	15	666
Zone 15	9	5	4
Zone 16	13	7	60
Zone 17	13	68	1837
Zone 18	14	203	13251
Zone 19	12	104	1624
Zone 20	24	117	6848
Zone 21	7	75	3647
Zone 22	4	23	1570
Zone 23	12	92	4891
Zone 24	4	12	467
Zone 25	18	20	1138
Zone 26	26	43	3078
Zone 27	12	36	929
Zone 28	6	23	1791
Zone 29	28	192	11558
Zone 30	13	181	10415
Zone 31	4	43	3600
Zone 32	7	33	2240
Zone 33	6	26	2465
Zone 34	4	30	1714
Zone 35	6	152	10640
Zone 36	12	63	1971
Zone 37	7	102	795
Zone 38	8	104	3688
Zone 39	6	49	1051
Zone 40	10	159	13556
Zone 41	6	114	3803
Zone 42	11	164	8966
Zone 43	12	125	4525
Zone 44	1	42	4157
Zone 45	12	15	214

Zone 46	11	55	3816
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### 3.5 Points to consider

- Any visibility analysis based on terrain models tends to ignore the screening effects of buildings / vegetation.
- Blade tip height used in this study will always give a worst-case scenario, as there is no differentiation to show whether you could see all of the rotating blade or only the very tip. Again, this would be an issue for a more focused study to factor in at the EIA stage.
- The resolution of the output visibility surface is 250m. However, grid cell resolution could be as high as 10m - equivalent to the resolution of the input DEM. The choice of grid resolution however is a trade-off between computing power/time and the usefulness of undertaking the exercise at a much more defined scale.
- Please note that as the number of observation points (hypothetical turbines) differs for each zone (dependent on area) this will weight larger zones higher than smaller zones; however zones are broadly comparable in size to minimise this effect.

## Appendix: Constraints - METADATA

### Technical and Environmental Constraints:

#### Technical: **Windspeed <=6.9ms-1 at 45m Above Ground Level**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1km square resolution
Source	ETSU NOABL data ( <a href="http://www.bwea.com/noabl/download.htm">http://www.bwea.com/noabl/download.htm</a> )
Description	Secondary Data: File contains data with windspeed greater than 6m/s only <i>Primary Data: converted from ASCII format (downloaded – see above) into a 1km polygon grid for the whole of Wales.</i>
Notes	The Department of Trade and Industry wind speed database (ETSU NOABL) contains estimates of the annual mean wind speed throughout the UK. The data is the result of an air flow model that estimates the effect of topography on wind speed. There is no allowance for the effect of local thermally driven winds such as sea breezes or mountain/valley breezes. The model was applied with 1km square resolution and makes no allowance for topography on a small scale or local surface roughness (such as tall crops, stone walls, or trees), both of which may have a considerable effect on the wind speed. The data can only be used as a guide and should be followed by on-site measurements for a proper assessment. Each value is the estimated average for a 1km square at 45m above ground level (agl).
Constraint Type	Footprint
Copyright	ETSU for the DTI 1999

#### Technical: **Settlement**

File Type	ESRI Shapefile - Polygon
Nominal Scale	Coordinates of addresses accurate to within 0.1m
Supplied by	OTCO
Description	Secondary Data: buffer generated with a 500m radius <i>Primary Data: OS Address Point – original format: point.</i>
Notes	Ordnance Survey Address point Data updated and maintained by Ordnance Survey. For more information on the accuracy of this dataset visit the following web address. <a href="http://www.ordnancesurvey.co.uk/oswebsite/products/addresspoint/techinfo.html">http://www.ordnancesurvey.co.uk/oswebsite/products/addresspoint/techinfo.html</a>
Constraint Type	Buffer – 500m Radius
Copyright	Reproduced from/based upon the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationery Office. Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence No. 100017916

#### Technical: **Steep slopes greater than 15°**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:10,000
Source	CESA
Description	Secondary Data - Derivation of slope from a DEM <i>Primary Data: generated from OS Survey Profile DEM</i> <i>(<a href="http://www.ordnancesurvey.co.uk/oswebsite/products/landformprofile">http://www.ordnancesurvey.co.uk/oswebsite/products/landformprofile</a>)</i>
Notes	Calculated using a 10m DEM (For more information on Ordnance Survey Profile dataset visit the following web address <a href="http://www.ordnancesurvey.co.uk/oswebsite/products/landformprofile/">http://www.ordnancesurvey.co.uk/oswebsite/products/landformprofile/</a> ) Raster data at 10 by 10 m resolution of all grid cells greater than 15 degrees was converted into a vector/polygon shapefile.
Constraint Type	Footprint
Copyright	N/A
Constraint Type	Footprint
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply. See legal maps for definitive boundaries.

Environmental/Planning with National/International Status: **National Parks**

File Type	ESRI Shapefile - Polygon
Nominal Scale	Unknown
Source	Countryside Council for Wales (CCW)
Description	Primary Data
Notes	None Available
Constraint Type	Footprint
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply. See legal maps for definitive boundaries.

Environmental/Planning with National/International Status: **Areas of Outstanding Natural Beauty (AONB)**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:50,000
Supplied by	Countryside Council for Wales (CCW)
Description	Primary Data
Notes	AONB are established under the same legislation as National Parks, but the key difference between the two is that creating opportunities for recreation is not a specific purpose of AONB. However, recreation within AONB is acceptable if it is consistent with the conservation of natural beauty and the needs of agriculture, forestry and other uses. AONB are designated by CCW and the proposals are confirmed by the First Minister for the National Assembly for Wales. Each AONB is managed by a Joint Advisory Committee which represents local authorities, land owning and community interests. Last updated: 13/08/00, Digitised from O.S. 1:50,000 raster
Constraint Type	Footprint
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply. See legal maps for definitive boundaries.

Environmental/Planning with National/International Status: Natura 2000 Habitat Directive site – **SPAs**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:10,000
Supplied by	Countryside Council for Wales (CCW)
Description	Primary Data
Notes	The EC Birds Directive of 1979 requires member states to establish Special Protection Areas to conserve the habitats of two categories of birds:- i) Species which are rare or vulnerable, of which there are forty-eight in the UK. ii) Some migratory species which visit our shores regularly. SPAs in Wales are identified by CCW, in conjunction with the UK Joint Nature Conservation Committee, and designated by the First Minister for the National Assembly for Wales. They are also protected through being SSSI. The 1994 Conservation Regulations also provide a means of protecting such areas at sea. SPA together with SAC will contribute to a European Union network of protected sites to be known as 'Natura 2000'. Last updated: 29/05/2001, Digitised from O.S. 1:10,000 raster
Constraint Type	Footprint
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply. See legal maps for definitive boundaries.

Environmental/Planning with National/International Status: Natura 2000 Habitat Directive site – **RAMSAR**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:10,000
Supplied by	Countryside Council for Wales (CCW)
Description	Primary Data

Notes	Wetlands of International Importance (Ramsar Sites) In ratifying the Convention in 1976, the UK government accepted a commitment to promote the conservation of internationally important wetland sites within its territories. Wetlands are vital for many types of birds particularly waterfowl and Wales have some prime sites that are essential to the survival of many wetland plants and animals. Wetland sites can be areas of marsh, fen, peatland or open water; natural or artificial; permanent or temporary; with water that is fresh, brackish or salty. They can also include shallow areas of sea. All Ramsar sites are also SSSI. Wetlands of International Importance are identified by CCW, in collaboration with the UK Joint Nature Conservation Committee, and designated by the First Minister for the National Assembly for Wales. Last updated: 01/06/01, Digitised from O.S. 1:10,000 raster
Constraint Type	Footprint
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply. See legal maps for definitive boundaries.

Environmental/Planning with National/International Status: Natura 2000 Habitat Directive site – **pSAC**

File Type	ESRI Shapefile - Polygon
Nominal Scale	Unknown
Source	Countryside Council for Wales (CCW)
Description	Primary Data
Notes	None Available
Constraint Type	Footprint
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply. See legal maps for definitive boundaries.

