

Conwy Local Development Plan 2007 – 2022



SUPPLEMENTARY PLANNING GUIDANCE

LDP11: Landscape Sensitivity and Capacity Assessment for Onshore Wind Turbine Development.

Adopted November 2014

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Statement of Consultation

This Supplementary Planning Guidance document was issued for a period of six weeks public consultation between 7 July 2014 and 15 August 2014

It was adopted by Cabinet on 11 November 2014

Copies of the representations received, together with the Council's response are available to view on-line at <http://conwy.jdi-consult.net/ldp/>

Whilst this study was produced jointly by Conwy County Borough Council and Denbighshire County Council, all references to Landscape Units and Landscape Strategy Areas relating to Denbighshire Council have been removed for the purposes of consultation.

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Acknowledgements

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1. Executive Summary

1.1 Background

Conwy County Borough Council and Denbighshire County Council (the Councils) both have a significant expanse of rural upland areas which have an abundant onshore wind resource. For the purposes of the SPG, the area covered only relates to Conwy County Borough. This includes Clocaenog Forest which has been designated as one of seven Strategic Search Areas (SSAs) in Wales, as defined in TAN 8. The Welsh Government's approach to wind energy development is to concentrate the development of large scale (>25MW) wind farms within Clocaenog Forest Strategic Search Area and the other SSAs, in order to contribute to the Welsh Government's aspiration to achieve 2GW in total capacity by 2015/2017 (of which 800MW of onshore and offshore wind energy is expected to be provided).¹

- 1.2 The identification of Clocaenog Forest SSA has led to some large wind energy developments being consented and constructed. Whilst it is recognised that renewable energy development is important to meeting sustainability targets, there does need to be a balance struck between accepting change to landscape character in some areas whilst protecting other areas that may be more susceptible to change.
- 1.3 Welsh Government planning policy does not set out spatial limitations for onshore wind energy development under 25 megawatts (MW) and those smaller developments under 5MW both of which are applicable to all parts of Wales subject to the assessment of localised impacts.
- 1.4 Conwy comprises a diverse mix of landscapes many of which are highly valued for their great natural beauty and tranquillity - ranging from remote and wild uplands and moorlands to narrow steep sided valleys, wide river floodplains, gently undulating pastoral lowlands and dramatic coastlines. The busy coastal resort towns along the north coast contrast markedly with the highly rural areas inland.
- 1.5 These landscapes are experiencing an increasing number of planning applications and enquiries for wind energy developments under 5MW, (i.e. applications for single and pairs of wind turbines) as well as larger wind energy schemes being progressed outside the SSA.
- 1.6 This study was commissioned by the Councils in response to this growing pressure on the landscape from wind energy developments. The study provides an evidence based assessment of the relative sensitivity and capacity of Conwy's landscape to accommodate wind energy development of varying scales; focussing on smaller scale developments (typically up to a group of 9 wind turbines and 80m maximum height to blade tip).
- 1.7 This study does not generally consider larger wind energy developments (typically a group of 10 turbines or more, over 80m in height to blade tip) as due to the high sensitivity of the landscapes throughout Conwy these are generally deemed inappropriate outside Clocaenog Forest SSA.

Table 1.5 below illustrates the wind energy development typologies (types/scales) that were identified in collaboration with the Steering Group for the purpose of this study:

¹ Ove Arup & Partners (2005), TAN 8 Annex D Study of Strategic Search Area A – Clocaenog Forest Final Issue Report
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Table 1.5: Wind Energy Development Typologies

Wind Energy Typology	Indicative Output (broad output category ²)	Supplementary Criteria (meets one or more of the criteria) (determines whether this typology applies or whether a larger one does)
Micro	under 50kW	<ul style="list-style-type: none"> • Single or twin turbine applications • Turbine up to 20m to blade tip
Small	under 5MW	<ul style="list-style-type: none"> • Turbines up to 3 in number • Turbines up to 50m to blade tip • Viewed as a small group
Medium	over 5MW and up to 25MW	<ul style="list-style-type: none"> • Turbines up to 9 in number • Turbines up to 80 metres to blade tip • Viewed as a large group
Large	over 25MW	<ul style="list-style-type: none"> • Turbines over and including 10 in number • Turbines up to 80 metres to blade tip • Viewed as a large scale wind farm
Very Large	Over 25MW	<ul style="list-style-type: none"> • Turbines over and including 10 in number • Turbines over 110 metres to blade tip • Viewed as a very large scale wind farm
Strategic	Over 50MW	<ul style="list-style-type: none"> • Turbines over 15 in number • Turbines over 100 metres to blade tip • Viewed as a nationally strategic • Located within the SSA • Applications for which are determined by National Infrastructure Planning delivered through PINS.

1.8 As stated previously, applications and enquiries for large and very large scale wind farm developments are most commonly associated with Clocaenog Forest SSA. The large and very large typologies have been included within Table 1.5 above for reference; however, as noted above, the capacities for these categories are not dealt with as part of this study.

1.9 Aim of the Study

The overall aim of the study is to provide strategic Supplementary Planning Guidance and to assist the Council in assessing the landscape and visual effects of onshore wind energy development for development control purposes with a view to minimising the effect of such developments on the landscape in line with policies NTE/4 and NTE/7 of the LDP.

POLICY NTE/4 – THE LANDSCAPE AND PROTECTING SPECIAL LANDSCAPE AREAS

1. Special Landscape Areas are shown on the proposal map and designated in the following locations:
 - a) Great Orme and Creuddyn Peninsula
 - b) Conwy Valley
 - c) Abergele hinterland
 - d) Elwy and Aled Valleys
 - e) Hiraethog
 - f) Cerrigydrudion and the A5 corridor

² These values are for guidance only. Efficiency and energy outputs are continually subject to advances in technology and operational efficiency, therefore it is recognised that these values are likely to change
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2. In order to conserve the attributes of the Special Landscape Areas development proposals will have to show particular regard to the character of each locality in order to minimise their impact. Development will only be permitted if it is shown to be capable of being satisfactorily integrated into the landscape. In appropriate cases planning applications should be accompanied by a Landscape and Visual Impact Assessment to assess the visual and landscape impacts of the development.
3. All proposals, both within and outside SLAs, will be considered against the Development Principles and other policies in the Plan designed to protect the environment and landscape character.

POLICY NTE/7 – ONSHORE WIND TURBINE DEVELOPMENT

1. The development of large or very large-scale (over 25MW) wind farms will be concentrated within the Clocaenog SSA in accordance with Policy DP/6 and be subject to a satisfactory Environmental Impact Assessment. Proposals will be expected to:
 - a) Demonstrate measures for the safeguarding, remediation and enhancement of habitat and species and conform to the principles contained in the Clocaenog Statement of Environmental Master Planning Principles (SEMP);
 - b) Ensure all details of associated ancillary development are submitted with the planning application as an integral part of the scheme;
 - c) Ensure that the potential cumulative impacts on surrounding communities, landscape and environment are considered acceptable. Where the development of a wind farm is considered to have an unacceptable cumulative impact it will be refused;
 - d) Demonstrate that the development will not lead to noise levels or shadow flicker that would be detrimental to the residential amenity of the surrounding area.
2. Outside the Clocaenog SSA the development of medium-scale wind farms over 5MW and below 25MW will only be approved in exceptional circumstances in the context of the following:
 - a) Acceptability in terms of other Local Development Plan policies;
 - b) The potential cumulative impacts on surrounding communities, landscape and environment are considered acceptable. Where the development of a wind farm is considered to have an unacceptable cumulative impact it will be refused;
 - c) The development will not generate noise levels or shadow flicker that would be unacceptably detrimental to the amenity enjoyed by nearby residents or by users of public rights of way or other recreational facilities or areas;
 - d) A satisfactory Environmental Impact Assessment should propose measures for the safeguarding, remediation and enhancement of habitat and biodiversity;
 - e) Where possible, turbines are located no less than 500 metres from an occupied dwelling or other noise-sensitive building;
 - f) Within SLAs wind turbine schemes medium-scale or larger will be resisted;
 - g) Exceptional circumstances are considered to be where there is an overriding need or capacity issue which cannot be met within the SSA.

3. Micro and small scale wind turbine development (5MW and less) will only be supported where:

- a) It is of a proportionate scale in terms of predominant energy production to supply the building(s) which it directly serves;
- b) It does not compromise the ability of the SSA to achieve its anticipated target of energy production;
- c) Criteria 2 a) – f) above are met and where appropriate a satisfactory EIA has been submitted;
- d) Within SLAs wind turbines will not be permitted unless serving a dwelling or cluster of dwellings at micro scale.

1.10 Study Objectives

The objectives of the study are to:

- Provide a strategic assessment of the relative sensitivity of Conwy and Denbighshire's landscapes for wind energy development using a defined set of landscape and visual criteria that includes both physical and perceptual aspects as well as a consideration of landscape value.
- Identify the key landscape, visual and perceptual sensitivities of different landscape areas.
- Provide broad guidance on those landscape areas where wind energy development of different scales is potentially most acceptable and those landscape areas where development is likely to result in unacceptable adverse landscape and visual effects.
- Comment on any likely cumulative and cross boundary effects of wind energy development.

1.11 Methodology

There is currently no formally agreed approach for assessing the sensitivity or capacity of landscapes for onshore wind energy development. The methodology set out in Section 2 of the report is developed from current guidance and the approach taken in other similar studies and tailored to this geographically unique study area. It is based on the premise that wind energy development could be more readily accepted in the least sensitive areas and should avoid areas that are highly valued for their scenic, recreational and undeveloped qualities such as tranquility and remoteness; particularly those areas safeguarded by international or national designations and those where the cumulative effects of existing and consented wind energy schemes limit further development.

1.12 Professional judgment and understanding of landscape character is used to make broad assumptions, for instance what makes one landscape more or less sensitive than another. These evaluations have been informed and backed up by data gathered from the sources of baseline information listed in Appendix 1, including maps, relevant landscape and historic character assessments, LANDMAP, field work and consultations with the Steering Group.

1.13 It is important to note that this report represents a strategic study and is not prescriptive at an individual site level. It does not replace the need for the Council to assess individual planning applications or for specific local landscape and visual impact assessment as part of formal Environmental Impact Assessment on a case by case basis.

1.14 It is also important to note that the study is not a cumulative appraisal of wind energy developments. It is also limited to landscape character and visual amenity issues. It does not take account of other natural and cultural heritage considerations (except where they relate to landscape character and visual amenity, including setting), technical factors such as wind speed, grid capacity or aviation constraints or the perceived need for wind energy development. The study focuses on smaller scale wind energy developments and does not consider the remaining capacity of Clocaenog Forest SSA.

1.15 Evaluation of Landscape Units and Their Sensitivity for Wind Energy Development

Studies such as this are typically based on existing local landscape character assessments which sub divide the landscape into landscape character types (LCT) or landscape character areas (LCA) (refer Appendix 7 for definitions). For the purpose of this report, in lieu of a current consistent landscape character assessment, the Study Area (Figure 2) was broken down into landscape units which are primarily based on discrete geographical areas of the landscape types identified in the Clwyd Landscape Assessment undertaken in 1995 (refer Section 2, Methodology).

A total of 42 landscape units were identified across Conwy and Denbighshire; these are broadly representative of different character areas of the landscape but are not formally recognised as LCAs).

1.16 Data for each these geographical areas was reviewed and site visits made to back up the findings and to inform evaluations of landscape sensitivity for wind energy developments, as follows:

- 21 LANDMAP layers were reviewed and analysed.
- Desk top studies were reviewed including but not limited to the following: Clwyd Landscape Assessment; Denbighshire Landscape Strategy; Seascape for Wales; Cadw Historic Landscapes; World Heritage Site information; and many more.
- Site visits were made to back up and moderate the findings.

The overall findings of the sensitivity assessments are illustrated in Section 4 and summarised in Table 4.1 below.

Table 4.1: Summary of Sensitivity

Landscape Unit		Assessed Sensitivity	Location	Page no.
Ref	Name			
LOWLAND AREAS				
A3	Lowland Hills	High	CCBC	41
A4	Coastal and Estuarine Flats (Prestatyn to Abergele)	Medium	CCBC/DCC	44
A5	Coastal and Estuarine Flats (Colwyn Bay)	Medium-High	CCBC	47
A6	Vale Farmlands (Vale of Clwyd)	High	CCBC/DCC	50
A8	Coastal Landscape Unit (Penmaenmawr to Llanfairechan)	High	CCBC	53
LOWER HILLS AND VALLEYS				
B2	Deep Valleys (Aled and Elwy)	High	CCBC/DCC	56
B7	Conwy Valley	High	CCBC	59
LIMESTONE COUNTRY				
C4	Limestone Farmlands (Abergele to Denbigh Coastal/ Vale Hills)	High	CCBC/DCC	63
C9	Limestone Escarpment and Hills	High	CCBC	66
C10	Great Orme and Creuddyn Peninsular	High	CCBC	69
MARGINAL UPLAND				
D1	Aled Hiraethog Hills (West)	High	CCBC	73
D2	Hill Forest (Clocaenog Forest)	Low	CCBC/DCC	76
D3	Cerrig Uplands	High	CCBC/DCC	79
D4	Maerdy Hills	High	CCBC/DCC	82
D5	Edeirion Hills	Medium-High	CCBC/DCC	85
D8	Upland Plateau	Medium-High	CCBC	88
D10	Moorland Plateau (Denbigh Moors)	High	CCBC/DCC	90
D11	Moorland Plateau	Very High	CCBC	93
D15	Moorland Ridge	High	CCBC	95
D16	Marginal Upland (East Conwy Valley)	High	CCBC	98

1.17 Evaluation of Landscape Strategy Areas and Capacity Assessments

For the purpose of assessing the capacity of the landscape for wind energy development the 42 landscape units were combined into 15 larger landscape strategy areas. This process was informed by reviewing the sensitivity assessments, supplemented by an analysis of intervisibility, key visual receptors, topography (including ridgelines and water-sheds based on LANDMAP information), Ordnance Survey and GIS data, landscape character, observations made during field studies and discussions with the Steering Group.

- 1.18 A judgement was then made on the overall sensitivity of each of these strategy areas based on an assessment of their constituent landscape units. A statement of the overall sensitivity of the strategy area in relation to wind energy development is presented within each landscape strategy evaluation, together with a justification of the assessment. This justification includes a list of the landscape, visual and cultural heritage characteristics and qualities which are susceptible to wind energy development. The overall sensitivity assessments for the landscape strategy areas are illustrated in Section 5 and summarised in Table 5.1 below.