Environmental/Planning with National/International Status: Natura 2000 Habitat Directive site – **SAC**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:1,250 or 1:2,500 or 1:10,000
Supplied by	Countryside Council for Wales (CCW)
Description	Primary Data
Notes	Special Areas of Conservation: The EC Habitats and Species Directive came into effect in 1992 and its aim is to maintain a rich variety of wildlife by protecting vulnerable habitats, and the plants and animals they support. The Habitat Directive together with the 1979 Birds Directive will lead to the establishment of a series of sites throughout Europe that will be known as 'Natura 2000'. This represents the cream of European sites and will ensure their survival for future generations. The sites listed here are all Candidate status, that means, they have been to public consultation and the UK government are currently presenting them to the EC for recommendation. Last updated: 18/09/2001 Digitised from a combination of O.S. Landline and O.S Raster products
Constraint Type	Footprint
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply. See legal maps for definitive boundaries.

Environmental/Planning with National/International Status: Natura 2000 Habitat Directive site – **Natural Nature Reserves (NNR)**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:2,500 or 1:10,000
Supplied by	Countryside Council for Wales (CCW)
Description	Primary Data

Notes	National Nature Reserves represent the very best examples of our wildlife habitats and geological features and can range in size between five hectares to well over 2,000. NNR are declared by CCW under the National Parks and Access to the Countryside Act of 1949, or under the Wildlife and Countryside Act of 1981. They are owned or leased by CCW, or the land is held by an approved body, such as a County Wildlife Trust. Each reserve has a programme of work to manage the site's special features. All of them are also SSSI and may provide places for educational projects, research and management trials. Some reserves require permits to gain access to them. Last updated: 13/06/2001 Digitised from a combination of O.S. Landline and O.S Raster products
Constraint Type	Footprint
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply. See legal maps for definitive boundaries.

#### Environmental/Planning with National/International Status: **Dyfi Valley biosphere site**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:10,000
Supplied by	Countryside Council for Wales (CCW)
Description	Primary Data
Notes	The Biosphere Reserve is an international designation made by UNESCO based on nominations made by more than 110 countries. Each reserve is therefore part of a world-wide chain of permanently protected areas dedicated to the study and understanding of the changes affecting land and water. The biosphere is rapidly changing under the influence of human activity, so understanding it's effect is of paramount importance. Last updated: 23/09/1999 Digitised from O.S 1: 10,00 Raster product.
Constraint Type	Footprint
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply. See legal maps for definitive boundaries.

#### Technical: **Major TV Transmitter Masts**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:50,000
Source	<a href="http://www.bbc.co.uk/reception/tv_transmitters/region_wales.shtml">http://www.bbc.co.uk/reception/tv_transmitters/region_wales.shtml</a> / CESA Website provided the point source location as a grid reference (accurate to 100m).
Description	Secondary Data: buffer generated with a 10km radius <i>Primary Data: point location of major TV Transmitter Masts radar digitised using OS Raster 1:50,000 using grid references supplied by the website given above.</i>
Notes	N/A
Constraint Type	Buffer at 10km
Copyright	N/A

#### Environmental – some existing planning status: **Scheduled Ancient Monuments**

File Type	ESRI Shapefile - Polygon
Nominal Scale	Unknown
Source	CADW: Welsh Historic Monuments
Description	Secondary Data: buffer generated with a 300m radius <i>Primary Data: Scheduled Ancient Monuments supplied by CADW – original format: point</i>
Notes	Please note that the radius has been applied to aid in differentiation of features at the scale of presentation
Constraint Type	Buffer at 300m
Copyright	"This report is based on Scheduled Ancient Monument Data. © Crown copyright. CADW: Welsh Historic Monuments".

#### Environmental – some existing planning status: Natura 2000 Habitat Directive site – **SSSI**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:1,250 or 1:2,500 or 1:10,000
Source	Countryside Council for Wales (CCW)
Description	Primary Data
Notes	SSSI cover a wide range of habitats from small fens, bogs and riverside meadows to sand dunes, woodlands and vast tracks of uplands. Most are in private ownership, although some are owned and managed by local wildlife trusts, or other voluntary conservation bodies. Notification of an SSSI under the Wildlife and Countryside Act 1981 has since been amended by the Countryside and Rights of Way Act 2001, which brought about numerous changes in the way SSSI are notified managed and protected. In order to ensure consistent, favourable long-term management of these sites, CCW is working with landowners to prepare management plans for all SSSI sites in Wales. Local planning authorities are required to consult CCW before allowing any development to proceed that may affect an SSSI. Water, gas and electricity companies must also do the same. Last updated: 12/08/02, Digitised from O.S. Landline and O.S. 1:10,000 raster
Constraint Type	Footprint
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply. See legal maps for definitive boundaries.

### Variable Technical and Environmental Constraints:

#### Technical: **Ministry of Defence (MOD) Low Flying Area 7T**

File Type	ESRI Shapefile - Polygon
Nominal Scale	Unknown
Supplied by	CartoGraphics: The National Assembly for Wales
Description	Primary Data
Notes	Summary of CartoGraphic Release of digital data - METADATA Description:- 18 co-ordinates used to plot low fly area, Owner of Data:- MOD HQ STC Ops Support, Original Source:- Ministry of Defence, Date Capture:- September 2003, Completeness:- 100%, Data Release: ISG. Steel & Energy. Simon Dupree/Rosemary Iles Comments: Data received 4/09/2003. SAC S T Rutherford. HQ Ops Support. Military Airspace Co-ord. LATCC MIL. Porters Way. West Drayton UB7 9AU. Tel: 01895 423937 Data captured by Philippa White, E/GIS/_DD/Topic Data/Transport/ Airfields.
Constraint Type	Footprint
Copyright	MoD

#### Technical: **Safeguarded civil aerodrome – Cardiff**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:10,000
Source	<a href="http://www.homepages.mcb.net/bones/06airfields/UK/uk.htm">http://www.homepages.mcb.net/bones/06airfields/UK/uk.htm</a> / CESA Website provided the point source location as a grid reference (accurate to 100m).
Description	Visibility Analysis – Line of Sight
Notes	Calculated using a 10m DEM (Ordnance Survey Profile <a href="http://www.ordnancesurvey.co.uk/oswebsite/products/landformprofile/">http://www.ordnancesurvey.co.uk/oswebsite/products/landformprofile/</a> ) Observer Offset = 26.82m (height of radar) Target Offset = 110m (wind turbine) Calculation radius = 30km For methodology see page #
Constraint Type	Line of Sight 30km radius
Copyright	N/A



Environmental – some existing planning status: Natura 2000 Habitat Directive site – **Local Nature Reserves (LNRs)**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:2,500 or 1:10,000
Source	Countryside Council for Wales (CCW)
Description	Primary Data
Notes	Local Nature Reserves are established and managed by local authorities, following consultation with CCW under the National Parks and Access to the Countryside Act 1949. For a site to become an LNR it must have natural features of special interest to the local area, and the authority must either have a legal interest in the land or have an agreement with the owner to manage the land as a reserve. LNR prove to be useful not only to protect habitats and wildlife but increase people's awareness of their environment. They are places where children can learn about nature, and they are often situated in or near urban areas. Last updated: 09/06/2002 Digitised from O.S. 1:10,000 raster
Constraint Type	Footprint
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply. See legal maps for definitive boundaries.

Environmental – some existing planning status: **RSPB reserves**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:10,000 or 1:50,000
Source	Data downloaded from the following website: <a href="http://www.rspb.org.uk/reserves/">http://www.rspb.org.uk/reserves/</a>
Description	Primary Data
Notes	The RSPB endeavours to maintain accurate information. However, the RSPB can accept no responsibility for the consequences of errors or omissions in the data. For further information, please contact the Conservation Data Management Unit (01767 680551).
Constraint Type	Footprint
Copyright	The RSPB reserve the right to comment on the accuracy of representation of the data in material produced by the recipient.

Environmental – some existing planning status: **RSPB Bird Data**

File Type	ESRI Shapefile - Polygon
Nominal Scale	Not Known
Source	Mike Webb (mike.webb@rspb.org.uk)
Description	Primary Data
Notes	"This 1km square contains, (or is an integral part of) a nationally important population of a bird species of acknowledged conservation importance (Annex 1 of the EU Birds Directive, Section 74 of the Countryside and Rights of Way Act 2000, or red-listed in Wales, in "The Population Status of Birds in Wales : An analysis of Conservation Concern, 2002 - 2007" Thorpe, R and Young, A. 2002,). If, within this 1km square, a development is proposed which is located within the relevant disturbance radius for the species, the developer will need to modify the design of the proposed development, after discussions with the RSPB. If no acceptable design modification takes place, or can take place, the RSPB will lodge and maintain a formal objection"
Constraint Type	Footprint
Copyright	The RSPB reserve the right to comment on the accuracy of representation of the data in material produced by the recipient.

Environmental – some existing planning status: **National Trails**

File Type	ESRI Shapefile - Polygon
Nominal Scale	Not Known
Source	Countryside Council for Wales (CCW)
	Secondary Data: buffer generated with a 250m radius <i>Primary Data: original format: line</i>
Notes	Source Not Known
Constraint Type	Buffer at 250m
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply.

Environmental – some existing planning status: **Country Parks (Historic Parks and Gardens)**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:25,000
Source	Countryside Council for Wales (CCW)
	Secondary Data: buffer generated with a 300m radius <i>Primary Data: Country Parks supplied by CCW – original format: point</i>
Notes	Please note that the radius has been applied to aid in differentiation of features at the scale of presentation Point data only Last updated: 23/08/1999
Constraint Type	Buffer at 2km
Copyright	Copyright is held by the Countryside Council for Wales. Normal restrictions apply.

Environmental – some existing planning status: **Historic Landscape**

File Type	ESRI Shapefile - Polygon
Nominal Scale	1:50,000
Source	Cadw, 2001, Register of Landscapes of Special Historic Interest in Wales Cadw, 2001, Register of Landscapes of Outstanding Historic Interest in Wales
	Primary Data
Notes	Digitised using Ordnance Survey 1:50,000 OS raster as a backdrop.
Constraint Type	Footprint
Copyright	Copyright is held by the CADW. Normal restrictions apply.

## SSA E: Landscape sensitivity worksheet

ZONE: E1 Seven Sisters (East )

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	Plateau [in LANDMAP but consists of slopes of ridge]	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
	Diversity	uniform	simple	diverse	complex	
PERCEPTUAL	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Relatively open slopes of Hirfynydd ridge [part of dissected Coalfield plateau], steep close to the top which lies 250-300m above valley floor, running down to Seven Sisters at around 200mAOD. Coniferous plantation lies over part of area but much is cleared leading to open rough grassland and clear views up to simple ridge line from valley floor. Open cast mining cuts into slopes and is also highly visible.

### Historic Landscape

Criteria				
Survival of historic patterns of	Not evident		Moderately evident	Highly evident

<b>landscape</b>					
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Part of wider Historic aspect area. Hirfynydd Ridge once tribal frontier and Roman border. Many cairns on overall ridge from Bronze Age. Sarn Helen Roman Road is an important feature.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Part of wider landscape habitats aspect area. In forest adjacent- crossbill and red squirrel.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other</b>	None known		Moderately		Highly sensitive

<b>geological features</b>					sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Open cast mining exposes rock face.					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments  The zone has sensitivity above because it consists of the exposed slopes of a ridge 250-300m above valley floor [part of dissected Coalfield plateau], steep close to the top, running down to Seven Sisters and the Dulais valley and to the north east. There is little depth of ridge top to obscure turbines. There is coniferous plantation over part of the area but much has been cleared leading to open rough grassland and clear views up to simple ridgeline from valley floor. Open cast mining cuts into slopes and is also highly visible. Hirfynydd Ridge was once a tribal frontier and Roman border and has historic interest. Many cairns are located on the overall ridge from the Bronze Age. Sarn Helen Roman Road is an important feature.					

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/a
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

**SSA E: Landscape sensitivity worksheet**  
**ZONE: E2 Hirfynydd (Sarn Helen)**

Generally criteria from better to worse for large scale windfarms, left to right.

**Visual and Sensory**

<b>Criteria from LANDMAP assessment</b>						
<b>PHYSICAL</b>	<b>Topographic form</b>	Plateau [ <i>in LANDMAP but consists of ridge and slopes</i> ]	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention		Forest		Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features	[rock outcrops]	features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High
<p>Comments</p> <p>Ridge and slopes [part of dissected Coalfield plateau], 150-400m above the Neath Valley bottom and 150-250m above Seven Sisters, with dramatic rock outcrops on Neath Valley side which are sensitive features. There is one small area of relatively flat remnant plateau top at around 450mAOD. Coniferous plantation clothes much of the area. Open cast workings lie to the north east.</p>						

**Historic Landscape**

<b>Criteria</b>			
<b>Survival of historic patterns of</b>	Not evident		Moderately evident
			Highly evident

<b>landscape</b>					
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Part of wider Historic aspect area. Hirfynydd Ridge once tribal frontier and Roman border. Many cairns on overall ridge from Bronze Age. Sarn Helen Roman Road is an important feature.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Part of wider landscape habitats aspect area. Potential for crossbill and red squirrel.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other</b>	None known		Moderately		Highly sensitive

<b>geological features</b>				sensitive	
<b>Overall sensitivity</b>	Low	Medium-low <i>[generally]</i>	Medium	Medium-high <i>[by rock outcrop]</i>	High
Comments Rock outcrops are key features.					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments The zone has sensitivity above because it is a ridge and slopes [part of dissected Coalfield plateau] with dramatic rock outcrops on the Neath Valley side. There is only one small area of relatively flat remnant plateau top at around 450mAOD. Though the scale of the ridge is quite large to the east, 150-400m above the Neath Valley bottom [150-250m above Seven Sisters], there are only limited opportunities to place turbines to minimise effects because of its single ridge character and outcrops. Coniferous plantation clothes much of the area. Open cast workings lie to the north east and possibly offer some opportunities off the top of the ridge. Hirfynydd Ridge was once a tribal frontier and Roman border and has historic interest. Many cairns are located on the overall ridge from the Bronze Age. Sarn Helen Roman Road is an important feature. The forest has potential for ecological species interest which may be disturbed by wind turbine development.					

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/a
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	



**SSA E: Landscape sensitivity worksheet**  
**ZONE: E3 Hirfynydd ( Sarn Helen ) - South West**

Generally criteria from better to worse for large scale windfarms, left to right.

**Visual and Sensory**

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	Plateau [in LANDMAP but consists of ridge]	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention		Forest		Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments  
 South western end of Hirfynydd Ridge and slopes [part of dissected Coalfield plateau], reaching 399mAOD and 150-250m above valley bottom. The ridge has a rounded profile and steep sides with local high points and coniferous plantation clothes much of the area.

**Historic Landscape**

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b> Part of wider Historic aspect area. Hirfynydd Ridge once tribal frontier and Roman border. Many cairns on overall ridge from Bronze Age. Sarn Helen Roman Road is an important feature.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b> Part of wider landscape habitats aspect area. In forest potential for crossbill and red squirrel.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

### Landscape Character Sensitivity Summary

Overall sensitivity	Low	Medium-low	Medium	Medium-high	High
Comments	<p>The zone has sensitivity above because it is the south western extremity of a rounded single ridge and slopes [part of dissected Coalfield plateau]. The height of the ridge reaches 399mAOD, 150-300m above the valley bottom. The ridge has a rounded profile and steep sides with local high points and coniferous plantation clothes much of the area. Hirfynydd Ridge was once a tribal frontier and Roman border and has historic interest. Many cairns are located on the overall ridge from the Bronze Age. Sarn Helen Roman Road is an important feature. The forest has potential for ecological species interest which may be disturbed by wind turbine development.</p>				

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	N/a
Visual and sensory	Low	Moderate	High	Outstanding	
Historic landscape	Low	Moderate	High	Outstanding	N/a
Biodiversity	Low	Moderate	High	Outstanding	
Cultural associations	Low	Moderate	High	Outstanding	
Geology	Low	Moderate	High	Outstanding	

## SSA E: Landscape sensitivity worksheet

### ZONE: E4 Hirfynydd ( Sarn Helen ) - West

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	Plateau [in LANDMAP but consists of slopes of ridge]	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
	Diversity	uniform	simple	diverse	complex	
PERCEPTUAL	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
	<b>Other criteria</b>					
	Skyline	smooth multiple		rounded		complex single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High
<p>Comments</p> <p>Western open slopes and top of Hirfynydd Ridge [part of dissected Coalfield plateau], running down to Dulais valley. The topography runs from around 250-400mAOD and 100m-250m max above valley floor. The ridge sides are steep and the skyline is simple but the top of the ridge is fairly narrow. Open rough grassland is the predominant simple landcover.</p>						

#### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident

<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high High
Comments Part of wider Historic aspect area. Hirfynydd Ridge once tribal frontier and Roman border. Many cairns on overall ridge from Bronze Age. Sarn Helen Roman Road is an important feature adjacent.				