Table 5.1: Summary of Strategy Areas and Overall Sensitivity

Landscape Strategy Area		Overall Sensitivity	Landscape Strategy Area Location		Page Number
Ref	Name		Conwy	Denbighshire	
2	Vale of Clwyd	High	5%	95%	102
3	South Clwydian Hills	Medium-High	5%	95%	104
7	Clocaenog Forest	Low	50%	50%	106
8	Cerrig Uplands	High	90%	10%	108
9	Denbigh Moors	High	80%	20%	110
10	Rhos Hills	High	60%	40%	112
11	Elwy Valley	High	95%	5%	114
12	Conwy Valley	High	100%		116
13	North West Conwy Coast	High	100%		118
14	Colwyn Coast	High	95%	5%	120
15	Coastal Flats	Medium	45%	55%	122

- 1.19 The landscape strategy for each of the 15 LSA areas is set out separately and includes the landscape objective(s) for the area, a record of operational and consented wind energy development (March 2013), an indication of the types of wind energy development which might be accommodated (indicative capacity) and some broad guidance notes regarding the scale, design and siting of wind energy developments.

- 1.20 It is important to note that the strategy area evaluation sheets must be read together with the relevant sensitivity evaluation sheets to gain a full appreciation of the sensitivity and capacity of the landscape in relation to wind energy developments.**

1.21 Guidance for Wind Energy Development Within Strategy Areas

Additional generic guidance notes for the siting and design of wind energy developments are included in Section 6.

1.22 Conclusion

Conwy is enveloped by two nationally designated landscapes, Snowdonia National Park which lies immediately to the west of the study area and the Clwydian Range and Dee Valley AONB (Denbighshire) much of which lies within the eastern part of the study area. The distance between these two highly valued landscapes ranges from approximately 20 km to 35 km and there is good intervisibility between the higher parts of each.

- 1.23 Taking the above into consideration and the fact that Conwy comprise a diverse mix of landscapes (many of which are highly valued for their natural beauty and special qualities such as tranquillity

and/or remoteness) much of the study area is considered to be highly sensitive for wind energy developments.

- 1.24 The study identifies some capacity for mostly micro and small scale wind energy developments but little capacity for anything larger.
- 1.25 This report provides a good starting point for identifying the key landscape and visual issues that should be taken into consideration when looking at individual development applications as the document will be used as a material consideration when assessing development.
- 1.26 It provides a strategic overview of the sensitivity and capacity of Conwy's landscapes for wind energy development, and helps answer the following questions:
- What types of landscapes does Conwy have?
 - Why are these landscapes sensitive (or not) for wind energy developments?
 - How sensitive are the area's landscape for wind energy developments?
 - What types of wind energy could potentially be accommodated without compromising the integrity and value of the landscape?
 - How could wind energy development be designed/accommodated to minimise adverse landscape and visual effects?
- 1.27 The text below summarises how it is anticipated that this report will be used to assist decision makers with regard to assessing wind energy development proposals.

1.28 How to Use This Report

The text below and accompanying flow chart diagram represents a brief guide on how to use the Landscape Capacity and Sensitivity Assessment for Wind Energy Development report.

1.29 Sensitivity of Development Location

1. Review **Figure 5** Landscape Units
 - Which landscape unit is the proposed development located in?
2. Review the evaluations of the sensitivity of the landscape unit and **Figure 3** Landscape and Cultural Heritage Designations / Constraints taking into consideration the descriptions of intervisibility and also reviewing adjacent landscape units where strong associations are identified.
3. List the key landscape features which are sensitive to wind energy development within the landscape unit which the proposal is located.

Proposed Scale of Wind Energy Development

4. Review **Table 1.5:** Wind Energy Development Typologies
 - What is the typology is deemed the 'best fit' for this proposed development?

Landscape Strategy and Capacity

5. Review **Figure 6** Landscape Strategy Areas
 - Within which landscape strategy area is the proposed wind energy development located?
6. Review the Landscape Strategy for this Area
 - What is the landscape objective for this strategy area? What does this objective mean? (detailed descriptions are included in **Section 2: Methodology** Landscape Objectives)
7. Review **Figure 4** Operational and Consented Wind Energy Developments (March 2013) and accompanying **Table A41:** Operational and Consented Wind Energy Developments (March 2013)
 - What developments already exist in this strategy area?

- Are you aware of any additional wind energy developments that have been consented / constructed in the landscape strategy area since March 2013?
 - Are there any wind energy developments within neighbouring strategy areas or within the study area buffer that may influence the viability of this development? In order to answer this question it would be useful to obtain details of zones of theoretical visibility (ZTV) relating to any such other developments to identify where potential cumulative impacts may arise. ZTV may have been submitted as part of an Environmental Impact Assessment (EIA) or landscape and visual impact assessment (LVIA) – check with planning authority.
- 8. Review the Indicative Overall Capacity for the area**
- Is there sufficient information to put a case forward which demonstrates that this proposed development falls within the indicative capacity for the area?
 - Is there any evidence to suggest that this development may give rise to any cumulative landscape or visual effects?
- 9. Review the guidance on siting for this landscape strategy area**
- Consider and note down any guidance which may have implications on this particular proposed development.

Offer advice

- 10.** Use the landscape strategy evaluation, indicative overall capacity and guidance on siting turbines (backed up by cross referencing the evaluation of the relevant landscape units and their sensitivity for wind energy development) to advise perspective applicants on what needs consideration in the application.

Applicants are to address these issues in the application justification statement (be that Design Access Statement/Landscape and Visual Impact Assessment/Environmental Impact Assessment).

1.30 Guide to using the Landscape Sensitivity & Capacity Assessment to Wind Energy Development Report

Key Question Approach

Location

Q Is wind energy development supported within the landscape strategy area?

To identify which Strategy Area the proposed Wind Energy Development is located:

1. Check location of the proposed development against Figure 5 'Landscape Units'
2. Review the assessed sensitivity of the 'Landscape Unit' and adjoining units
3. Check location of the proposed development against Figure 6 'Landscape Strategy Areas'
4. Review the Strategy Area objective(s)

Y N

ACTION

Planner:

Consider whether this is a material consideration to refuse permission

Developer:

Consider relocation of development to reduce conflict with Landscape Sensitivity, Strategy and Capacity

Scale

Q Does the typology of the proposal fit with those supported in the 'Landscape Strategy'?

To identify the topology of the proposed development:

1. Check proposed development against Table A: Wind Energy Development Typologies
2. Review the Strategy Area objective(s) and indicative overall capacity to determine which typologies are appropriate

Y N

ACTION

Planner:

Consider whether this is a material consideration to refuse permission

Developer:

Consider relocation of development to reduce conflict with Landscape Sensitivity, Strategy and Capacity

Capacity

Q Does the proposal fit within the overall indicative capacity identified within the strategy area?

To identify what other wind energy developments are in the landscape strategy area:

1. Check proposed development against Figure 4 operational and consented Wind Energy Developments (March 2013)
2. Check whether any other applications have been made or consents given for Wind Energy Developments since March 2013?

maybe
Y N

ACTION

Planner:

Consider whether this is a material consideration to refuse permission

Developer:

Consider relocation of development to reduce conflict with Landscape Sensitivity, Strategy and Capacity

ACTION

Planner:

Assess potential landscape & visual effects of proposed Wind Energy Development. If necessary, seek to revise the scheme siting, layout and design in relation to guidance within this report

Developer:

Review and address detailed siting, layout and design issues in relation to guidance within this report

2. SECTION 1: BACKGROUND

- 2.1 This study was commissioned by Conwy County Borough Council (CCBC) and Denbighshire County Council (DCC) - (the 'Councils'). Its purpose is to provide an evidence based assessment of the relative sensitivity and capacity of the Conwy and Denbighshire' landscapes to accommodate wind energy development of varying scales (focussing on smaller scales), with the aim of informing the development of strategic Supplementary Planning Guidance and assisting the Councils in assessing the landscape and visual effects of wind energy development for development control purposes. Key requirements of the brief for the study were transparency, clarity and relative simplicity, with a focus on smaller scale developments. For the purposes of the SPG, the area covered only relates to Conwy County Borough.
- 2.2 Conwy has a significant expanse of rural upland areas with an abundant wind resource. This includes Clocaenog Forest which has been designated as one of seven Strategic Search Areas (SSAs) in Wales (TAN 8) with an indicative capacity target of 140 megawatts (MW) (approximately 50 modern wind turbines of 100m in height)³. The Welsh Government's approach is to limit the development of large scale wind farms to the SSAs, which have been independently and empirically assessed to be the most suitable areas for wind energy development. However, Welsh Government planning policy does not set out spatial limitations for wind energy development under 25MW which are applicable to all parts of Wales subject to the assessment of localised effects. In light of the increasing number of planning applications, Environmental Impact Assessment (EIA) screening opinion requests and pre-application enquiries being submitted to the Councils for individual and clusters of wind turbine developments of varying scales, this study has been commissioned in order to guide development to the most suitable locations and ensure that the key characteristics and quality of the area's landscapes are safeguarded.
- 2.3 Wind turbines are tall structures, which are typically sited in open or elevated areas. This raises the potential for extensive landscape and visual effects, which is exacerbated by the often complex visual interplay between different lighting conditions and the scale and form of groups of turbines.
- 2.4 The movement of the rotor blades attracts the eye and in certain lighting conditions moving turbines can be highly visible from a long distance.
- 2.5 The acceptability of wind turbines in the landscape is an emotive subject and one where compromise is often needed. Whilst it is generally acknowledged that the most valued aspects of the natural heritage should be protected, those landscapes of lesser value can normally accommodate some wind energy development, albeit in a controlled way to minimise adverse effects.
- 2.6 This study considers the main factors that influence the sensitivity of Conwy's landscape to wind energy development and describes how these are combined to identify spatial variations in relative sensitivity⁴. It then provides an indication as to where wind energy development might best be located and an indication of the appropriate scale of development, based on thresholds of maximum capacity⁵.
- 2.7 The assessment approach was developed with the Project Steering Group which includes representatives from both Councils as well as representation from Natural Resources Wales⁶ (NRW). **This is a strategic study and is not prescriptive at an individual site level. It does not replace the need for the Councils to assess individual planning applications or for specific local landscape and visual impact assessment as part of formal EIA.**

³ Ove Arup & Partners (2005), TAN 8 Annex D Study of Strategic Search Area A – Clocaenog Forest Final Issue Report

⁴ Relative Sensitivity – the sensitivity of each discrete geographical 'landscape unit' is assessed in relation to the baseline of the overall study area.

⁵ Maximum capacity refers to the extent to which a landscape can accommodate wind energy development without significant adverse effects on landscape character, quality, fabric, value or amenity, including significant adverse visual effects.

⁶ Formerly the Countryside Council for Wales (CCW).

- 2.8 The study is not a cumulative appraisal of wind energy developments and is limited to landscape character and visual amenity issues. It does not take account of other natural and cultural heritage considerations (except where they relate to landscape character and visual amenity, including setting), technical factors such as wind speed, grid capacity, aviation constraints or the perceived need for wind energy development. The study focuses on smaller scale wind energy developments and does not consider the remaining capacity of TAN 8 SSA A.

2.9 Planning and Policy Framework

National Policy Context

Planning Policy Wales (PPW) (2014) as amended.

Land use planning policies for the Welsh Government set out in Planning Policy Wales (PPW) establish the Government's objectives for conservation and improvement of natural heritage, in particular the protection of native habitats, trees and woodlands and landscapes with statutory designations. The LANDMAP information system is endorsed as an important resource to use for landscape assessment. All forms of renewable energy are promoted where they are environmentally and socially acceptable.

- 2.10 Relevant policies are provided in Appendix 2 and extracts from PPW regarding renewables is included below as follows:

The UK is subject to the requirements of the EU Renewable Energy Directive. These include a UK target of 15% of energy from renewables by 2020. The Welsh Government is committed to playing its part by delivering an energy programme which contributes to reducing carbon emissions as part of its approach to tackling climate change. The Welsh Government's Energy Policy Statement (2010) identifies the sustainable renewable energy potential for a variety of different technologies as well as establishing its commitment to energy efficiency. It explains the aim by 2050, at the latest, to be in a position where almost all local energy needs can be met by low carbon electricity production. The approach is to reduce energy consumption and improve energy efficiency first and maximise renewable and low carbon energy generation at every scale across Wales. This is part of a concerted effort to tackle climate change in Wales.

Planning policy at all levels should facilitate delivery of both the Welsh Government's overall Energy Policy Statement, and UK and European targets on renewable energy. The Renewable Energy Directive contains specific obligations to provide guidance to facilitate effective consideration of renewable energy sources. In this context both local planning authorities and developers should have regard in particular to the guidance contained in Technical Advice Note 8: Planning for Renewable Energy, Technical Advice Note 22: Sustainable Buildings and Planning for Renewable Energy - A Toolkit for Planners.⁷

2.11 **Technical Advice Notes**

PPW is supported by a series of Technical Advice Notes (TANs) including TAN 8: Renewable Energy which allocates seven SSAs across Wales within which most large wind farms (> 25MW) can potentially be located and sets a target maximum capacity for each. TAN 8 identifies areas where proposals are likely to be supported, areas to be afforded significant protection from wind farm development, and the approach to be followed elsewhere.

- 2.12 Welsh Government planning policy does not set out spatial limitations for wind energy development under 25MW and those smaller developments under 5MW, both of which are applicable to all parts of Wales subject to the assessment of localised effects. TAN 8 states that most areas outside SSAs should remain free of large wind power schemes although there may be some potential for wind farm schemes up to 25MW capacity on urban brownfield sites and for smaller community based and domestic wind farm schemes less than 5MW elsewhere.

⁷ Planning Policy Wales (Edition 5, November 2012)

It is generally recognised that there is a presumption for major landscape change within, but that there should be no significant change outside, SSAs.

- 2.13 LANDMAP Information Guidance Note 3, (Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines) refers back to TAN 8 and provides more detailed information about SSAs and wind energy development with a view to avoiding, minimising and compensating for adverse effects. Relevant text from this guidance note is included in Table 1.1 below.

Table 1.1: Extracts from LANDMAP Information Guidance Note 3

Areas within and immediately adjacent to Strategic Search Areas (SSAs)	TAN 8 Strategic Search Areas (SSAs) are considered the most appropriate locations for large scale wind farm development (Welsh Assembly Government, 2005). Within the SSAs landscape change has been accepted, and the creation of ‘wind farm landscapes’ in these areas acknowledged by Government as an outcome of delivering renewable energy targets, <i>“within (and immediately adjacent) to the SSAs, the implicit objective is to accept landscape change i.e. a significant change in landscape character from wind turbine development.”</i> However, given the height of turbines, the visual impacts of a wind farm inside an SSA, may well affect the character of areas some distance away. Such issues arise most clearly where SSAs are close to National Parks and AONBs. An example is the Hirwaun Inquiry, 2008, where large wind turbines sited within 8km of the National Park boundary were considered to be unduly intrusive.
Other areas outside the SSAs.	TAN 8 states that “in the rest of Wales outside the SSAs, the implicit objective is to maintain the landscape character i.e. no significant change in landscape character from wind turbine development”. Whilst “most areas outside SSAs should remain free of large wind power schemes”, wind farm schemes may be proposed on urban/industrial brownfield sites (up to 25MW), as smaller community based schemes (generally less than 5 MW) or as part of the re-powering and/or extension of existing wind farms. The LVIA should help determine if the “environmental and landscape impacts are acceptable” (TAN 8 2.11-2.14).