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Part of wider landscape habitats aspect area. In forest adjacent- crossbill and red squirrel.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological</b>	None known		Moderately sensitive		Highly sensitive

<b>features</b>					
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>	Open cast mining exposes rock face.				

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>	<p>The zone has sensitivity above because the ridge sides are steep and though the skyline is simple, the top of the ridge is fairly narrow. There is little depth of ridge top to obscure turbines. The area comprises the western open slopes and top of Hirfynydd Ridge [part of dissected Coalfield plateau], running down to Dulais valley. The topography runs from around 250-400m AOD and 100m-250m max above valley floor. Open rough grassland is the predominant simple landcover. Hirfynydd Ridge was once a tribal frontier and Roman border and has historic interest. Many cairns are located on the overall ridge from the Bronze Age. Sarn Helen Roman Road is an important feature running adjacent.</p>				

### Landscape Value

<b>Aspect</b>	Low	Moderate	High	Outstanding	N/a
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/a
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA E: Landscape sensitivity worksheet

ZONE: E5 Mynydd Marchywel

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	Plateau [in LANDMAP but consists of single ridge]	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	Forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
	Diversity	uniform	simple	diverse	complex	
PERCEPTUAL	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention		forest		Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

Single ridge and slopes [part of dissected Coalfield plateau], reaching over 400m AOD and 100-300m above valley bottom to the east and 200-300m above the valley to west. The ridge has a rounded profile, simple undulating skyline from the high point in the south and steep sides with local high points and coniferous plantation clothes much of the area.

### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident

<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Bronze Age remains on ridge top					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present ?	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No sensitive species known					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High



Comments

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	<b>Medium-high</b>	High
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Comments

The zone has sensitivity above because it is a single narrow ridge with steep slopes [part of dissected Coalfield plateau], reaching over 400mAOD and 100-300m above valley bottom to the east and 200-300m above the valley to west. The ridge has a rounded profile, simple undulating skyline from the high point in the south and steep sides with local high points and coniferous plantation clothes much of the area.

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA E: Landscape sensitivity worksheet

### ZONE: E6 Mynydd Marchywel South West

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	Plateau [in LANDMAP but end of ridge]	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	Simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High
<b>Comments</b> Exposed end of single ridge rising from 200-350mAOD, 150-250m above the valley floor with steep slopes in parts. The ridge has a smooth skyline profile with simple, open moorland cover bordered by coniferous plantation to the north.						

#### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
House platforms and ridge and furrow in evidence in the area.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Upland heath habitats/rough grazing					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

## Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>					
<p>The zone has sensitivity above because it is the exposed end of single ridge rising from 200-350mAOD, 150-250m above the valley floor with steep slopes in parts. There is no depth of ridge to conceal wind turbines. The ridge has a smooth skyline profile with simple, open moorland cover bordered by coniferous plantation to the north. House platforms and ridge and furrow in evidence in the area.</p>					

## Landscape Value

<b>Aspect</b>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA E: Landscape sensitivity worksheet

### ZONE: E7 Mynydd Marchywel South East

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
	<b>Other criteria</b>					
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Part of upper valley sides near the end of the Marchywel ridge, around 100-150m above adjacent Dulais valley floor. Pastoral farming gives way to fridd with medium scale fields, scattered deciduous trees and nearby farmsteads. Backcloth of open ridge behind. The area is part of the continuum of the valley sides.

#### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Area of medieval/post medieval field patterns with associated settlement.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Fridd habitat					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

### Landscape Character Sensitivity Summary

Overall sensitivity	Low	Medium-low	Medium	Medium-high	High
Comments	<p>The zone has sensitivity above because it is part of the pastoral settled landscape of the upper valley sides near the end of the Marchywel ridge, only around 100-150m above adjacent Dulais valley floor. Pastoral farming giving way to fridd with medium scale fields, scattered deciduous trees and nearby farmsteads in the settled valley make the area inappropriate for large scale wind turbine development. The area is part of the continuum of the valley sides.</p>				

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
Visual and sensory	Low	Moderate	High	Outstanding	
Historic landscape	Low	Moderate	High	Outstanding	N/A
Biodiversity	Low	Moderate	High	Outstanding	
Cultural associations	Low	Moderate	High	Outstanding	
Geology	Low	Moderate	High	Outstanding	

## SSA E: Landscape sensitivity worksheet

ZONE: E8 Mynydd Drumau ( east )

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some	Out only	None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth multiple	[trees and rocks]	rounded		complex single
	Sensitive features	no sensitive features		some sensitive features		features on skyline [rock outcrops]
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Prominent, flat, narrow topped hill reaching 272mAOD, 150-200m above valley floor with strong rock outcrop above mixed woodland on eastern side. The landform acts as an outlier for the dissected coalfield plateau above the Neath valley.

### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness of historic patterns of	Not evident	Patches	Cohesive over parts of the area	Highly cohesive



<b>landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Carreg Bica- standing stone, burial cairns and ring cairns.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Upland Heathland					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Carreg Bica- folklore association					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Located on a fault with significant rock outcrops

### Landscape Character Sensitivity Summary

Overall sensitivity	Low	Medium-low	Medium	Medium-high	High
Comments	The zone has sensitivity above because it is a prominent flat, narrow topped hill only reaching 272mAOD, 150-200m above valley floor with strong rock outcrop above mixed woodland on eastern side. The landform acts as an outlier for the dissected coalfield plateau above the Neath valley which gives it further prominence. Carreg Bica, a standing stone has folklore importance adding to the sensitivity of the site. There are also burial cairns and ring cairns.				

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
Visual and sensory	Low	Moderate	High	Outstanding	
Historic landscape	Low	Moderate	High	Outstanding	N/A
Biodiversity	Low	Moderate	High	Outstanding	
Cultural associations	Low	Moderate	High	Outstanding	
Geology	Low	Moderate	High	Outstanding	

## SSA E: Landscape sensitivity worksheet

ZONE: E9 Mynydd Drumau ( west )

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
<b>PERCEPTUAL</b>	<b>Diversity</b>	uniform	simple	diverse	complex	
	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

Flat, narrow topped hill reaching 272mAOD to east sloping down towards Tawe valley bottom, 100-200m above valley floor. The landform acts as an outlier for the dissected coalfield plateau above the Neath valley. The landcover is pastoral with field pattern, woodland and settlement.

### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Improved grassland 50%					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No information					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Pennant sandstone

### Landscape Character Sensitivity Summary

Overall sensitivity	Low	Medium-low	Medium	Medium-high	High
Comments	<p>The zone has sensitivity above because it is a flat but narrow topped hill only reaching 272mAOD to east sloping down towards Tawe valley bottom, 100-200m above valley floor. The landform acts as an outlier for the valleys plateau above the Tawe valley which gives it further prominence. The landcover is pastoral with field pattern, deciduous woodland and settlement making it further unsuitable.</p>				

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
Visual and sensory	Low	Moderate	High	Outstanding	
Historic landscape	Low	Moderate	High	Outstanding	N/A
Biodiversity	Low	Moderate	High	Outstanding	
Cultural associations	Low	Moderate	High	Outstanding	No info
Geology	Low	Moderate	High	Outstanding	

## SSA E: Landscape sensitivity worksheet

ZONE: E10 River Egel Valley

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
	Diversity	uniform	simple	diverse	complex	
PERCEPTUAL	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

#### Comments

Upland valley rising up to 300mAOD, with the valley sides upto 100m high. The landcover is pastoral with small- medium sized fields, scattered farmhouses with a small block of coniferous plantation.

### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness of historic patterns of landscape	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Some standing stones/cairns and drystone walls from mid 18C in area.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Fridd habitat and rhos pastures [dominant] with mire in the valley bottom and ancient woodland.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The zone has sensitivity above because it is an upland valley in relatively fine grain landscape of pastoral land use with small- medium sized fields, scattered farmhouses with a small block of coniferous plantation. The valley sides rise up only upto 100m high up to 300mAOD. Overall these attributes make the area unsuitable for strategic windfarm development.</p>					

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	



## SSA E: Landscape sensitivity worksheet

ZONE: E11 Mynydd Uchaf (AAT site)

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	Plateau [in LANDMAP but a hill]	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements

Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High
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Comments

Upland unenclosed common with simple rounded skyline rising to 357mAOD. The area rises 50-170m above surrounding lower land and encloses the upland valley of the River Egel. The dominant landcover is acid grassland with some heath. The common is accessed by minor road with sparse scattered settlement on its edges.

### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness of historic patterns of	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
One of the 3 most important ritual landscapes from the Bronze Age in Glamorgan displaying cairns etc.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Wet and dry heath					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	<b>Medium-high</b>	High
<p>Comments</p> <p>The zone has sensitivity above because it is upland unenclosed common [upto 357mAOD] with simple rounded skyline which only rises 50-170m above surrounding lower land and encloses the upland valley of the River Egel. The dominant landcover is acid grassland with some heath. The common is accessed by minor road with sparse scattered settlement on its edges. The area is one of the 3 most important ritual landscapes from the Bronze Age in Glamorgan displaying cairns etc.</p>					

### Landscape Value

<b>Aspect</b>	Low	Moderate	High	Outstanding	
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA E: Landscape sensitivity worksheet

ZONE: E12 Mynydd y Bettws

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	plateau	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
PERCEPTUAL	Diversity	uniform	simple	diverse	complex	
	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention				Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features		features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

Upland common with rounded skyline reaching 341mAOD rising around 200-250m above valley to the north. The area is unenclosed and exposed with long views. A minor road passes through it and there is an existing wireless mast and pylons. The zone lies on the edge of a wide valley to the north and east and is on the edge of the coalfield plateau upland.

### Historic Landscape

Criteria				
Survival of historic patterns of landscape	Not evident		Moderately evident	Highly evident
Cohesiveness of historic	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>patterns of landscape</b>					
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments	No information				

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments	No information				

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive	Highly sensitive	
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments	No information				

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive	Highly sensitive	
<b>Other geological features</b>	None known		Moderately sensitive	Highly sensitive	
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

No information

### Landscape Character Sensitivity Summary

Overall sensitivity	Low	Medium-low	Medium	Medium-high	High
Comments	<p>The zone has the sensitivity above because it lies on the edge of a wide valley to the north and east and is on the edge of the coalfield plateau upland. It is an upland common with rounded skyline reaching 341mAOD rising around 200-250m above valley to the north. The area is unenclosed and exposed with long views. The area to the south of the summit which faces away from the valley is slightly less sensitive than the area to the north although the scale of turbines may counteract this. A minor road passes through it and there is an existing wireless mast and pylons.</p>				

### Landscape Value

Aspect	Low	Moderate	High	Outstanding	
Visual and sensory	Low	Moderate	High	Outstanding	
Historic landscape	Low	Moderate	High	Outstanding	N/A
Biodiversity	Low	Moderate	High	Outstanding	No info
Cultural associations	Low	Moderate	High	Outstanding	No info
Geology	Low	Moderate	High	Outstanding	No info

## SSA E: Landscape sensitivity worksheet

ZONE: E13 Mynydd y Gwair

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm <i>[LANDMAP indicates this but not true for this area]</i>	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote [ <i>mentioned in LANDMAP but not remote compared to mid Wales</i> ]				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

Comments

Simple open upland common rising to 374mAOD, 200-300m above valley floor. The zone has a broad undulating ridge top sloping south towards further upland. The area is the furthest west part of the coalfield plateau. The landcover is acid grassland, unenclosed, and is crossed by a minor road.

**Historic Landscape**

<i>Criteria</i>					
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident		Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Penller castle to the north is possibly sensitive.					

**Landscape habitats/Biodiversity**

<i>Criteria</i>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Mainly acid grassland, some marshy grassland with purple moor grass.					

**Cultural landscape/associations**

<i>Criteria</i>				
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive	Highly sensitive
<b>notional associations [eg with famous people,</b>	None known		Moderately sensitive	Highly sensitive



<b>events]</b>					
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Pennant sandstone					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The zone has sensitivity above because it is a simple open upland common rising to 374mAOD, 200-340m above valley floor. The zone has a broad undulating ridge top sloping south towards further upland. The area is the furthest west part of the coalfield plateau. The landcover is acid grassland, unenclosed, and is crossed by a minor road.</p>					

### Landscape Value

<b>Aspect</b>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

**SSA E: Landscape sensitivity worksheet**  
**ZONE: E14 Upper Lliw Reservoir**

Generally criteria from better to worse for large scale windfarms, left to right.

**Visual and Sensory**

<b>Criteria from LANDMAP assessment</b>						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm [in wider LANDMAP area]	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote [mentioned in LANDMAP but not remote compared to mid Wales]				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth multiple		rounded		complex single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
<b>Overall Sensitivity</b>		Low	Moderate/low	Moderate	Fairly High	High

Comments

Southern end of simple open upland common rising to 317mAOD, Upto 200m above minor valley to the east 150m above minor valley to west. The zone has a broad undulating ridge top sloping south and encircling a small reservoir on the River Lliw. The area is the furthest west part of the coalfield plateau. The landcover is unenclosed acid grassland, some enclosed land and a small conifer plantation. It is crossed by a minor road. There are long views to the south.

**Historic Landscape**

<b>Criteria</b>					
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident		Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Not significant constraint except in field systems in centre.

**Landscape habitats/Biodiversity**

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

Mainly acid grassland, some marshy grassland, purple moor grass.

**Cultural landscape/associations**

<b>Criteria</b>				
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive	Highly sensitive
<b>notional associations [eg with famous people,</b>	None known		Moderately sensitive	Highly sensitive

<b>events]</b>					
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
No info.					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Pennant sandstone					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The zone has sensitivity above because it is the southern end of a simple open upland common with long views to the south. The area rises to 317mAOD, upto 200m above minor valley to the east 150m above minor valley to west. The zone has a broad undulating ridge top sloping south and encircling a small reservoir on the River Lliw. The area is the furthest west part of the coalfield plateau. The landcover is unenclosed acid grassland, some enclosed land which is sensitive and a small conifer plantation. The area is crossed by a minor road.</p>					

### Landscape Value

<b>Aspect</b>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	No info
<b>Geology</b>	Low	Moderate	High	Outstanding	

## SSA E: Landscape sensitivity worksheet

ZONE: E15 Onllwyn South

Generally criteria from better to worse for large scale windfarms, left to right.

### Visual and Sensory

Criteria from LANDMAP assessment						
<b>PHYSICAL</b>	<b>Topographic form</b>	plateau	rolling/undulating	hills/valleys	levels	mountains
	<b>Landcover pattern</b>	forestry	open land	field pattern/mosaic	development	
	<b>Settlement pattern</b>	no settlements	scattered/rural/farm	clustered	urban	
<b>AESTHETIC</b>	<b>Scale of landform</b>	vast	large	medium	small	intimate
	<b>Scale of landcover</b>	vast	large	medium	small	intimate
	<b>Sense of enclosure</b>	confined	enclosed	open	exposed	
	<b>Diversity</b>	uniform	simple	diverse	complex	
<b>PERCEPTUAL</b>	<b>Level of human access</b>	rare	occasional	infrequent	frequent	constant
	<b>Presence of attractive views</b>	None		Some		Many
	<b>Presence of detractive views</b>	Many		Some		None
	<b>Tranquillity</b>	Noisy				Tranquil
	<b>Remoteness</b>	Remote				Settled
	<b>Wildness</b>	Human intervention				Wild
<b>Other criteria</b>						
	<b>Skyline</b>	smooth		rounded		complex
		multiple				single
	<b>Sensitive features</b>	no sensitive features		some sensitive features		features on skyline
	<b>Vertical elements</b>	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High

Comments

The area is undulating lower hillside which is reclaimed land between 250-300mAOD and only 50-100m above lower land to north. The area has field enclosures, copses and woodlands and settlement nearby.