- 2.14 TAN 12: Design, requires Local Planning Authorities to appraise the character of the landscape, including its visual and sensory qualities and emphasises that landscape character needs to be considered when developing a robust and coherent planning framework. This is intended to help ensure that development including wind energy developments is sited in areas which are best able to accommodate them thereby helping to limit adverse effects and maintain landscape diversity. TAN 12 advocates the use of LANDMAP to help inform and identify where development is preferable in landscape terms.

2.15 Local Policy Context

Conwy Local Development Plan 2007 – 2022

The Local Development Plan (LDP) covers the part of Conwy County Borough that lies outside Snowdonia National Park (known as the Plan Area). The Plan Area contains diverse, high quality landscapes ranging from the open moorland of Hiraethog (the Denbigh Moors) to locally significant spaces around towns and villages. The coastline of Conwy is seen as playing an important part in attracting visitors to the area. The key objective of this SPG is to inform the assessment of landscape impact and capacity (as updated) in the implementation of policies NTE/4 and NTE/7 of the LDP. Policy NTE/4 deals with Special Landscape Areas and NTE/7 deals with On-shore wind turbine development. Further SPG documents are being prepared to cover the wider subjects regarding On-shore Wind Turbine development, Landscape, Biodiversity, and Design which will also impact on and inform on-shore wind turbine development proposals. The Council is also preparing guidance on Community Benefits from wind farm development in the Plan area.

- 2.16 Accompanying the LDP is a series of background papers which explain how specific policies have been formulated. Two of these are relevant to this study:

Revised Background Paper 27 - Special Landscape Areas, August 2012 (covering Conwy only)

This background paper explains how LANDMAP was used to identify and designate a number of Special Landscape Areas (SLAs) within the Plan Area. These are shown on the LDP Proposals Map and include:

- SLA1 - Y Gogarth a Phenrhyn Creuddyn (Great Orme and Creuddyn Peninsular)
- SLA2 – Rhyd y Foel i Abergele (Rhyd Y Foel to Abergele)
- SLA3 – Dyffrynnoed Elwy ac Aled (Elwy and Aled Valleys)
- SLA4 – Hiraethog
- SLA5 – Cerrigydrudion a choridor yr A5 (Cerrigydrudion and the A5 corridor)
- SLA6 – Dyffryn Conwy (Conwy Valley)

Development will only be permitted in the SLAs if it is shown to be capable of being satisfactorily integrated into the local landscape.

2.17 *Clwyd Landscape Assessment 1995 - Useful Historical Data (covering Conwy & Denbighshire)*

The landscape assessment of the former county of Clwyd covers both Conwy and Denbighshire. It was based on the Warwickshire landscape character assessment which is documented in CCW's report, Assessment and Conservation of Landscape Character: The Warwickshire Landscapes Project Approach (CCP332, 1991); this remains a widely accepted method for assessing landscape character. The assessment identified 27 distinct landscape types within four broad categories

- Lowland Areas, Lower Hills and Valleys, Limestone Country and Marginal Uplands.

2.18 *Snowdonia Local Development Plan 2011-2022 (covering Snowdonia National Park)*

Conwy and Denbighshire share authority boundaries with Snowdonia National Park Authority. Snowdonia National Park has used LANDMAP to inform the identification of Landscape Character Areas (LCAs) and accompanying management guidelines. Although the National Park Authority decides planning applications within its area, Conwy Borough County Council and Denbighshire County Council are the planning authority for adjoining areas. Because any development in these areas could affect the wider setting of the Park, the Environment Act 1995 requires the Councils to consider the purpose for which the National Park was designated.

2.19 *Seascape Assessment of Wales (covering Conwy & Denbighshire)*

The Seascape Assessment of Wales subdivides the Welsh coast into 50 regional seascape units detailing the character and qualities of each unit. It also assesses the sensitivity and capacity of each seascape unit to offshore renewable energy developments. Whilst the report focuses on offshore wind energy development it nevertheless provides a valuable information resource in determining the potential effects of onshore wind energy developments on seascape character and qualities.

2.20 *Approach to the Study*

The objectives of the assessment are to:

- Provide a strategic assessment of the relative sensitivity of Conwy and Denbighshire's landscape to wind energy development using a defined set of landscape and visual criteria that includes both physical and perceptual aspects as well as a consideration of landscape value.
- Identify the key landscape, visual and perceptual sensitivities of different areas.

- Provide broad guidance on those areas where wind energy development of different scales is potentially most acceptable and those areas where there is likely to be significant adverse landscape and visual effects; bearing in mind the capacity limits.
- Comment on any likely cumulative and cross boundary effects of wind energy development.

There is currently no formally agreed approach for assessing the sensitivity or capacity of landscapes to onshore wind energy development. The methodology set out in Section 2 is developed from current guidance and the approach taken in other similar studies. It is based on the premise that wind energy development should be more readily accepted in the least sensitive areas and should avoid areas that are highly valued for their scenic, recreational and undeveloped qualities such as tranquillity and remoteness; particularly those areas safeguarded by international or national designations and those where the cumulative effects of existing and consented wind energy schemes limit further development.

2.21 Structure of the Report

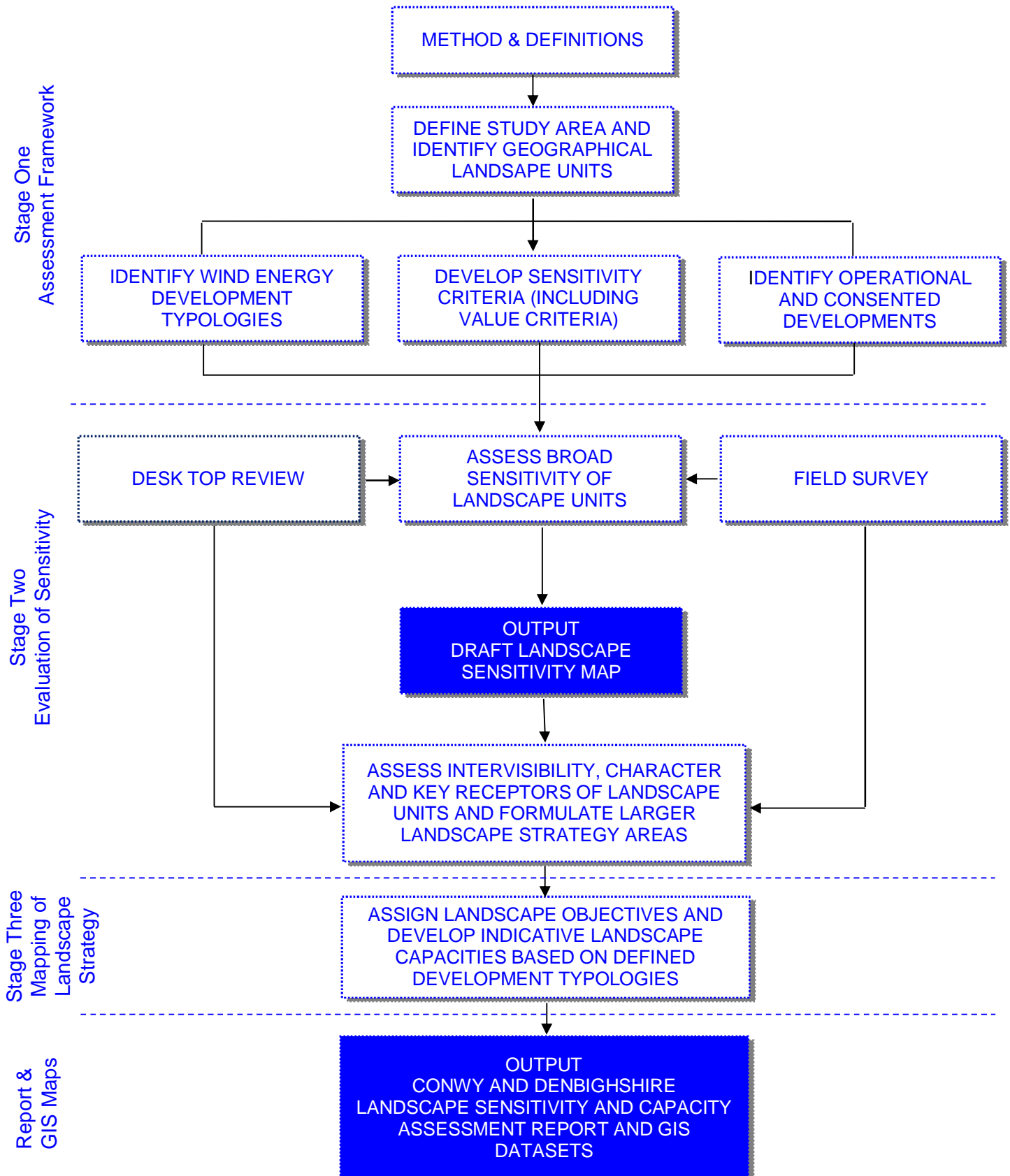
The remainder of the report is structured as follows:

- **Section 2:** Methodology
- **Section 3:** Baseline landscape of Conwy and Denbighshire
- **Section 4:** Evaluation of landscape units and their sensitivity to wind energy development
- **Section 5:** Evaluation of landscape strategy areas and capacity assessments
- **Section 6:** Guidance for wind energy development within strategy areas

The report is also supported by figures and appendices as listed in the contents.

3. SECTION 2: METHODOLOGY

- 3.1 Definitions of key terms/words and a glossary of abbreviations that are used within this report are included in Appendix 7 for clarity and transparency. The methodology for the report is illustrated in the flowchart below and described in more detail in the text that follows.



3.2 Stage One: Assessment Framework

The methodology was informed by the documents listed in Appendix 1, including guidance developed for use in Scotland which is specific to wind energy development schemes and is widely accepted for use in England and Wales. The following good practice documents were particularly informative:

- *Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity* (Scottish Natural Heritage and the Countryside Agency, 2006).
- *Guidelines for Landscape and Visual Impact Assessment (GLVIA)*. The Landscape Institute and the Institute for Environmental Management and Assessment (Second edition 2002) replaced by GLVIA Third edition April 2013. This is the industry standard for landscape and visual assessment.

Both Topic Paper 6 and GLVIA advocate the use of professional judgement and an understanding of landscape character to help inform broad assumptions as to what makes one landscape relatively more or less sensitive than another to particular forms of development. Key to this is an understanding of which aspects of the landscape are particularly susceptible to the type of development proposed. These include physical, perceptual and experiential characteristics. The susceptibility of these is first assessed individually before being combined and a judgement for overall sensitivity made through balanced assessment of all the characteristics.

3.3 Data Sources

The assessment was informed by data gathered from the sources of baseline information listed in Appendix 1, including maps, relevant landscape and historic character assessments, LANDMAP, field work and consultations with the Steering Group.

3.4 LANDMAP

LANDMAP is the formally adopted methodology for landscape assessment in Wales and has been extensively used to inform this study in accordance with GLVIA. LANDMAP is an all-Wales GIS based landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent dataset. LANDMAP comprises five spatially related datasets (layers) - Geological Landscape, Landscape Habitats, Visual and Sensory, Historic Landscape and Cultural Landscape. Information on each is detailed in the *LANDMAP Methodology: Guidance for Wales (CCW, 2008)*.

- 3.5 Each of the five spatial layers are subdivided into discrete geographical units (GIS polygons) referred to as aspect areas. Each mapped aspect area is defined by its recognisable landscape characteristics and qualities. Accompanying each aspect area is a description (Collector Survey record) which describes and documents the landscape character, qualities and features. Management recommendations are also provided, together with an overall evaluation score, contextualised from a local to international scale of importance.
- 3.6 Each Collector Survey records information from the unique perspective of the LANDMAP layer concerned, with each LANDMAP layer being produced independently for each of the five layers. Therefore when key characteristics are referred to across several layers for the same geographic area, the value of their importance is typically emphasised. However, it is only by assessing each layer on its own, that it becomes clear which aspects of the landscape character and qualities are sensitive.
- 3.7 Although GLVIA recommends that data from all five LANDMAP layers should be used in any assessment, the Cultural Landscape information provided in the Cultural Landscape layer was not sufficiently detailed to be useful for this study⁸.

⁸ LANDMAP Information Guidance Note 3 doesn't identify any specific evaluation criteria for Cultural Landscape

3.8 Definition of the Study Area and Scale of Mapping

Study Area

As shown in Figure 3, the study covers the whole of the local Planning Authority area for Conwy and Denbighshire, excluding Snowdonia National Park. It includes areas with particular landscape interests notably the Pontcysyllte Aqueduct and Llangollen Canal World Heritage Site, Conwy Castle World Heritage Site, Clwydian Range and Dee Valley AONB, Great Orme Heritage Coast, Cynwyd and Llandrillo AOB, Registered Historic Landscapes and Registered Parks and Gardens.

- 3.9 The assessment took account of coastal and seascape issues only where they were relevant to the assessment of landscape character and sensitivity of the coastline between Lavan Sands (to the north west) and the Point of Ayr (to the north east). Consideration of offshore wind energy developments were not in the remit of the study.
- 3.10 Due to the height of turbines and their wide ranging visual influence, any development will typically affect the landscape in which it is located and also neighbouring landscapes. Existing and proposed wind energy developments beyond the Councils' boundaries were therefore included in the baseline for the assessment, focusing on those within 10km of the boundary. This report is principally concerned with wind energy developments of smaller to medium scale, therefore for the purposes of this study it was considered that this is the distance where the potential for significant visual effects arising from small to medium scale wind energy developments is most likely to arise.

3.11 Scale of Mapping

Landscape sensitivity and capacity studies are typically based on existing local landscape character assessments which subdivide the landscape into landscape character types (LCTs) or landscape character areas LCAs; ideally LCAs (refer to Appendix 7 for definitions). These are then reviewed and the key characteristics of each LCA (or LCT) which are potentially sensitive to any given development (key sensitivity criteria) are identified. Whilst these key sensitivity criteria may vary according to the nature of the development being considered, the methodological approach between studies is generally similar. In this case, there wasn't a current consistent landscape character assessment covering both Conwy and Denbighshire⁹. After consideration with the Steering Group, the Clwyd Landscape Assessment 1995 was considered to be the most appropriate baseline for the purpose of this study, due to the following reasons:

- The Clwyd Landscape Assessment covers the most of the study area (approximately 85%).
- Although it was produced 18 years ago the landscape character types within the Clwyd Landscape Assessment are closely linked to the landscape character areas of the more recent Denbighshire Landscape Strategy (produced in 2003), which is based on an analysis of data from the five LANDMAP layers.
- LANDMAP uses the Clwyd Landscape Assessment 1995 as a key data source.
- The landscape character types were generally considered to be of a suitable scale to use as the reporting units for the study.

The Clwyd Landscape Assessment breaks much of the landscape of the study area down into 27 LCTs. For the purpose of this report these LCTs were subdivided into geographical areas and are referred to as landscape units (refer Appendix 7 for definition). The term landscape units has been used for the purpose of this report as the areas are not formally recognised as LCAs.

The 15% of the study area which was not covered by the Clwyd Landscape Assessment was subdivided into three landscape units, primarily based on Special Landscape Areas as described in Conwy's Revised Background Paper 27 - (August 2012). This approach was endorsed by the Steering Group.

- 3.12 Figure 5 illustrates the 42 landscape units which were devised. Due to the Clwyd Landscape Assessment plan not being available in GIS or any other digital format, the original paper based

⁹ Although the Visual and Sensory Aspect Area (VSAs) boundaries could have been used as the reporting units for sensitivity, the scale of these (>300 across the study area), was considered too detailed for this strategic study.

plan was scanned in and digitised into GIS format and then overlaid onto a current 1:50,000 OS base of the area.

3.13 Landscape and Visual Sensitivity Criteria

A key step in the study process was to identify and understand the aspects of the landscape which are more likely to be affected by wind energy development as it is these characteristics which ultimately define how much development could potentially be accommodated or not in a particular area.

- 3.14 The criteria defined in Table 1.3 and Table 1.4 are based on current good practice and were agreed with the Steering Group. They include criteria relating to landscape character and visual amenity as well as other aesthetic, perceptual and experiential aspects, for example scenic quality, remoteness and tranquillity. They also include criteria relating to the value of the landscape¹⁰, as defined by the presence of any landscape designations and undesignated landscapes which have been evaluated by LANDMAP as Outstanding or High¹¹. It is important to emphasise that a landscape which is highly valued by society may still be able to accommodate some wind energy development in the right location - if it fits with the characteristics of the landscape and doesn't compromise the reason why value is attached to the landscape and in the case of designated landscapes, does not compromise the purpose for designation. Conversely a landscape that isn't designated may be highly sensitive to wind energy development if it has particular characteristics which are very sensitive to wind energy development.
- 3.15 Table 1.4 identifies the LANDMAP datasets which were used to help assess the sensitivity of each criteria and how they have been used to indicate lower or higher sensitivity. This was supplemented by information from existing assessment work (see Appendix 6).
- 3.16 The sensitivity of each landscape unit within the study area was assessed against each of the sensitivity criteria and graded using a transitional three point sensitivity scale, higher, medium or lower as described in Table 1.2 below.

Table 1.2: Definition of Sensitivity

Definition	
Higher	Areas where the key landscape characteristics are vulnerable and likely to be adversely affected by wind energy development. The landscape would not be able to accommodate wind energy development without significant effects on its character.
Medium	Areas where wind energy development may cause some adverse effects on key landscape characteristics. Although the landscape may be able to absorb some development if sensitively sited and designed, it may introduce new inappropriate characteristics or result in a change in character.
Lower	Landscapes which taking into account their character and general visibility are not very vulnerable to change and could accommodate some wind energy development without significant adverse effects.

- 3.17 The overall assessment of sensitivity of each landscape unit was then evaluated and an overall grade of sensitivity was assigned using a more detailed five point sensitivity scale, low, medium, medium-high, high and very-high. This process involved a balanced approach, considering all the assessed criteria and focussing particularly on the susceptibility of the key landscape characteristics of each unit to wind energy developments. All of these evaluations represent the

¹⁰ Although not strictly a sensitivity criterion as defined by Topic Paper 6, designated landscapes are typically highly vulnerable to change associated with wind energy development, therefore they were included in the assessment of sensitivity.

¹¹ TAN 8 states that to identify the landscape value of an area, existing information on landscape value derived from LANDMAP should be mapped. A concentration of Outstanding and High evaluation scores in a given area can be significant. However it does not mean a blanket ban on development; it is the underlying information from which the evaluations are derived that must be judged in order to arrive at an assessment of sensitivity based on value.

judgement of two qualified and experienced landscape architects, based on both desk top studies and field surveys. The overall evaluations of sensitivity are not based on any mathematical formula (for example – assigning scores and adding up the lower, moderate and higher scores and averaging them out) there is also recognition that sensitivity does vary locally within the landscape units and that the overall evaluation represents the general sensitivity across the landscape unit to reflect the strategic nature of this study.

Table 1.3: Criteria for Assessing Landscape and Visual Sensitivity to Wind Energy Development

Landscape Criteria
<p>Scale: This is one of the most important characteristics affecting where turbines may be more readily accommodated and also in influencing the scale of development that may be appropriate. A large scale expansive landscape is typically less sensitive to large wind energy developments than small scale intimate landscapes. A large height differential between valley floors and hill tops may help reduce sensitivity by lessening the perceived size of the turbines. In both instances care has to be taken to ensure that the apparent scale of the landform is not diminished by the size of the turbines.</p>
<p>Landform: Landforms that are smooth, regular and convex, or flat and uniform are likely to be less sensitive to wind energy development than complex varied landforms with distinctive landmarks where visible wind turbines may have a detrimental effect on the appearance and experience of the landform. Complex landforms may provide some screening opportunities for turbines but care has to be taken not to dominate intricate landforms.</p>
<p>Landcover Pattern: This criterion is not concerned with the particular material sensitivity of a type of landcover, but with the impression of landcover pattern. Simple uncluttered landscapes with sweeping lines and a consistent groundcover are likely to be less sensitive to wind energy development. Areas of commercial forestry and intensive farming may also indicate lower sensitivity. Complex landscapes comprising a variety or mosaic of characteristic or sensitive landscape features such as trees and woodlands, irregular field patterns and hedgerows are typically more vulnerable to change arising from wind energy development. Tree and woodland cover offers the potential to screen small scale turbines in certain situations (particularly in combination with undulating landform) although care must be taken not to allow turbines to detract from or dominate locally distinctive features such as tree knolls, ancient specimen trees or avenue trees.</p>
<p>Built Environment: This criterion is concerned with the presence of built structures and human intervention present in the landscape. The presence of modern structures such as wind turbines, transport, utility or communications infrastructure or industrial development may reduce landscape sensitivity to wind energy development, as may the visible influences of quarrying or landfill. The frequency of built form and human intervention in more contemporary densely settled areas may also indicate a reduced sensitivity to the introduction of wind turbines. However, in all of these cases care must be taken to avoid further visual conflict and cumulative change through the introduction of additional vertical structures. In settled areas there is a balance to be struck between visual effects and effects on landscape character. Areas which are more sparsely settled and/or characterised by a more established, traditional or historic built character, including historic structures are likely to be more sensitive to wind energy development.</p>
Visual Criteria
<p>Skylines and Settings: Landscapes with distinctive ridges or skylines are likely to be more sensitive to wind energy development than skylines that are less prominent or have been affected by existing contemporary structures such as electricity or communications infrastructure. The presence of distinctive or historic landscape features such as hilltop monuments, church spires or vernacular villages' increases sensitivity.</p>
<p>Movement: Turbines can draw the eye by introducing movement into the landscape. Landscapes that are already affected by movement are therefore likely to be less sensitive, whilst landscapes which are valued for their tranquillity will be more sensitive.</p>

Visibility, Key Views, Vistas: This criterion is concerned with views and visual receptors which influence visual sensitivity. The likelihood of turbines being highly visible in the landscape depends on the scale of the development and landform in which it is sited and on the screening opportunities of landcover, especially buildings, trees and woodlands. Landscapes which are visually contained with limited inward and outward views are likely to be less sensitive than open landscapes with extensive inward and outward views. The availability of views of these landscapes from neighbouring areas will also influence sensitivity. Landscapes which are experienced from tourist routes, national or regional trails and other recognised visitor locations are more sensitive to wind energy development. Similarly, close proximity to settlement which increases the chance of adverse effects on visual amenity may increase an area's sensitivity.

Typical Receptors: The numbers and types of people likely to experience a change in a view due to potential development influences visual sensitivity. The most sensitive receptors are likely to be residents, communities, people engaged in outdoor recreation where landscape is part of the experience, visitors to landscape focussed natural and built heritage assets, key amenity and recreational attractions and users of scenic routes. Each location brings with it certain expectations. Transport routes are generally considered less sensitive receptors, however single and sequential views from strategic road and rail routes are important to the perception of the landscape.

Intervisibility/Associations with Adjacent Landscapes: Landscape units which have limited intervisibility (inward and outward views to and from adjoining landscapes) are likely to be less sensitive than units which have extensive views. Where adjoining landscapes are intervisible and are of higher sensitivity then this increases the sensitivity of a landscape unit. Where the adjoining landscapes are not intervisible or are of a lower sensitivity, then sensitivity is likely to be lower. The setting of designated landscapes may be more sensitive where the setting contributes to the overall scenic quality of the designated landscape.

Views to and from Important Landscape and Cultural Heritage Features: Landscapes which are important to the views in and out and setting of key designated landscape and cultural heritage areas / focal features (such as AONBs, National Parks, World Heritage Sites, Historic Landscapes, Registered Parks and Gardens, Areas of Outstanding Beauty, National Trails and Cycle Networks and key/focal designated visitor attractions such as historic hillforts/castles/church spires) are likely to be more sensitive.

Aesthetic, Perceptual and Experiential Criteria

Scenic Quality and Character: Areas of attractive scenery, character, quality, integrity, strong sense of place and local distinctiveness will typically be more sensitive to wind energy development than less scenic areas. This includes landscapes designated for their natural beauty (see below) but also areas of undesignated landscape, including areas which are locally distinctive or have strong character.

Remoteness/Tranquillity: Areas which are relatively remote and have a wild and/or tranquil character and lack built development increase the sensitivity of the landscape to wind energy development. Turbine development adjacent to such areas can undermine the special qualities and setting of such areas, although if this is associated with and in scale with other forms of development such as farms, the effects may be lessened.

Value Criteria





Landscape Value: Areas which are predominantly recognised by Outstanding or High LANDMAP evaluations are likely to be more highly sensitive to wind energy development. In addition, landscapes that are formally designated for their scenic, designed or recreational value are likely to be more sensitive to wind energy development than undesignated areas. The degree of sensitivity depends on the nature of the proposal and the landscape qualities which are valued by the designation. The hierarchy of the designation has a bearing on sensitivity of a landscape. Internationally and nationally designated landscapes such as National Parks, World Heritage Sites and AONBs are considered to be very sensitive, closely followed by regional and local designations such as AOBs and SLAs.





Landscape value is formally recognised by designation, but value can also be informed by published documentation such as tourist leaflets; art and literature. Heritage Coasts are not protected by designation but are considered to be of national value.

Historic Value: Areas which are predominantly recognised by Outstanding or High LANDMAP evaluations are likely to be more highly sensitive to wind energy development. Areas designated for their international, national or regional historic or cultural heritage value such as World Heritage Sites are likely to be more sensitive to wind energy development especially if the character or perception of the landscape in which they are located is likely to be significantly altered. Registered Historic Landscapes and Registered Parks and Gardens are not protected by designation but are considered to be of national value.

Table 1.4: Source of Data Relevant to the Sensitivity Criteria

Characteristic	LANDMAP Data Source (other data sources will be used)	Some Indicators of Lower Sensitivity to Wind Energy Development	↔	Some Indicators of Higher Sensitivity to Wind Energy Development
Landscape Criteria				
Scale	VS8: Scale	<ul style="list-style-type: none"> Vast or large scale landscapes 	↔	<ul style="list-style-type: none"> Intimate and small scale landscapes Small scale field systems
Landform	VS4: Topographic Form	<ul style="list-style-type: none"> Simple featureless landform Convex landform Plateaux Flat and uniform landform 	↔	<ul style="list-style-type: none"> Rugged hills Irregular or complex landform Narrow valleys and ridges
Landcover Pattern	VS3: Landcover VS5: Landcover Pattern	<ul style="list-style-type: none"> Developed land, derelict or waste ground Open upland pasture Upland moorland Forestry Lowland farmland 	↔	<ul style="list-style-type: none"> Rocky uplands Open hillsides Field pattern/Mosaic Valleys Water
Built Environment	VS6: Settlement Pattern VS27: Condition	<ul style="list-style-type: none"> Contemporary structures (transport/communications/utility infrastructure/wind turbines) Modern day industrial development Major infrastructure/modern settlements 	↔	<ul style="list-style-type: none"> Infrequent/no residential built form Sparsely settled/unpopulated areas Presence of, historic buildings/structures or settlement
Visual Criteria				
Skylines & Settings	Topographic data	<ul style="list-style-type: none"> Less prominent skylines Existing vertical features (modern development) 	↔	<ul style="list-style-type: none"> Prominent skylines Distinctive skylines Uninterrupted skylines

		<ul style="list-style-type: none"> Existing built development 	<ul style="list-style-type: none"> Presence of distinctive/sensitive landscape features
Movement	VS18: Level of Human Access	<ul style="list-style-type: none"> Constant or frequent access Busy 	 <ul style="list-style-type: none"> Rare or infrequent access
Visibility, Key Views, Vistas and Typical Receptors (both within and outside of each landscape unit)	VS9: Enclosure	<ul style="list-style-type: none"> Landscapes which are confined, contained or enclosed with few outward views Sparsely populated or inaccessible 	 <ul style="list-style-type: none"> Landscapes which are open or exposed with far reaching views Views from scenic routes, well-known landmarks, or views from visitor viewpoints Densely populated
Intervisibility/associations with Adjacent Landscapes		<ul style="list-style-type: none"> Limited views into or out of landscape Neighbouring landscapes of lower sensitivity Contributes little to wider landscape Large scale simple backdrops Weak association with adjacent landscape units 	 <ul style="list-style-type: none"> Views into or out, especially from high ground Neighbouring landscapes of higher sensitivity, especially internationally and nationally designated landscapes Contributes to wider landscape Distinctive or complex backdrops Landscapes important to the settings/approaches/gateways to designated landscapes Strong association with adjacent landscape units
Views to and from Important Landscape and Cultural Heritage Features (both within and outside of each landscape unit)	National Park, Area of Outstanding Natural Beauty, World Heritage Site, Area of Outstanding Beauty, Heritage Coast, National Trails and National Cycle Routes, Registered Historic Landscape, Registered Park and Garden (for the purpose of this strategic	<ul style="list-style-type: none"> Weak association with landscape Little intervisibility between sites 	 <ul style="list-style-type: none"> Strong association with landscape Intervisibility between sites

	study Listed Buildings and SAMs are considered only if valued as a key visitor attraction or focal point).	
Aesthetic, Perceptual and Experiential Criteria		
Scenic Quality and Character	VS46: Scenic Quality VS47: Integrity VS48: Character Sense of Place	<ul style="list-style-type: none"> Low to Moderate LANDMAP evaluation Weak sense of place  <ul style="list-style-type: none"> Outstanding or High LANDMAP evaluation Strong sense of place
Remoteness/Tranquillity	VS24: Perceptual and Sensory Qualities	<ul style="list-style-type: none"> Noisy, threatening, unattractive  <ul style="list-style-type: none"> Attractive, settled, remote, tranquil, safe, wild
Landscape Value	Designated site/nationally valued site/regionally valued site or its setting VS50: Overall Evaluation VS49: Rarity LH45: Overall Evaluation LH42: Connectivity / Cohesion GL31: Rarity / Uniqueness GL33: Overall Evaluation	<ul style="list-style-type: none"> No designated sites Low to Moderate LANDMAP evaluation  <ul style="list-style-type: none"> National Park, AONB, Heritage Coast, AOB, SLA Outstanding or High LANDMAP evaluation
Historic Value	Designated site/nationally valued site/regionally valued site or its setting HL38: Rarity HL35: Integrity HL40: Overall Evaluation	<ul style="list-style-type: none"> No designated sites Low to Moderate LANDMAP evaluation  <ul style="list-style-type: none"> World Heritage Site, Registered Historic Landscape, Registered Park and Garden, visually prominent Scheduled Ancient Monuments such as hillforts and castles frequently visited by tourists Outstanding or High LANDMAP evaluation

3.18 Stage Two – Assessing Landscape and Visual Sensitivity

This part of the study involved desk and field survey, the latter being undertaken both in the early stages of the study (familiarisation) and later to help verify and refine the desk based sensitivity assessments.