### Historic Landscape

Criteria				
<b>Survival of historic patterns of landscape</b>	Not evident		Moderately evident	Highly evident
<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area	Highly cohesive

<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
Reclaimed land					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High

Comments

No info

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
<b>Comments</b>					
<p>The zone has sensitivity above because it is undulating lower hillside which is reclaimed land between 250-300mAOD and only 50-100m above lower land to north. The area has field enclosures, copses and woodlands and settlement nearby. Overall the combination of these attributes mean the area has medium-high sensitivity.</p>					

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/A
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	No info

## SSA E: Landscape sensitivity worksheet

### ZONE: E16 Glyn Neath North

Generally criteria from better to worse for large scale windfarms, left to right.

#### Visual and Sensory

Criteria from LANDMAP assessment						
PHYSICAL	Topographic form	Plateau <i>[in LANDMAP but consists of lower ridge and slopes]</i>	rolling/undulating	hills/valleys	levels	mountains
	Landcover pattern	forestry	open land	field pattern/mosaic	development	
	Settlement pattern	no settlements	scattered/rural/farm	clustered	urban	
AESTHETIC	Scale of landform	vast	large	medium	small	intimate
	Scale of landcover	vast	large	medium	small	intimate
	Sense of enclosure	confined	enclosed	open	exposed	
	Diversity	uniform	simple	diverse	complex	
PERCEPTUAL	Level of human access	rare	occasional	infrequent	frequent	constant
	Presence of attractive views	None		Some		Many
	Presence of detractive views	Many		Some		None
	Tranquillity	Noisy				Tranquil
	Remoteness	Remote				Settled
	Wildness	Human intervention			Forest	Wild
<b>Other criteria</b>						
	Skyline	smooth		rounded		complex
		multiple				single
	Sensitive features	no sensitive features		some sensitive features	<i>[rock outcrops]</i>	features on skyline
	Vertical elements	Many Masts and pylons		Some masts and pylons		No man made vertical elements
Overall Sensitivity		Low	Moderate/low	Moderate	Fairly High	High
<p>Comments</p> <p>Northern end of ridge and slopes [part of dissected Coalfield plateau] reaching 370mAOD, 100-200m above the Neath valley floor to the south and 0-170m above Afon Pyrrdin valley to the north. The area falls from the main Hirfynydd ridge and then rises back up to a series of lower hills around 300mAOD. Coniferous plantation clothes much of the area. Open cast workings lie to the east.</p>						

#### Historic Landscape

Criteria			
Survival of historic patterns of landscape	Not evident		Moderately evident
			Highly evident



<b>Cohesiveness of historic patterns of landscape</b>	Not evident	Patches	Cohesive over parts of the area		Highly cohesive
<b>Presence of designated features eg SAM's, listed buildings etc</b>	None	Low	Medium	Fairly high	High
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Part of wider Historic aspect area. Hirfynydd Ridge once tribal frontier and Roman border. Sarn Helen Roman Road is an important feature.					

### Landscape habitats/Biodiversity

<b>Criteria</b>					
<b>Presence of habitat sensitive to windfarms</b>	No sensitive habitat	Moderately sensitive over some of area	Moderately sensitive over all of area	Highly sensitive over some of area	Highly sensitive over most of area
<b>Presence of species sensitive to windfarms</b>	Not present	Limited presence	Some presence	Moderate-high presence	Significant presence
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments Part of wider landscape habitats aspect area. Potential for crossbill and red squirrel.					

### Cultural landscape/associations

<b>Criteria</b>					
<b>Recorded expressions [eg featured in painting or poem]</b>	None known		Moderately sensitive		Highly sensitive
<b>notional associations [eg with famous people, events]</b>	None known		Moderately sensitive		Highly sensitive
<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					

### Geological landscape/Earth sciences

<b>Criteria</b>					
<b>Exposed rock/ outcrops</b>	None known		Moderately sensitive		Highly sensitive
<b>Other geological features</b>	None known		Moderately sensitive		Highly sensitive

<b>Overall sensitivity</b>	Low	Medium-low <i>[generally]</i>	Medium	Medium-high	High
Comments					

### Landscape Character Sensitivity Summary

<b>Overall sensitivity</b>	Low	Medium-low	Medium	Medium-high	High
Comments					
<p>The zone has sensitivity above because it is the northern end of the Hirfynydd ridge falling from the main ridge to a broad saddle and then rising back up to a series of lower hills around 300mAOD. Though simple in landcover, it is at a lower elevation. It is part of dissected Coalfield plateau at a lower elevation reaching 370mAOD, 100-200m above the Neath valley floor to the south and 0-170m above Afon Pyrrdin valley to the north. Coniferous plantation clothes much of the area. Open cast workings lie to the east.</p>					

### Landscape Value

<i>Aspect</i>					
<b>Visual and sensory</b>	Low	Moderate	High	Outstanding	
<b>Historic landscape</b>	Low	Moderate	High	Outstanding	N/a
<b>Biodiversity</b>	Low	Moderate	High	Outstanding	
<b>Cultural associations</b>	Low	Moderate	High	Outstanding	
<b>Geology</b>	Low	Moderate	High	Outstanding	

## POTENTIAL VISUAL EFFECTS

The tables below discuss the main potential visual effects of turbines located in each zone.

<b>SSA E</b>		
<i>Zone no.</i>	<i>Zone name</i>	<i>Effects</i>
Zone 1	Seven Sisters (East)	The area is contained by the ridge to the south so its effects are reduced overall and are focussed northwards towards the national park. Turbines on the western part of the zone would have a significant effect on Seven Sisters and this area should be avoided. The area would be highly visible to nearby settlement to the north and the upland part of Brecon Beacons.
Zone 2	Hirfynydd (Sarn Helen)	The area lies on the ridgetop and turbines on its edges will affect the Neath valley and Crynant valleys and settlements with turbines potentially prominent/dominant in places. These areas should be avoided. The area is most visible to the Brecon Beacons national park in Area E.
Zone 3	Hirfynydd ( Sarn Helen ) - South West	The area lies on the ridgetop and turbines on its edges will affect the Neath valley and Crynant valleys and settlements with turbines potentially prominent/dominant in places. These areas should be avoided. The area is visible to the Brecon Beacons national park but further than Zone 2.
Zone 4	Hirfynydd ( Sarn Helen ) - West	The area lies on the ridgetop and turbines on its edges will affect the Crynant valleys and settlements with turbines potentially prominent/dominant in places. These areas should be avoided. The area will be visible from the Brecon Beacons national park.
Zone 5	Mynydd Marchywel	As a single ridge wind turbines on its edges will affect the Tawe valley and Crynant valleys and settlements with turbines potentially prominent/dominant in places. These areas should be avoided. The area is visible to the Brecon Beacons national park particularly to the north.
Zone 6	Mynydd Marchywel South West	As the exposed southern end of a single ridge wind turbines will be highly visible from the southern part of the Neath valley adversely affecting its hilly backcloth. The number of turbines could have a disproportionate visual effect. The area can also be seen in profile especially from the west.
Zone 7	Mynydd Marchywel South East	As the south eastern end of a single ridge the area is generally contained to the north and west and also by the Hirfynydd ridge to the east. However, wind turbines will be visible from the southern part of the Neath valley adversely affecting its hilly backcloth. The number of turbines could have a disproportionate visual effect.
Zone 8	Mynydd Drumau (east)	Wind turbines in this area will be highly prominent overlooking the Neath Valley and will have significant adverse effects on Neath and adjacent settlements. Turbines will also be highly visible from the West including settlements in the Tawe valley and from the M4 corridor. The effect on receptors is likely to be so severe that the area is considered unacceptable in terms of windfarm development.
Zone 9	Mynydd Drumau (west)	Wind turbines in this area will be highly prominent overlooking the Tawe Valley and will have significant adverse effects on Clydach, Birchgrove and adjacent settlements. Turbines will also be highly visible from the East including settlements in the Neath valley and the M4 corridor. The effect on receptors is likely to be so severe