3.19 Baseline Assessment

The first step in the process was to:

- Identify and evaluate the existing landscape of the study area, including its distinctive characteristics, existing landscape designations and effects of existing wind energy developments.
- Identify and evaluate the existing views and visual amenity of the study area.

The following information was reviewed as a desk exercise:

- Ordnance Survey maps and aerial photography.
- Designated and nationally/regionally valued landscapes, including the Clwydian Range and Dee Valley AONB, Cynwyd and Llandrillo AOB, SLAs, Registered Historic Landscapes, Registered Parks and Gardens.
- Information from LANDMAP datasets (all five Aspect Areas).
- Natural and Built Heritage GIS mapping data.
- Existing landscape character assessments.
- Registered Historic Landscapes, including Dyffryn Clwyd (The Vale of Clwyd), Pen Isaf Dyffryn Conwy (Lower Conwy Valley), Creuddyn a Chonwy (Creuddyn and Conwy), Gogledd Arllechwedd (North Arllechwedd), Y Berwyn (Berwyn), Pen Isaf Dyffryn Elwy (Lower Elwy Valley), Mynydd Hiraethog (Denbigh Moors), Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg), Comin Treffynnon a Mynydd Helygain (Hollywell Common & Halkyn Mountain), Pontcysyllte Aqueduct and Canal World Heritage Site, Registered Parks and Gardens and visually prominent Scheduled Monuments.
- Existing wind energy developments within the study area.

The findings of the desk survey, which were subsequently refined following field survey work, are presented in Section 3. They include an overview of the key landscape characteristics of the study area, a description of existing and consented wind energy developments and their effect on the landscape and comments on any issues of existing and potential cumulative effects.

3.20 Assessing the Sensitivity of Landscape Units (LUs)

This part of the study required the preparation of sensitivity assessment sheets for each landscape unit, as presented in Section 4.

The key features of each landscape unit are described before being evaluated against the sensitivity criteria described in Table 1.3 and Table 1.4 using a three point grading: **higher, medium or lower** (described in Table 1.2, Section 1). Those characteristics which are considered particularly susceptible to development are highlighted. Finally a judgement on the overall sensitivity of each landscape unit to change associated with wind energy development is made, based on a more detailed five point sensitivity scale: **low; medium; medium-high; high; and very high**.

Appendix 6 includes a CD containing 21 plans which represent data taken from LANDMAP overlaid onto the study area (as listed in Table 1.4). This information was used to make initial judgements on sensitivity which was then backed up and or moderated following further desk top studies and the site visits.

3.21 Field Survey

On completion of the draft assessment, field surveys were undertaken to help test and refine the findings and provide the following information:

- Better understanding of the general characteristics of the landscape including the effects of existing wind energy developments and any forces for change which it may be experiencing.

- Analysis of the landscape, in terms of the characteristics and qualities which affect its sensitivity to wind energy development, including the special qualities of any designations which apply.
- Appreciation of the variations within individual landscape units and more detailed understanding of scenic quality and landscape condition.
- Appreciation of the nature of any visual amenity issues.
- Understanding of the degree of intervisibility, both between landscape units within Conwy and Denbighshire and with landscapes in neighbouring authority areas.
- Important views to and from each landscape unit were recorded, identifying distinctive features such as iconic viewpoints, views to and from designated landscapes, skylines or uninterrupted horizons (both land and sea). It is important to understand how the landscape is experienced both from fixed viewpoints and sequentially as people travel through an area.
- Understanding of how individual characteristics either alone or in combination make one landscape more sensitive than another. This helped identify any specific strategic sensitivity / capacity constraints which may reduce the potential of particular landscape areas to accommodate wind energy development.

3.22 The fieldwork also briefly considered the likely implications of the different wind energy development typologies in relation to different aspects of the landscape. The acceptability of the different wind energy development typologies varies across all landscape units. In small scale sheltered valleys for example, there are clear technical constraints to large and medium typologies. Similarly, areas with significant landscape sensitivities to large scale development such as the Clwydian Range and Dee Valley AONB, may only be suitable for single very small turbines.

3.23 Based on the results of the field surveys, the draft evaluations of landscape unit sensitivity were refined and the final sensitivity assessment and accompanying summary tables for each landscape unit prepared.

3.24 Combining Landscape Units into Landscape Strategy Areas

The final step in Stage Two involved combining the landscape units into larger landscape strategy areas. This was informed by the sensitivity assessments, supplemented by an analysis of intervisibility, key visual receptors, topography (including ridgelines and water-sheds based on LANDMAP information), Ordnance Survey and GIS data, landscape character, observations made during field studies and discussions with the Steering Group.

3.25 A judgement was then made on the overall sensitivity of each of these strategy areas based on an assessment of their constituent landscape units. To allow for more refined judgement, the overall sensitivity of strategy areas was judged on a five point scale - **low, medium, medium-high, high** and **very high**. As before, these levels are based on professional judgement rather than a mathematical scoring system or matrix analysis as discussed previously.

3.26 Stage Three – Assigning Landscape Strategies and Developing Siting and Design Guidance

This stage in the study applied professional judgement to determine the most appropriate landscape objective(s) and the relative capacity of each of the identified strategy areas by combining the landscape and visual sensitivity evaluation with issues of intervisibility and potential cumulative effects that may arise should further development take place.

3.27 Wind Energy Development Typologies

Landscape capacity for wind energy development reflects not only the presence of different landscape characteristics and values, but also the grouping and height of the turbines in relation to the scale of the landscape. To help evaluate this, a series of generic wind energy development typologies based on past wind energy development applications and anticipated future trends, was identified.. The almost endless possible permutations of turbine numbers and heights made the choice of an appropriate range of typologies difficult. There was, however, a clear need to establish appropriate typologies to enable the provision of meaningful guidance, including guidance on single and pairs of turbines below 60m to blade tip, which are becoming increasingly common in planning applications and enquiries.

3.28 The five categories (**micro**, **small**, **medium**, **large**, and **very large**) which were identified and agreed with the Steering Group are presented in Table 1.5 overleaf and illustrated in Figure 9 in comparison to other well-known local landmarks to provide a sense of scale.

A proposal will normally be considered as falling within the category that represents the biggest type for which it qualifies.

Table 1.5: Wind Energy Development Typologies

Wind Energy Typology	Indicative Output (broad output category ¹²)	Supplementary Criteria (meets one or more of the criteria)(determines whether this typology applies or whether a larger one does)
Micro	under 50kW	Single or twin turbine applications Turbine up to 20m to blade tip
Small	under 5MW	Turbines up to 3 in number Turbines up to 50m to blade tip Viewed as a small group
Medium	over 5MW and up to 25MW	Turbines up to 9 in number Turbines up to 80 metres to blade tip Viewed as a large group
Large	over 25MW	Turbines over and including 10 in number Turbines up to 80 metres to blade tip Viewed as a large scale wind farm
Very Large	Over 25MW	Turbines over and including 10 in number Turbines over 110 metres to blade tip Viewed as a very large scale wind farm
Strategic	Over 50MW	Turbines over 15 in number Turbines over 100 metres to blade tip Viewed as a nationally strategic Located within the SSA Applications for which are determined by National Infrastructure Planning delivered through PINS.

3.29 Applications and enquiries for smaller to medium scale wind energy projects are applicable to the wider study area. Here, turbine height (rather than just the number of turbines) and how this relates to landscape scale and landform, is a key consideration as well as localised issues including settlement separation, views from settlement edges and routes. Applications and enquiries for **large** and **very large** scale wind farm developments are most commonly associated with TAN 8 SSA A. The **large** and **very large** typologies have been included within Table 1.5 above for reference; however, the capacities for these categories are not dealt with as part of this study, as developments of this scale are not considered to be appropriate outside the TAN 8 Area.

3.30 Whilst output is used to define different scales of wind energy development in the Councils' emerging Local Development Plans, there are a number of specific conditions (in relation to height, rotor diameter or number of turbines), which influence the landscape and visual effect of a proposal and which can therefore change the categorisation of a proposal regardless of output. Indicative

¹² These values are for guidance only and should not be taken as a criterion for determining typology. Efficiency and energy outputs are continually subject to advances in technology and operational efficiency, therefore it is recognised that these values are likely to change.

outputs are presented in Table 1.5 for reference; however, this information should not be used to determine which typology applies to proposed wind energy developments.

3.31 Landscape Objective + Indicative Overall Capacity = Landscape Strategy

Landscape Objectives

The Design Commission for Wales (DCfW) in its 2012 document, *Designing Wind Farms in Wales*, applied Scottish Natural Heritage (SNH) guidance to the development of its own guidance relating to the development of wind farms. In this document three landscape objectives are discussed in relation to 'wind farm' developments as follows:

- **Landscape Protection:** a 'landscape with no wind farms or infrequent wind farms'.
- **Landscape Accommodation:** a 'landscape with occasional wind farms'.
- **Landscape Change:** a 'landscape with wind farms'.

3.32 This landscape sensitivity and capacity assessment for wind energy development was commissioned to identify the sensitivity of the landscapes of Conwy and Denbighshire, specifically in relation to 'wind energy' development as opposed to 'wind farm' development. The above DCfW guidance has therefore been slightly modified and an extra objective added to reflect the scales of wind energy development which are being addressed in this report. It is important to note that these should not be seen as rigidly prescriptive objectives.

Objective 1	
Landscape Protection	<i>Typically no wind energy development or very infrequent smaller scale wind energy development</i>
<p>Landscape protection is applicable to landscapes where the conservation of resource and visual experience of the landscape has been assessed to be of very high importance. It aims to retain or reinforce the present character, quality and integrity of the landscape.</p> <p>It is likely to be difficult to accommodate anything more than 'micro scale' wind energy development in such areas. Micro scale development may be acceptable where this relates well to the existing built environment. Whilst smaller scale wind energy development may be appropriate in certain circumstances within areas where landscape protection is the primary objective, such opportunities are likely to be very limited due to the landscape and visual sensitivities of these areas and is dependent on how well the scale and design of development relates to the existing landscape and visual constraints.</p> <p>With tall structures such as turbines, intervisibility between strategy areas must be carefully considered to avoid adverse landscape and visual effects arising from multiple developments.</p> <p>Where a landscape designation is in place, it is important to understand how wind energy development could affect the special qualities for which it is designated.</p> <p>PPW (Edition 5, 2012) aims to maintain the integrity and quality of the landscape within the National Parks, Area of Outstanding Natural Beauty (AONB), Natura 2000 Habitat Directive Sites, National Nature Reserves and World Heritage Sites. In these areas, 'landscape protection' will be the most appropriate landscape objective, reflecting the high degree of protection afforded these designated areas. As such they are all excluded from TAN 8 SSAs.</p>	
Objective 2	
Landscape Accommodation	<i>Typically a landscape with occasional wind energy developments</i>
<p>Landscape accommodation is applicable to landscapes where the conservation of landscape character and visual amenity has been assessed to be of moderate to high importance.</p>	

This objective aims to retain the overall character, quality and integrity of the landscape, whilst accepting that occasional small to medium scale developments may be allowed. Such development may have an effect on the local landscape but should not bring about large scale changes in character.

Objective 3

Landscape Change	<i>Typically a landscape with relatively frequent wind energy developments</i>
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Landscape change is applicable to landscapes where it is accepted that the landscape character can accommodate some change as a result of wind energy development.

The landscape change objective accepts that medium to larger scale developments may be allowed which may have an effect both locally and across a wider area. In such areas it is important to ensure that turbines do not become a major feature of the landscape and that they fit in with the scale and character of the landscape.

Objective 4

New Landscape	<i>Typically a landscape with a notable amount of wind energy developments - a wind farm landscape</i>
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Within (and immediately adjacent) to the SSAs, the implicit objective is to accept a significant change in landscape character resulting from wind turbine development located within the SSA. Where it is accepted that the area is one whose landscape character may be allowed to change, DCfW considers that good landscape design principles still need to be followed to ensure that the development is appropriate to the scale and character of the landscape.

3.33 Each landscape strategy area is assigned a landscape objective, or in some cases several landscape objectives, to assist the Councils' decision making on new applications. These landscape objectives then form the basis for recommendations on the wind energy development typologies which may be appropriate in each of the strategy areas.

3.34 The relationship or thresholds of landscape change that may arise from development vary depending on the landscape and the nature of the potential development. It is assumed however that there is typically higher capacity for wind energy development in areas of lower sensitivity where landscape change is considered more acceptable. Conversely areas of higher sensitivity, particularly those which are designated are likely to have very limited capacity. In addition, larger strategy areas may be able to accommodate a greater number of developments.



3.35 Indicative Landscape Capacity

An overall indicative landscape capacity has been derived for each landscape strategy area by considering the following:

- Overall landscape and visual sensitivity to wind energy development which determines the objective for the area.
- The range of visual experiences; how the landscapes of the area are seen and contribute to strategic and local issues.
- Operational and consented wind energy developments within and adjacent to each landscape strategy area.
- The size of each visual compartment. There may be scope for a greater number of developments within large strategy areas before a capacity threshold is reached.

3.36 Whilst the indicative landscape capacity helps to identify the type of developments which could be potentially accommodated, this does not in itself suggest that planning applications for wind energy development in these areas will be appropriate. Other variables such as environmental designations and technical constraints, the site specific siting, layout and design and need for the development are beyond the scope of this assessment and will need to be considered on a case by case basis.

The general relationship between landscape sensitivity, landscape objectives and capacity is illustrated below.

Landscape Sensitivity	Landscape Objective	Landscape Capacity	Threshold
Higher Sensitivity 	Landscape Protection Landscape Accommodation	Limited Capacity 	<i>No wind energy development or very infrequent smaller scale development A landscape with occasional wind energy development</i>
	Landscape Change		<i>Typically a landscape with relatively frequent wind energy developments</i>
Lower Sensitivity	New Landscape	Highest Capacity	<i>Typically a landscape with a number of wind energy developments essentially a wind farm landscape</i>

3.37 Siting and Design Guidance in Relation to Potential Landscape and visual Impacts of Wind Energy Development

Guidance has been formulated for each strategy area to help direct development to the most appropriate locations in landscape and visual terms. This guidance broadly indicates what type(s) of wind energy development (if any) may be considered appropriate and highlights specific design and siting issues. Any specific constraints which may reduce the potential of particular areas to accommodate wind energy development are noted as are any potential cumulative and cross boundary effects of wind energy development.

A number of more general guidance notes have also been developed to be read alongside this specific guidance; these are found in Section 6.

4. SECTION 3: BASELINE LANDSCAPE OF CONWY

4.1 LANDSCAPE CHARACTER BASELINE

Key Landscape Characteristics of Conwy & Denbighshire

Conwy and Denbighshire comprise a diverse mix of landscapes many of which are highly valued for their great natural beauty and tranquillity. These landscapes range from remote and wild uplands and moorlands to narrow steep sided valleys, wide river floodplains, gently undulating pastoral lowlands and dramatic coastlines. Busy coastal resort towns contrast markedly with the highly rural areas inland. Topography plans within Appendix 5 illustrate the diverse landform of the study area.

- 4.2 There is no consistent/current landscape character assessment which covers both Conwy and Denbighshire. The most recent assessment is the Denbighshire Landscape Strategy¹³. This covers just over half of the study area and identifies and provides landscape management guidelines for 45 landscape character areas. Because there wasn't a comparable assessment for Conwy, these character areas were not considered an appropriate mapping base for this study.

4.3 Clwyd Landscape Assessment 1995 – Broad Landscape Character

The landscape character assessment of the former county of Clwyd has therefore been used to provide the mapping base for this study as described in the methodology (Section 2). Figure 1 illustrates the Clwyd Landscape Character Types which cover the study area. Many of these character types broadly align with the character areas which are detailed in the Denbighshire Landscape Strategy.

- 4.4 The objective of the Clwyd Landscape Assessment was to identify and describe the distinctive characteristics and qualities of the varied landscapes which made up the former county of Clwyd. The assessment identified four main landscape types across Clwyd:
- **Lowland areas** - generally rolling farmland with extensive tree cover and a historic and nucleated settlement pattern.
 - **Lower Hills & Valleys** - a mosaic of low hills and narrow valleys with abundant woodland.
 - **Limestone Country** - a range of landscapes dominated or influenced by limestone.
 - **Marginal uplands** - a series of upland fringe landscapes dominated by high hills, numerous valleys and extensive moorland with an overall strong rural character and sparse population.
- Much of the geographical area covered by this study is identified as marginal upland.

4.5 A Countryside Strategy for Conwy 1998-2003 – Broad Landscape Character

A Countryside Strategy for Conwy produced in 1998 set out the Council's aims for the management of Conwy's countryside. The strategy refers to the Clwyd Landscape Assessment and also subdivides the county into four broad landscape character types, as follows:

- Coastal Lowlands
- Valleys
- Limestone Country
- Uplands

4.6 Mapping Base for the Conwy and Denbighshire Landscape Sensitivity and Capacity Study

Figure 2 identifies the mapping base for this study, together with the four broad landscape character types which cover the study area as discussed above. These broad landscape character types are an amalgamation of those identified in the Clwyd Landscape Assessment and A Countryside Strategy for Conwy.

¹³ Denbighshire County Council (2003) Denbighshire Landscape Strategy

4.7 Protected Landscapes

Planning Policy Wales sets out the targets for renewable energy development whilst also establishing the Government's objectives for conservation and improvement of natural heritage (as outlined in both Section 1 and Appendix 2).

- 4.8 The landscapes of Conwy and Denbighshire are protected by a significant proportion of both statutory and non-statutory landscape related designations.

The study area is bounded by two nationally important landscapes; Snowdonia National Park to the west and south; and the Clwydian Range and Dee Valley AONB to the east (most of which is included within the study area).

These landscape designations together with cultural heritage and other environmental constraints are illustrated on Figure 3 and the key designations related to landscape character and value are outlined below.

- 4.9 **Conwy Castle (Castles and Town Walls of King Edward in Gwynedd) World Heritage Site** is located to the north of Conwy County on the west bank of the river Conwy. The extensive and detailed contemporary technical, social, and economic documentation of the castle, and the survival of adjacent fortified town at Conwy, makes it one of the major references of medieval history¹⁴

- 4.10 There is no detailed guidance regarding the siting of proposed wind energy development in relation to this World Heritage Site or its essential setting, however Part 2 of The Castles and Town Walls of Edward I in Gwynedd, World Heritage Site Management Plan¹⁵ discusses the importance of significant/historic views into and out of each monument in the World Heritage Site, stating that inappropriate development would obstruct or interfere with these views, which generally extend beyond the areas of essential setting. This is particularly relevant to proposed wind energy developments.

4.11 National Parks

Although excluded from the study area both Conwy and Denbighshire have sections of boundary which adjoin **Snowdonia National Park**. The Park is the largest of three National Parks in Wales and attracts thousands of visitors each year. It is administered by its own National Park Authority whose aim is to:

- Conserve and enhance the natural beauty, wildlife and cultural heritage of the area.
- Promote opportunities to understand and enjoy its special qualities.
- Foster the economic and social wellbeing of its communities.

4.12 Open Access Land

In May 2005 the Countryside and Rights of Way Act (CROW) came into force, clearly identifying open access land (open country and/or common land) in Wales. One fifth of Wales is mapped as 'access land' where the public have a right of access on foot.¹⁶ A large proportion of land within Conwy and Denbighshire is mapped as Open Access Land where the public have a right to access and enjoy the countryside.

It is recognised that wind energy development may occur in open country and on common land. However each wind turbine would be regarded as a building, therefore the turbine and the developed land immediately around it would be excepted land under Schedule 1 of the CROW Act. Depending on how close the turbines are, the public may be able to walk between the turbines.

4.13 Registered Historic Landscapes (Wales)

The Historic Landscapes Register aims to help planners and developers introduce changes and new developments in ways that will cause the least harm to the historic character of the land.

¹⁴ <http://whc.unesco.org/en/decisions/1540>

¹⁵ <http://cadw.wales.gov.uk/historicenvironment/protection/worldheritage/cstlsedward1/?lang=en>

¹⁶ <http://www.ccg.gov.uk/enjoying-the-country/open-access-land.aspx>

Inclusion in the Register does not confer statutory protection – but it does help highlight the cultural heritage importance of some parts of the landscape.

Conwy and Denbighshire contain a cluster of Registered Historic Landscapes:

- Pen Isaf Dyffryn Conwy (**Lower Conwy Valley**) - *'A topographically diverse landscape, straddling the lower Conwy valley and adjacent uplands on the north eastern flanks of the Carneddau ridge in north Snowdonia, containing extensive and well-preserved relict evidence of land use, communications and defence from the prehistoric period onward'.*
- Creuddyn a Chonwy (**Creuddyn & Conwy**) - *'This mainly coastal landscape, comprising the Great and Little Orme's Heads and the lower part of the Conwy Estuary and its hinterland in north Snowdonia, contains evidence of highly diverse land use and settlement from the early prehistoric period to the present'.*
- Gogledd Arllechwedd (**North Arllechwedd**) - *'A dissected, mainly upland, area situated on the northern flanks of the Carneddau ridge in north Snowdonia, containing well-preserved relict evidence of recurrent land use and settlement from the prehistoric to medieval and later periods'.*
- Pen Isaf Dyffryn Elwy (**Lower Elwy Valley**) - *'A steeply-sided gorge and part of a narrow river valley to the west of the Vale of Clwyd, with a group of caves containing internationally significant Quaternary geological and archaeological deposits, including evidence for, and human remains belonging to, the earliest occupation of Wales a quarter of a million years ago'.*
- Mynydd Hiraethog (**Denbigh Moors**) - *'A visually striking and extensive rolling moorland landscape comprising the central and western part of the Denbigh Moors situated between the major river valleys of the Clwyd and Conwy in North Wales. The area represents a large, and in Wales an increasingly rare, survival of an uninterrupted extent of heather moorland, deliberately managed and maintained as a grouse moor and a shooting estate in the early part of the 20th century, the greater part overlying archaeological evidence of successive periods of land use from the prehistoric, medieval and later periods'.*

4.14 **Registered Parks and Gardens**

A large number of Registered Parks and Gardens of Special Historic Interest in Wales are found within the study area. Although not protected by statutory designation they are nationally valued as they form an important and integral part of the historic and cultural fabric of Wales.

4.15 **Heritage Coast**

The area around the Great Orme near Llandudno is nationally valued and as such 'defined' as a **Heritage Coast** which is administered by Natural Resources Wales (NRW) (formerly the Countryside Council for Wales). This 4 mile stretch of coastline wraps around Orme Head, which defines the eastern shore of Conwy Bay. The aim of this non-statutory 'definition' is to conserve the natural beauty of the coast and improve accessibility for visitors.

4.16 **Areas of Outstanding Beauty**

The Cynwyd and Llandrillo AOB (formerly Berwyn Mountains AOB revised March 2013) is a non-statutory designation designed to protect the Berwyn Mountains, in recognition of its nationally important landscape value.

4.17 **Conwy Special Landscape Areas**

A number of areas within Conwy are designated as Special Landscape Areas (SLAs) within the revised deposit LDP:

- SLA 1 – Y Gogarth a Phenrhyn Creuddyn (Great Orme and Creuddyn Peninsular)
- SLA 2 – Rhyd y Foel i Abergele (Rhyd Y Foel to Abergele)
- SLA 3 – Dyffrynnoed Elwy ac Aled (Elwy and Aled Valleys)
- SLA 4 – Hiraethog
- SLA 5 – Cerrigydrudion a choridor yr A5 (Cerrigydrudion and the A5 corridor)
- SLA 6 – Dyffryn Conwy (Conwy Valley)

The purpose of this regional designation is to ensure that the character of these areas is not altered by inappropriate forms of development and that features which contribute to local distinctiveness are conserved.

4.18 **Operational and Consented Wind Energy Developments**

Figure 4 and accompanying Table A4.1 (within Appendix 4) identify and illustrate the wind energy development baseline for this study as at the end of March 2013. Operational and consented wind energy developments are shown within the study area including the 10 km buffer. The data used to compile the table and Figure 4, was provided by the Councils and neighbouring authorities.

Table A4.2 (within Appendix 4) also includes information about existing and proposed offshore wind energy developments.

Appendix 4 also includes Table A4.3 (Other Wind Energy Development Proposals) and Figure A4.1 which represent all operational and consented wind energy developments together with all other applications for wind energy developments (including those refused) within the study area as at the end of March 2013.

- 4.19 The operational wind energy developments were considered as part of the baseline for the sensitivity assessments of the landscape units; however, for the purposes of the evaluations of the landscape strategy areas, all consented wind energy developments were assumed to have been built and as such were considered in the baseline together with operational developments.
- 4.20 The highest concentrations of wind energy developments within the study area are found in and around TAN 8 SSA A. There are three notable areas of wind energy developments outside SSA A; these are as follows:
- The first is a small area to the south of Cerrigydrudion (refer to Figure 4 and Appendix 4, wind energy development references E3, E5, E7, E8 and E29)
 - The second area is in and around Moel Maelogen wind farm to the east of Llanrwst (refer to Figure 4 and Appendix 4, wind energy development references E4, E6, E15, E22 and E23)
 - The third area is just outside the study within the 10 km buffer in Gwynedd. This is the Braich Ddu development (refer to Figure 4 and Appendix 4, wind energy development reference E62).
- 4.21 In some areas (in particular the SSA A), the presence of existing wind energy developments somewhat reduces the sensitivity of the landscape to that particular type of development. This is because this type of modern development is already a component of the landscape in those particular areas. However, the presence of existing wind energy developments does not automatically suggest that there is further capacity for more developments of this nature.
- 4.22 **It is recommended that the Councils maintain a 'live' register of wind energy development applications and consents in the future; similar to the table within Appendix 4 and Figure A4.1. This information will be invaluable in assisting the decision making process regarding applications for new wind energy developments when considering the identified indicative capacities of each of the landscape strategy areas.**

4.23 **Comment on Potential Cumulative Visual Effects**

Cumulative visual effects can occur as a result of further wind energy developments which may be viewed in sequence from along sensitive routes, or, when a receptor is able to see two or more wind energy developments from any one viewpoint. Taking into consideration all of the operational and consented wind energy developments within the study area there are a number of key receptors for which the potential for cumulative effects has been noted, as follows:

- Effects on views from residential properties which have views of existing wind energy developments (in particular to the south of the study area around SSA A)
- Effects on views from Snowdonia National Park
- Effects on views from the Clwydian Range and Dee Valley AONB
- Effects on views from Offa's Dyke Path national trail

- Effects on views from promoted public rights of way such as the Clwydian Way and Dyserth Cycleway
- Effects on views from the A5 historic route
- Effects on views from the A5 and North Wales Coast Railway
- Effect on views from Registered Historic Landscapes, Parks and Gardens, World Heritage Sites, and other areas of acknowledged cultural heritage importance

References regarding potential cumulative visual effects and guidance on how to avoid these are made, where relevant, within the landscape strategy area assessments.

4.24 Comment on Potential Cumulative Landscape Effects

Cumulative landscape effects can impact on either the physical fabric or character of the landscape, or any special values attached to it.¹⁷ There are a large amount of designated and highly valued landscapes within and around the study area. There is therefore potential for additional wind energy developments to cause cumulative landscape effects on these landscapes. The main issues regarding cumulative landscape effects are linked to the following key designations / valued landscapes:

- Snowdonia National Park and its setting
- Clwydian Range and Dee Valley AONB and its setting (including the Pontcysyllte Aqueduct and Canal World Heritage Site and its essential setting)
- Cynwyd and Llandrillo AOB and its setting
- Conwy Special Landscape Areas
- Registered Historic Landscapes¹⁸

References regarding cumulative landscape effects and guidance on how to avoid these are made, where relevant, within the landscape strategy area assessments.

¹⁷ Definition taken from SNH (2012) Assessing the cumulative impact of onshore wind energy development, Inverness: Scottish Natural Heritage

¹⁸ Undesignated but recognised as being of national value

5. SECTION 4: EVALUATION OF LANDSCAPE UNITS AND THEIR SENSITIVITY TO WIND ENERGY DEVELOPMENT

5.1 A total of 42 landscape units were identified across the study area as illustrated in Figure 5. These landscape units are listed below in Table 4.1 together with an overall evaluation of their landscape and visual sensitivity in relation to wind energy development.