		that the area is considered unacceptable in terms of windfarm development.
Zone 10	River Egel Valley	The most significant effects will be limited to scattered rural settlement in the River Egel Valley and surrounding common.
Zone 11	Mynydd Uchaf (AAT site )	The area dominates GCG to the west, Tairgwaith to the north and is visible from linear settlements further north and to the north east. There are potentially significant effects on these settlements depending on the location of wind turbines. Locations back from the edge and further south would affect less people. Turbines on the northern edges of the area would be highly visible from the national park to the north.
Zone 12	Mynydd y Bettws	The area overlooks Ammanford in the valley to the north west, Glanamau to the north and settlements to the north east. Wind turbines on much of the area would have potentially significant adverse effects on Ammanford and closer settlements with a large viewshed to the west. Existing detractors such as a wireless mast and pylons will be relatively small in scale in comparison with strategic wind turbines. Turbines on the northern edges of the area would be highly visible from the national park to the north. Turbines on the limited southern [south facing] part of the area are likely to be less prominent in views from the valley floor.
Zone 13	Mynydd y Gwair	The area has a large view shed to the west and turbines may have some effects on Ammanford and rural settlement in the valleys to the east and west. Turbines on the northern edges of the area would be highly visible from the national park to the north. At a distance, there will also be some effects on the Gower AONB. Turbines located in the core of the area are unlikely to have significant effects on most surrounding settlements.
Zone 14	Upper Lliw Reservoir	Turbines in this area have potential for adverse visual effects on northern outskirts of Swansea eg Llangefylach and, at a distance, on the Gower AONB. Locating turbines in the northern part of the area is likely to have least effects on surrounding settlement.
Zone 15	Onllwyn South	This area performs particularly poorly in relation to effects on settlement within 2km bordering one to the north. Though the area is generally well contained to the south it also has an effect on the national park to the north. The containment of the higher ground also means the area performs well in terms of effects on roads and settlement over a wider area. However, the effect on adjacent receptors is likely to be so severe that the area is considered unacceptable in terms of windfarm development.
Zone 16	Glyn Neath North	The north western part of this area could have significant adverse effects potentially on the nearby settlement of Dyffryn Cellwen. The southern part could have significant adverse effects potentially on Blaengwrach and Glyneath. Though the area is generally well contained to the south west it also has an effect on the national park to the north. The containment of the higher ground also means the area performs well in terms of effects on settlement over a wider area. The nearby main roads will have clear views of turbines particularly on the eastern fringes.

<b>SSA F</b>		
<i>Zone no.</i>	<i>Zone name</i>	<i>Effects</i>
Zone 1	Moel ton-mawr	The ridge separates the Llynfi valley from the coastal lowlands. Turbines would be widely visible from settlements to the south and north with views down the valley and from the M4 being clear. Significant adverse effects would be apparent.
Zone 2	Mynydd Margam	The upland is seen in conjunction with Margam Park and acts as setting on its southern fringes and turbines on the southern edge may have a significant adverse effect on receptors. There are clear views from the south, in particular from the M4 corridor and coastal plain. The eastern fringes will affect the Llynfi valley. Turbines in the core and northern part of the area would be likely to have less effect.
Zone 3	Mynydd Bach	Turbines on the eastern fringes may have a significant effect on Maesteg and other Llynfi valley settlements whilst the north western edge will significantly affect Bryn. The issue of cumulative effects on this settlement will need to be taken into consideration in conjunction with Zone 5. Turbines in the core and west of the area are likely to have least effect.
Zone 4	Ergyd Isaf (Mynydd Margam West)	Turbines on this prominent landform would be highly visible and have a significant adverse effect on the coastal plain settlements, in particular Margam, and on the M4.
Zone 5	Afan Argoed South East	Turbines on the south eastern corner may have a significant adverse effect on Maesteg and Llynfi valley settlements whilst turbines to the south west will have a similar effect on Bryn. The issue of cumulative effects on this settlement will need to be taken into consideration in conjunction with Zone 3. The area forms part of the Afan Forest Park and effects on the Afan valley in conjunction with Zone 13 will need to be considered.
Zone 6	Foel Trawsnant	Turbines on the eastern edge may have a significant adverse effect on Caerau and the upper Llynfi valley settlements. The area borders the Afan valley and cumulative effects in conjunction with Zone 13 will need to be considered.
Zone 7	Mynydd y Gelli	Effects on Abergwynfi/Blaengwnfi could be significantly adverse as the area slopes down towards these settlements. Croeserw to the west may have clear views of turbines on the western edge, which with the visual effects of the existing windfarm at Ffynnon Oer and adjacent zones eg 13, may have significant adverse cumulative effects. The effects of turbines on the southern central edge on the Garw valley could be significant. The A4107 will also have clear views passing through the area.
Zone 8	Mynydd Blaengwynfi	The area is generally set back from settlement although views will be possible from Croeserw. The A4107 will also have clear views.
Zone 9	Mynydd Blaenrhondda ( West )	The area is generally set back from settlement although views glimpses may be possible from Glyncoed. The area will be highly visible from the national park with the northern edge particularly prominent. This northern tip should be avoided.
Zone 10	Mynydd Pen-y-Cae - Llyn Fach	This zone is particularly prominent in views to the north, in particular to the national park and settlements such as Glynneath. Its height in addition to its location on the

		edge of the dissected plateau would make turbines highly prominent and have a significant adverse effect on receptors in the above areas including the A465. It is likely that the effects will be unacceptable.
Zone 11	Glyncorrwg West	The area is generally set back from settlement although views glimpses may be possible from Glyncorrwg. The cumulative effects on this settlement should be avoided when considered in relation to other surrounding zones. The area will be highly visible from the national park with the northern edge particularly prominent.
Zone 12	Coed Morgannwg Way	Turbines in this zone are likely to have effects on receptors in the Neath valley around Glynneath and Resolven, the A465 and in the national park. The significant adverse effects should be avoided by careful siting.
Zone 13	Mynydd Nant-y-bar	Turbines on the south eastern side may have a significant adverse effects on the Afan valley. As part of the Afan Forest Park the issue of cumulative effects on this area will need to be taken into consideration in conjunction with Zones 5 and 6.
Zone 14	Glyncorrwg East	The area is not generally widely visible but the effect of turbines on Glyncorrwg could be dominant and significantly adverse as the zone slopes down to this settlement. These effects should be avoided.
Zone 15	Mynydd Fforch dwm	Turbines on the area would be visible and prominent from Cilfrew on the opposite valley side but there are very few nearby dwellings that may be affected.
Zone 16	Ffynnon Oer (wind farm )	The area includes the Ffynnon Oer windfarm and the greatest effects in the south would be on Cwmer. The extent of the effect if the northern part is developed may include the Neath valley around Resolven.
Zone 17	Mynydd Resolven	This zone including the outlying hill is particularly prominent in views from the north, in particular to the national park and settlements such as Glynneath. It is also highly visible from Resolven and the A465. Its location would make turbines highly prominent and domineant in some places and have a significant adverse effect on receptors in the above areas. It is likely that the effects will be unacceptable in most parts of the area.
Zone 18	Mynydd-y-Gaer and Foel Fynyddau	Turbines on this zone as outlying hills/ridges would be particularly prominent in views from the Neath and the surrounding Neath valley, the M4 and the coastal plain around Port Talbot. Effects are likely to range from dominant to prominent and the location would make turbines have a significant adverse effect on receptors in the above areas. It is likely that the effects will be unacceptable.
Zone 19	Mynydd Baedan	The ridge forms the prominent southern edge of the Llynfi valley with lower land to the south and east. Turbines would be widely visible and prominent when viewed from settlements to the north, east and south eg Cefn Cribwr with views down the valley being clear. Significant adverse effects would be apparent.
Zone 20	Mynydd Caerau	Turbines on the western edge of this zone are likely to dominate the settlement of Caerau and will have significant adverse effects. Turbines to the south may have an adverse effect on Maesteg and its southern outskirts. Turbines on Mynydd Caerau are likely to be prominent when viewed from Croeserw and also possibly