Table 4.1: Summary of Sensitivity

Landscape Unit		Assessed Sensitivity	Location	Page no.
Ref	Name			
LOWLAND AREAS				
A3	Lowland Hills	High	CCBC	41
A4	Coastal and Estuarine Flats (Prestatyn to Abergele)	Medium	CCBC/DCC	44
A5	Coastal and Estuarine Flats (Colwyn Bay)	Medium-High	CCBC	47
A6	Vale Farmlands (Vale of Clwyd)	High	CCBC/DCC	50
A8	Coastal Landscape Unit (Penmaenmawr to Llanfairechan)	High	CCBC	53
LOWER HILLS AND VALLEYS				
B2	Deep Valleys (Aled and Elwy)	High	CCBC/DCC	56
B7	Conwy Valley	High	CCBC	59
LIMESTONE COUNTRY				
C4	Limestone Farmlands (Abergele to Denbigh Coastal/Vale Hills)	High	CCBC/DCC	63
C9	Limestone Escarpment and Hills	High	CCBC	66
C10	Great Orme and Creuddyn Peninsular	High	CCBC	69
MARGINAL UPLAND				
D1	Aled Hiraethog Hills (West)	High	CCBC	73
D2	Hill Forest (Clocaenog Forest)	Low	CCBC/DCC	76
D3	Cerrig Uplands	High	CCBC/DCC	79
D4	Maerdy Hills	High	CCBC/DCC	82
D5	Edeimion Hill	Medium-High	CCBC/DCC	85
D8	Upland Plateau	Medium-High	CCBC	88
D10	Moorland Plateau (Denbigh Moors)	High	CCBC/DCC	90
D11	Moorland Plateau	Very High	CCBC	93
D15	Moorland Ridge	High	CCBC	95
D16	Marginal Upland (East Conwy Valley)	High	CCBC	98

5.2 Approach to Evaluating Landscape Units

The following text (in addition to the methodology) describes the how the sensitivity evaluations have been approached and presented for each strategy area:

- A key plan and text describing location, extent and key characteristics are provided upfront as a brief introduction to each landscape unit.
- The evaluation of the sensitivity of each landscape unit in relation to wind energy development is broken down into four overarching sensitivity criteria categories, as follows:
 - ❖ Landscape
 - ❖ Visual
 - ❖ Aesthetical, Perceptual and Experiential
 - ❖ Value
- Detailed criteria are included within each of these overarching categories and evaluations of sensitivity (lower, medium and higher) are made against each of these respectively.
- Within the 'Sensitivity Criteria' column those characteristics which are considered particularly susceptible to wind energy development and therefore have a bearing on the overall assessment of sensitivity are detailed with an asterisk.
- LANDMAP¹⁹ has been used as a tool for assisting the evaluations of sensitivity as outlined in the methodology. The text shown in *italics* within the 'Characteristics of the Landscape Unit' column represents LANDMAP evaluations specific to each landscape unit. For example *VS4: Levels / Hills/Valleys* denotes visual and sensory LANDMAP evaluations of topographic form; the underlined text signifies the evaluation(s) which geographically cover the majority of the landscape unit.
- In addition to the LANDMAP evaluations a wide range of data sources have been drawn upon to reinforce / build upon the initial LANDMAP evaluations. These data sources have been listed at the end of each table under the heading **Key Reference Sources Used for this Assessment** for ease of reference and to point the reader in the direction of more detailed information relevant to each landscape unit should this be required.
- Site visits have also been made to verify the evaluations.
- The text shown in black represents the key findings of LANDMAP backed up by additional data source research and site visits; text highlighted in **bold** indicates the main findings that have informed the assessed sensitivity of each criterion.
- A summary of sensitivity to wind energy developments is included at the end of each table; this includes an overall assessment of sensitivity together with a summary of justification.
- It is important to note again that the overall evaluation of sensitivity of each of the landscape units is not based on any mathematical formula (for example - adding up the individual lower, moderate and higher scores and dividing by the total) but on the professional judgements of two chartered landscape architects through a balanced assessment of all the characteristics which takes into consideration the key criteria and the weight of evidence in relation to sensitivity. As explained in the methodology the overall assessment of sensitivity has been made using a more detailed five point sensitivity scale, **low, medium, medium-high, high and very-high**.

It is important to note that the sensitivity evaluation sheets must be read in conjunction with the relevant landscape strategy evaluation sheets when considering the appropriateness for wind energy developments within a specific area (refer to Figure 7 for locations of landscape units in relation to strategy areas.)

¹⁹ The LANDMAP data sources relevant to this study area are illustrated on plans of the study area which are contained on a CD within Appendix for reference.

5.3 A3 Lowland Hills

Location and Extent

This area comprises the coastal fringe and hills between Colwyn Bay and Abergele.

Key Characteristics

- Medium scale lowland landscape
- Arable and pastoral fields

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. <i>VS8: Small/Medium</i>		Amber	
	Landform	Low rolling hills slope northwards towards the coastline and are incised by small valleys. <i>VS4: Rolling/Undulating/Hills/Valleys</i>		Amber	
	Landcover Pattern	A farmland mosaic of medium - large fields with field and hedgerow trees and small woodland blocks. <i>VS3: Mosaic Rolling Lowland / Hill & Lower Plateau Mosaic</i> <i>VS5: Field Pattern/Mosaic</i>			Red
	Built Environment	Densely dispersed pattern of farms and rural properties distributed along a network of local lanes. <i>VS6: Mixture / Clustered / Scattered Rural/Farm</i> <i>VS27: Fair / Good</i>		Amber	
Visual	Skylines and Settings	Skylines are relatively simple, interrupted by occasional mature field and hedgerow trees, wood pole lines and dispersed rural properties.		Amber	
	Movement	The presence of occasional road traffic brings some movement to the otherwise relatively still character of this landscape unit. <i>VS18: Infrequent / Frequent</i>			Red
	Visibility, Key Views, Vistas	This landscape unit is typically enclosed by landform and vegetation , although there are some open views to the sea, coastal fringe and Clwydian Range from more elevated areas to the south. <i>VS9: Enclosed</i>		Amber	
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> • Numerous scattered properties • Long distance routes including Sustrans - North Wales Coast cycle route (NCN Route 5) and the North Wales Path (part of the Wales Coast Path) • Open Access Areas (west of Abergele) 			Red

		<ul style="list-style-type: none"> Local attractions and public rights of way The A55 tourist route and North Wales Coast Railway The local road network 			
	Intervisibility/ Associations with Adjacent Landscapes	This area has a strong association with adjacent limestone escarpment landscapes and coastal landscapes to the north.			Red
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> Rhyd Y Foel to Abergele SLA Open Access Areas (west of Abergele) Sustrans - North Wales Coast cycle route (NCN Route 5) Registered Parks and Gardens Hillforts 		Amber	
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate LANDMAP evaluation. VS46: <u>Moderate</u> / High VS47: <u>Moderate</u> / High VS48: <u>Moderate</u> / High		Amber	
	*Remoteness / Tranquillity	A tranquil and attractive rural landscape with a relatively small amount of modern development and activity. VS24: <i>Attractive; Sheltered; Settled</i> / <i>Attractive; Tranquil; Sheltered; Safe; Settled; Spiritual</i>			Red
Value	*Landscape Value	The eastern part of this landscape unit lies within the regionally designated Rhyd Y Foel to Abergele SLA. Typical Moderate-High LANDMAP evaluation. VS50: <u>Moderate</u> / High VS49: <u>Moderate</u> / <u>High</u> LH45: <u>Moderate</u> LH42: Low / <u>Moderate</u> / High GL31: <u>Moderate</u> / <u>High</u> GL33: <u>Moderate</u> / <u>High</u>			Red
	Cultural Heritage Value	This landscape unit includes a Registered Park and Garden. Typical Moderate LANDMAP evaluation. HL38: <u>Moderate</u> / High HL35: Low / <u>Moderate</u> HL40: <u>Moderate</u> / High		Amber	
Summary of Sensitivity to Wind Energy Developments		The landscape is medium scale with a gently rolling landform. The presence of settlement and other man-made features is relatively limited and the eastern part is regionally designated as the Rhyd Y Foel to Abergele SLA. There is strong association and intervisibility with the SLA landscape and sensitive coastal landscapes further north. These factors and the presence of a number of sensitive visual receptors and important cultural heritage features increase the overall sensitivity.	High		

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Lowland Hills
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline
- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Unit 2, Point of Ayr to Colwyn Bay
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 2 Rhyd Y Foel to Abergele
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

5.4 A4 Coastal and Estuarine Flats (Prestatyn to Abergele)

Location and Extent

Located on the north Denbighshire coast around Rhyl, Prestatyn and Abergele, this landscape unit is an established holiday destination and recreational area.

Key Characteristics

- Large scale open and relatively straight coastal landscape
- Highly developed for tourism
- Extensive, mostly flat area of coastal farmland

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

			Assessed Sensitivity		
Sensitivity Criteria		Characteristics of the Landscape Unit	Lower	↔	Higher
Landscape	Scale	Typically a large scale landscape. VS8: <i>Large / Medium</i>	Yellow		
	Landform	Extensive, mostly flat area. VS4: <i>Levels</i>	Yellow		
	Landcover Pattern	Low lying coastal farmland , coastal dunes, golf course, sections of natural coastline and manmade sea defences with the immediate coastal area largely developed for tourism. VS3: <i>Flat Open Lowland Farmland / Urban / Estuary / Dunes & Dune Slack / Intertidal</i> VS5: <i>Development / Mixture / Open Land</i>	Yellow		
	*Built Environment	This landscape unit is heavily influenced by modern development within the urban resort towns of Rhyl and Prestatyn and major transport infrastructure , including the A55 tourist route and North Wales Coast Railway. VS6: <i>Urban / Linear / No Settlements (along shoreline)</i> VS27: <i>Poor / Fair / Good</i>	Yellow		
Visual	Skylines and Settings	Skylines are less prominent particularly to the north. Offshore wind turbines and the Rhyl Tower interrupt skylines to the north. Upland areas to the south west and south east provide distant uninterrupted rolling skylines .		Amber	
	Movement	The A55 tourist route and the North Wales Coast Railway form a major transport corridor within this landscape unit. This coastal landscape is characterised by activity and bustle with some quieter areas where transport routes and tourism development are less prevalent. VS18: <i>Constant / Frequent / Infrequent</i>	Yellow		

	*Visibility, Key Views, Vistas	Expansive views to surrounding hills, settled lowlands and along the coast. There are open views across farmland to the Clwydian Range to the east and the Rhos Hills uplands to the south west. A large offshore wind farm is prominent in views from Prestatyn. <i>VS9: Confined / Enclosed / <u>Open</u></i>			Red
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> Numerous properties in and around Rhyl and Prestatyn Long distance routes including Offa's Dyke Path national trail, Sustrans - North Wales Coast cycle route (NCN Route 5), the North Wales Path (part of the Wales Coast Path) and the Clwydian Way Local attractions including the Gronant Dunes and public rights of way The A55 tourist route and North Wales Coast Railway Dense network of local roads Passing ships and ferries 			Red
	Intervisibility/ Associations with Adjacent Landscapes	The level low lying landscape affords a high degree of intervisibility , particularly with the adjacent limestone hills and more distant Clwydian Range. The nearby seascape is highly visible and includes views from ships heading to and from the Port of Liverpool.			Red
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> The Clwydian Range and Dee Valley AONB Rhuddlan Castle Registered Parks and Gardens, notably Bodelwyddan Dyffryn Clwyd (The Vale of Clwyd) Registered Historic Landscape The Marble Church (St Margaret's Church, Bodelwyddan) 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Low-Moderate LANDMAP evaluation, <i>VS46: <u>Low</u> / <u>Moderate</u> / High (immediate coastline)</i> <i>VS47: <u>Low</u> / <u>Moderate</u> / High (immediate coastline)</i> <i>VS48: <u>Low</u> / <u>Moderate</u> / High (immediate coastline)</i>	Yellow		
	Remoteness / Tranquillity	The settlements and major transport routes give a sense of activity and movement to much of this landscape unit, with the exception of the Gronant Dunes which are much more tranquil and remote. <i>VS24: Unattractive; Noisy; Exposed; Smell / Unattractive; Noisy; Settled / Exposed; Threatening; Wild; Smell</i>	Yellow		
Value	Landscape Value	Nationally designated features include Offa's Dyke Path national trail (running through the urban	Yellow		

	environment) and Sustrans - North Wales Coast cycle route (NCN Route 5). This landscape unit has a typical Low-Moderate LANDMAP evaluation. <i>VS50: <u>Low</u> / <u>Moderate</u> / <u>High</u> (immediate coastline)</i> <i>VS49: <u>Low</u> / <u>Moderate</u> / <u>High</u> (immediate coastline)</i> <i>LH45: <u>Low</u> / <u>Moderate</u> / <u>High</u></i> <i>LH42: <u>Low</u> / <u>Moderate</u> / <u>High</u> / <u>Unassessed</u></i> <i>GL31: <u>Moderate</u> / <u>High</u> (immediate coastline)</i> <i>GL33: <u>Low</u> / <u>Moderate</u> / <u>High</u> (immediate coastline)</i>			
Cultural Heritage Value	This landscape unit contains important cultural heritage features including some Registered Parks and Gardens. Typical Moderate LANDMAP evaluation. <i>HL38: <u>Low</u> / <u>High</u> / <u>Unassessed</u></i> <i>HL35: <u>Low</u> / <u>Moderate</u> / <u>High</u> / <u>Unassessed</u></i> <i>HL40: <u>Low</u> / <u>Moderate</u> / <u>High</u> / <u>Unassessed</u></i>		Amber	
Summary of Sensitivity to Wind Energy Developments	The large scale and mostly flat coastal farmland, which is heavily developed in places lessens the sensitivity of the landscape. However this is partially counterbalanced by the high number of sensitive visual receptors, presence of nationally designated footpaths and high degree of intervisibility with important landscape and cultural heritage features, which together increase the overall sensitivity. The area where the Gronant Dunes are located is particularly scenic and the sensitivity in this locality is therefore considered high.	Medium		

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Coastal and Estuarine Flats
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline
- Welsh Seascapes and their Sensitivity to Offshore Developments, No: 2 Regional Seascape Unit Name: Point of Ayr to Colwyn Bay
- Denbighshire Landscape Strategy 2003, Character Area: Rhyl and Prestatyn Coast (Code: D/LC/1)

5.5 A5 Coastal and Estuarine Flats (Colwyn Bay)

Location and Extent

Located along the north coast of Conwy around Colwyn Bay, this landscape unit is an established holiday destination and recreational area.