		from the Garw Valley. The area is likely to have a significant cumulative visual effect on settlements of the upper Llynfi valley when considered in conjunction with zones 3, 5 and 6.
Zone 21	Moel Cynhordy	Turbines on this zone are likely to be highly prominent when viewed from the rural part of the Llynfi valley and around Llangynwydd, possibly dominating some properties. The area is likely to have a significant cumulative visual effect on settlements of the Llynfi valley when considered in conjunction with zones 1, 2 3, 5, 6 and 19.
Zone 22	Werfa	Turbines would be likely to be highly prominent/dominant on the settlements of the Garw valley and Ogmere Vale [Blaengarw and Nant-y-moel] if placed on the southern margins. Views from the A4107 would be clear. As a high point, the area is widely visible across the coalfield plateau.
Zone 23	Mynydd Llangeinwyr	This area performs poorly in relation to effects on settlement within 2km to the east and west in Ogmere Vale and the Garw valley respectively. Windfarm development on this narrow ridge is likely to have a dominant effect on settlement in these steep sided valleys and there are few, if any options for strategic scale wind turbines. The effect on nearby receptors is likely to be significantly adverse.
Zone 24	Mynydd Corrwg Fechan	The area is not generally widely visible but the effect of turbines on the southern side and top of the hill on Glyncorwg would be dominant and significantly adverse as the zone abuts this settlement. These effects should be avoided. Development to the north may be acceptable depending on effects.
Zone 25	Mynydd Blaenrhondda	The area is generally set back from settlement although views glimpses may be possible from the upper parts of the Rhondda valley. These eastern edges should be avoided. The area will be highly visible from the national park with the northern edge particularly prominent. This northern tip should also be avoided.
Zone 26	Mynydd Tynewydd	The area is generally set back from settlement although views glimpses may be possible from the upper parts of the Rhondda valley. These western edges should be avoided. The area will be highly visible from the national park and the A465 [albeit at a distance] with the north eastern tip particularly prominent. Turbines on this latter area would also be visible from settlement to the north and should also be avoided.
Zone 27	Mynydd Bwlfa	This zone is prominent in views to the north, in particular to the national park, the A465 and settlements such as Hirwaun, and Aberdare to the east. The scarp edge would make turbines highly prominent and have a significant adverse effect on receptors in the above areas and should be avoided. Turbines on the south western facing slopes may be acceptable.
Zone 28	Cefn y Rhondda (north )	This area is generally well contained with the only potential for views from the upper Rhondda fach where there is no settlement, the A4233 and from the Rhondda to the south west. Turbines should avoid the southern tip of the area to avoid effects on the latter.
Zone 29	St Gwynno Forest	This area has potential for views from the Cynon valley to the east, the Rhondda Fach and Penrhys to the west and Ynysbwl to the south east. Longer views are possible of

		<p>the south from Cilfynydd in the Taff Vale. Turbines should avoid the southern part of the area due to the wider effects to the south east, avoid the northern edges which may affect the Cynon valley and also the western edges which could affect the Rhondda Fach. Penrhys is likely to have views of any development in the area and the cumulative effects of this with Zones 32, 33 and 34 to the south east should be considered. Setting back any turbines from the western edge should reduce the potential for cumulative effects on the Rhondda Fach in association with the Arts Factory windfarm although this is an issue which needs careful consideration.</p>
Zone 30	St Gwynno Forest ( South )	<p>This area performs poorly in relation to effects on settlement within 2km to the south and west in the Rhondda and Rhondda Fach valleys respectively. Windfarm development is likely to have a dominant effect on settlement in these steep sided valleys. Though the area is more contained to the east it will be visible over a longer distance from settlement such as from Cilfynydd. Overall there is no satisfactory location for strategic windfarms. The effect on adjacent receptors is likely to be so severe that the area is considered unacceptable in terms of windfarm development.</p>
Zone 31	Mynydd William Meyrick ( NE)	<p>This area performs poorly in relation to effects on settlement within 2km to the east and particularly to the west in the Rhondda and Ogmore Vale valleys respectively. Windfarm development is likely to have a dominant effect on settlement in these steep sided valleys. Overall there is no satisfactory location for strategic windfarms due to the exposed nature of the zone. The effect on adjacent receptors is likely to be so severe that the area is considered unacceptable in terms of windfarm development.</p>
Zone 32	Mynydd William Meyrick ( SW)	<p>Turbines on the northern and western edges of this zone are likely to have dominating effect on settlements on Ogmore vale. Turbines in the south eastern area are likely to be visible over a wide area to the south and south west but at a distance and also from Penrhys.</p>
Zone 33	Mynydd Maesteg ( North )	<p>Turbines on the eastern edges of this zone are likely to be prominent when viewed from settlement in the upper Ogwr Fach. Turbines in the area is likely to be visible over a wide area to the south and south west but at a distance and also from Penrhys.</p>
Zone 34	Mynydd Maesteg ( South )	<p>Turbines on the eastern edges of this zone are likely to be dominant when viewed from Evanstown and settlement in the upper Ogwr Fach and should be avoided. Turbines in the area is likely to be visible over a wide area to the south and south west but at a distance and also from Penrhys.</p>
Zone 35	Mynydd y Glifach ( Trane )	<p>This area performs poorly in relation to effects on settlement within 2km to the west, south east and possibly north east in the upper Ogwr fach, Ely and Rhondda Fach valleys respectively. Windfarm development is likely to have a dominant effect on settlement at Gilfach Goch and around Tonyrefail. Overall there is no satisfactory location for strategic windfarms. The effect on adjacent receptors is likely to be so severe that the area is considered unacceptable in terms of windfarm development.</p>



Zone 36	Mynydd Maendy Gilfach Goch	Turbines on this exposed south facing slope would be likely to have a dominating effect on the rural settlement of Glynogwr, Gilfach Goch to the south east and the Cwm Ogwr fach valley. Only turbines at the far northern part of this area are likely to have reduced effects and are still likely to be prominent in views from the south.
Zone 37	Mynydd y Gaer	Turbines on this ridge would be likely to have a dominating effect on the rural settlement of Glynogwr and others in the Cwm Ogwr fach to the north and on rural settlement to the south. They would be prominent in views from the south including from the M4. It is likely that the effects would be significantly adverse.
Zone 38	Mynydd Maendy (Taff Ely wind farm)	Turbines on this ridge would be likely to have a dominating effect on the southern edge of Gilfach Goch and settlements to the east which already have views of the Taff Ely windfarm turbines at a lesser scale. They would be prominent in views from the south including from the M4. It is likely that the effects would be significantly adverse.
Zone 39	Mynydd Margam (East)	Turbines on this zone would be prominent from the Llynfi valley as the area lies on the edge of the valley slopes. The old settlement of Llangynwydd would be likely to be significantly adversely affected.
Zone 40	Cefn y Rhondda	This area performs poorly in relation to effects on settlement within 2km to the south west and north east in the Rhondda and Rhondda Fach valleys respectively. Windfarm development on this narrow ridge is likely to have a dominant effect on settlement in these steep sided valleys. Overall there is no satisfactory location for strategic windfarms. The effect on adjacent receptors is likely to be so severe that the area is considered unacceptable in terms of windfarm development.
Zone 41	Mynydd Merthyr North -East )	This area performs poorly in relation to effects on settlement within 2km to the south west and north east in the Cynon and Taff valleys respectively. Windfarm development on this narrow topped ridge is likely to have a dominant effect on settlement such as Heolgerrig, Winchfawr to the north east and be highly prominent when viewed from Aberdare in these wide valleys. Overall there is no satisfactory location for strategic windfarms. The effect on adjacent receptors is likely to be so severe that the area is considered unacceptable in terms of windfarm development.
Zone 42	Mynydd Merthyr	This area performs poorly in relation to effects on settlement within 2km to the south west and north east in the Cynon and Taff valleys respectively. Windfarm development on this narrow topped ridge is likely to have a dominant/high prominent effect on settlement such as Troedyrhiw to the north east and Mountain Ash to the south west in these wide valleys. Overall there is no satisfactory location for strategic windfarms. The effect on adjacent receptors is likely to be so severe that the area is considered unacceptable in terms of windfarm development.
Zone 43	Mynydd Portref (Taff Ely wind farm east )	Turbines on this ridge would be likely to have a dominating effect on the settlements around Tonyrefail to the north and Llanharan to the south. They would be prominent in views from the south including from the M4. It is likely that the effects would be significantly adverse.

Zone 44	Mynydd Pwllyrhebog	This area performs poorly in relation to effects on Gilfach Goch and settlement in the upper Ogwr fach which is within 2km to the south. The effect on adjacent receptors is likely to be so severe that the area is considered unacceptable in terms of windfarm development.
Zone 45	Ffynnon Oer (west )	Turbines on the northern and western edges of this area may affect parts of the Neath valley and the whole area would be prominent from Cilfrew on the opposite valley side. There a few dwellings in close proximity.
Zone 46	Mynydd Bwlfa (south east )	The A4233 passes through the zone and turbines may have a significant adverse and dominating effect on Aberdare to the north east or Cwmaman to the south east. Turbines should avoid these effects and be located further to the west of the area.