Key Characteristics

- Medium scale, settled landscape
- Narrow, low lying coastline backed by steep hills
- Highly developed for tourism
- Major transport and communication corridor

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. <i>VS8: Medium</i>		Amber	
	Landform	Narrow, low lying, linear coastline backed by steep sided hills. <i>VS4: Rolling/Undulating</i>		Amber	
	Landcover Pattern	Immediate coastal area is largely developed for tourism. <i>VS3: Urban / Road Corridor</i> <i>VS5: Development / Open Land</i>	Yellow		
	*Built Environment	Heavily influenced by the urban resort town of Colwyn Bay and major transport infrastructure. <i>VS6: Urban / No Settlements (immediate coastline)</i> <i>VS27: Fair</i>	Yellow		
Visual	Skylines and Settings	Skylines to the north focus on offshore wind turbines. To the south the skylines are strongly undulating and mainly uninterrupted.		Amber	
	Movement	This coastal landscape unit is characterised by activity and bustle. The A55 tourist route and North Wales Coast Railway form a busy major transport corridor. <i>VS18: Constant / Frequent</i>	Yellow		
	Visibility, Key Views, Vistas	Views to the south are enclosed and filtered by landform, vegetation and modern development. However, to the north there are some expansive views across the sea to offshore wind farms. <i>VS9: Enclosed</i>	Yellow		
	*Typical Receptors (in descending)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> • Numerous properties particularly along the coast around Colwyn Bay 			Red

	order of sensitivity)	<ul style="list-style-type: none"> Long distance routes including the Sustrans - North Wales Coast cycle route (NCN Route 5) and the North Wales Path (part of the Wales Coast Path) Local attractions and public rights of way The A55 tourist route and North Wales Coast Railway The local road network 			
	Intervisibility/ Associations with Adjacent Landscapes	This landscape unit has a moderate association with the adjacent limestone hills and coastal landscapes.		Amber	
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> Sustrans - North Wales Coast cycle route (NCN Route 5) Registered Parks and Gardens Hillforts Pwllcrochan Woods (Local Nature Reserve) 		Amber	
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate LANDMAP evaluation. VS46: <u>Moderate</u> / High (immediate coastline) VS47: <u>Moderate</u> / High (immediate coastline) VS48: <u>Moderate</u> / High (immediate coastline)		Amber	
	Remoteness / Tranquillity	Urban development and major transport routes bring frequent movement to this landscape unit. VS24: <i>Noisy; Threatening; Unattractive / Attractive; Unattractive; Noisy; Settled</i>	Yellow		
Value	Landscape Value	Nationally designated features include Sustrans - North Wales Coast cycle route (NCN Route 5). Typical Moderate LANDMAP evaluation. VS50: <u>Moderate</u> / High (immediate coastline) VS49: <u>Moderate</u> / High (immediate coastline) LH45: <u>Moderate</u> / High (immediate coastline) LH42: <u>Low</u> / High (immediate coastline) GL31: <u>Moderate</u> GL33: <u>Low</u> / Moderate / High		Amber	
	Cultural Heritage Value	This landscape unit includes some Registered Parks and Gardens. Typical Moderate LANDMAP evaluation. HL38: <u>Moderate</u> / High (immediate coastline) HL35: <u>Low</u> (immediate coastline) / <u>Moderate</u> HL40: <u>Moderate</u>		Amber	
Summary of Sensitivity to Wind Energy Developments		The medium scale low lying coastal landscape is characterised by development and transport corridors which lessens the sensitivity of the landscape. However these characteristics are counterbalanced by the high number of sensitive visual receptors, presence of nationally designated footpaths and high degree of intervisibility with important landscape and cultural	Medium		

	heritage features, which together increase the overall sensitivity.	
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Coastal and Estuarine Flats
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline
- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Unit No: 2 Point of Ayr to Colwyn Bay and Unit No: 3 Rhos Point to Great Orme Head
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

5.6 A6 Vale Farmlands (Vale of Clwyd)

Location and Extent

This landscape unit comprises the Vale of Clwyd which runs from the fringes of Rhyl and Prestatyn south past Ruthin.

Key Characteristics

- Medium scale, broad valley landscape
- Predominantly pastoral farmland
- Cultural heritage interest

Sensitivity Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

			Assessed Sensitivity		
Sensitivity Criteria		Characteristics of the Landscape Unit	Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. <i>VS8: <u>Medium</u> / Small</i>		Amber	
	Landform	The river Clwyd meanders along the floor of a broad valley between adjacent upland areas. <i>VS4: <u>Rolling/Undulating</u> / Hills/Valleys / Levels</i>		Amber	
	*Landcover Pattern	Lowland pastoral farmland with some woodlands and historic parkland and the river Clwyd. <i>VS3: <u>Flat Lowland Mosaic</u> / Wooded Rolling Lowland / Flat Open Lowland Farmland</i> <i>VS5: <u>Field Pattern/Mosaic</u> / Development</i>		Amber	
	Built Environment	This landscape unit is historically settled . Other than dispersed, scattered farmsteads, settlement is typically concentrated in small villages and hamlets and several small towns of medieval origin. <i>VS6: <u>Mixture</u> / Scattered Rural/Farm / Village / Urban</i> <i>VS27: <u>Poor</u> / Fair / Unassessed</i>			Red
Visual	Skylines and Settings	This landscape unit is rarely seen as a skyline feature . The Clwydian Range and Denbigh - Ruthin Hills form distinctive skylines and backdrops to much of this area. A number of prominent historic landmarks including churches and castles are seen against the skyline in local to middle distance views. To the north of the area, existing pylon lines interrupt skylines.		Amber	
	Movement	There is frequent traffic along the road network which has some localised influence and brings visual movement within this landscape unit, whilst to the south this is screened more by valley vegetation. Traffic along the A55 is noticeable and in places intrusive. <i>VS18: <u>Frequent</u> / Infrequent / Constant (towns and villages)</i>		Amber	

	Visibility, Key Views, Vistas	Views within the valley are typically enclosed and filtered by landform and vegetation. There are however some clear views to and from the valley sides, including from the Clwydian Range and tourist attractions. There are also several open long views focussed along road corridors which cross and flank the area. <i>VS9: Enclosed</i>			Red
	*Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> Numerous properties along the valley, both dispersed and concentrated in settlements Long distance routes including Offa's Dyke Path national trail, Sustrans - North Wales Coast cycle route (NCN Route 5), Clwydian Way Open Access Areas along the Clwydian Range Local attractions including historic parks, churches and castles in adjacent landscape units Public rights of way The local road network 			Red
	Intervisibility/ Associations with Adjacent Landscapes	This area has a strong association with the Clwydian Range to the east and the Denbigh Hills and foothills to the west.			Red
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> The Clwydian Range and Dee Valley AONB Open Access Areas along the Clwydian Range Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscapes Registered Parks and Gardens Rhuddlan Castle Denbigh Castle The Marble Church (St Margaret's Church, Bodelwyddan) 			Red
Aesthetic, Perceptual and Experiential	*Scenic Quality and Character	The Vale of Clwyd is valued for its high scenic quality and character which is recognised by its typically High LANDMAP evaluation <i>VS46: <u>High</u> / Moderate / Low</i> <i>VS47: <u>High</u> / <u>Moderate</u> / <u>Low</u></i> <i>VS48: <u>High</u> / Moderate</i>			Red
	Remoteness / Tranquillity	Away from settlements, the Vale's landscape is perceived to be tranquil . However, the well-developed farmed character and presence of settlement and network of local roads in this landscape gives a reduced sense of remoteness .		Amber	

		VS24: <i>Attractive; Safe; Settled; Other / Attractive; Tranquil; Safe; Settled / Attractive; Sheltered; Safe; Settled</i>			
Value	Landscape Value	The western edge of the Clwydian Range and Dee Valley AONB lies just inside the south eastern edge of this landscape unit. Nationally designated features also include the Sustrans - North Wales Coast cycle route (NCN Route 5). This landscape unit typically has a moderate-high LANDMAP evaluation. VS50: <i>High / Moderate / Low</i> VS49: <i>High / Moderate / Low</i> LH45: <i>High / Moderate / Low</i> LH42: <i>High / Moderate / Low / Unassessed</i> GL31: <i>High / Moderate</i> GL33: <i>High / Moderate / Low</i>		Amber	
	*Cultural Heritage Value	The southern half of this landscape unit lies within Registered Historic Landscapes, principally Dyffryn Clwyd (The Vale of Clwyd) and also a small part of Pen Isaf Dyffryn Elwy (Lower Elwy Valley). This landscape unit also includes Rhuddlan Castle, Denbigh Castle and some Registered Parks and Gardens. Typical Moderate LANDMAP evaluation. HL38: <i>Unassessed / Low / Moderate / High</i> HL35: <i>Unassessed / Low / Moderate / High</i> HL40: <i>High / Moderate / Low</i>			Red
	Summary of Sensitivity to Wind Energy Developments	This is a scenic pastoral valley landscape the western edge of which lies just inside the Clwydian Range and Dee Valley AONB. The historic dispersed settlement pattern, presence of important cultural heritage features and many sensitive visual receptors also increase the overall sensitivity.	High		

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Vale Farmlands
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline and 11 Vale of Clwyd
- Countryside Council for Wales, Historic Landscapes Register, areas as follows: 1 The Vale of Clwyd (HLW (C) 1) and 38 Lower Elwy Valley (HLW (C) 4)
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Rhyl and Prestatyn Coast (Code: D/LC/1); Vale of Clwyd North (Code: D/LC/6); Vale of Clwyd East of Denbigh (Code: D/LC/7); and Vale of Clwyd South (Code: D/LC/8).
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14

5.7 A8 Coastal Landscape Unit (Penmaenmawr to Llanfairfechan)

Location and Extent

This landscape unit comprises the immediate coastline and uplands which run west from Penmaenmawr to Llanfairfechan, to the far north west of Conwy.

Key Characteristics

- Medium scale coastal landscape
- High hills/mountains extend to the coast

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

			Assessed Sensitivity		
Sensitivity Criteria	Characteristics of the Landscape Unit		Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. <i>VS8: <u>Medium</u> / Vast</i>		Amber	
	Landform	Gentle coastal slopes interrupted by dramatic rugged mountains along the northern fringes of Snowdonia National Park. <i>VS4: <u>Disturbed</u> / High Hills/Mountains / Levels / Rolling/Undulating</i>			Red
	Landcover Pattern	Rural pastoral landcover with modern development including quarries, coastal settlements and transport corridors. <i>VS3: <u>Intertidal</u> / <u>Urban</u> / <u>Excavation</u> / <u>Upland Grazing</u> / <u>Hillside & Scarp Slopes Grazing</u> VS5: <u>Open Land</u> / <u>Mixture</u> / <u>Development</u></i>	Yellow		
	Built Environment	Urban development along the coast includes settlements and a major road and rail corridor. Urban influences are less evident in the upland areas with the exception of quarrying activities. <i>VS6: <u>Mixture</u> / <u>Urban</u> / <u>No Settlements</u> VS27: <u>Poor</u> / <u>Fair</u> / <u>Good</u></i>		Amber	
Visual	*Skylines and Settings	The northern fringes of Snowdonia National Park form a dramatic backcloth to southerly views. Skylines to the north are also prominent and include Anglesey and the distinctive Great Orme Headland.			Red
	Movement	Frequent traffic on the local road network brings movement into this landscape unit, particularly in connection with the larger settlements. However, in contrast the uplands are more still in character . <i>VS18: <u>Rare</u> / <u>Occasional</u> / <u>Infrequent</u> / <u>Constant</u></i>		Amber	
	Visibility, Key Views, Vistas	Views are typically open and include expansive views to Snowdonia National Park and the Great Orme Headland. <i>VS9: <u>Open</u> / <u>Exposed</u></i>			Red

	Typical Receptors (in descending order of sensitivity)	<p>These include occupiers, users and visitors to the following:</p> <ul style="list-style-type: none"> Numerous properties particularly along the coast Long distance routes including Sustrans - North Wales Coast cycle route (NCN Route 5) and the North Wales Path (part of the Wales Coast Path) Open Access Areas Local attractions and public rights of way The A55 tourist route and North Wales Coast Railway The local road network Passing ships and ferries 			Red
	*Intervisibility/Associations with Adjacent Landscapes	There is a strong association and intervisibility with Snowdonia National Park , with adjacent coastal landscapes including the Great Orme Headland and more distantly with Anglesey.			Red
	Views to and from Important Landscapes and Cultural Heritage Features	<p>These include:</p> <ul style="list-style-type: none"> Snowdonia National Park Anglesey Coast AONB Great Orme and Creuddyn Peninsular SLA Great Orme Heritage Coast Open Access Areas Gogledd Arllechwedd (North Arllechwedd) and Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscapes Registered Parks and Gardens Hillforts 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	<p>Typical Moderate-High LANDMAP evaluation.</p> <p>VS46: <i>Low / High</i></p> <p>VS47: <i>Low / High</i></p> <p>VS48: <i>Moderate / High</i></p>			Red
	Remoteness / Tranquillity	<p>Although the coastline is busy due to modern development and the A55, a short distance inland it rapidly becomes highly remote and tranquil.</p> <p>VS24: <i>Small; Tranquil; Exposed; Remote; Wild; Spiritual, Settled; Tranquil; Noisy; Exposed, Exposed, Unattractive</i></p>		Amber	
Value	Landscape Value	<p>Nationally designated features include Sustrans - North Wales Coast cycle route (NCN Route 5) and Open Access Areas.</p> <p>Typical Moderate LANDMAP evaluation with some areas as Outstanding.</p> <p>VS50: <i>Low / High</i></p> <p>VS49: <i>Low / Moderate / High / Outstanding</i></p> <p>LH45: <i>Low / Moderate / High / Outstanding</i></p> <p>LH42: <i>Low / Moderate / Outstanding</i></p> <p>GL31: <i>Moderate / High</i></p> <p>GL33: <i>Moderate / High</i></p>			Red

	Cultural Heritage Value	<p>Much of this landscape unit lies within the Gogledd Arllechwedd (North Arllechwedd) Registered Historic Landscape.</p> <p>This landscape unit includes a Registered Park and Garden.</p> <p>Typical Moderate LANDMAP evaluation with some areas Outstanding.</p> <p><i>HL38: <u>Moderate</u> / High / Outstanding</i></p> <p><i>HL35: Low / <u>Moderate</u> / High / Outstanding</i></p> <p><i>HL40: Moderate / High</i></p>			Red
	Summary of Sensitivity to Wind Energy Developments	<p>The sensitivity of this dramatic coastal landscape is significantly increased by proximity to Snowdonia National Park and by its intervisibility with the Great Orme and Creuddyn Peninsular SLA and more distantly the Anglesey Coast AONB. The high cultural heritage value of the landscape further increases the overall sensitivity.</p>			High

Key Reference Sources Used for this Evaluation

- LANDMAP
- Regional Landscape Character Map for Wales, RLCA 6 Snowdonia / Eryri and 7 Conwy Valley
- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Units, as follows: 4 Conwy Estuary and 5 Great Orme Head to Puffin Island
- Countryside Council for Wales, Historic Landscapes Register 30 North Arllechwedd (HLW (Gw) 12)
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

5.8 B2 Deep Valleys (Aled and Elwy)

Location and Extent

This landscape unit includes the valleys of the Rivers Aled and Elwy and is a distinct landscape located within the wider area of the rolling uplands of the Rhos Hills.

Key Characteristics

- Medium scale
- Valley topography with scattered farms

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. <i>VS8: Small/Medium</i>		Amber	
	*Landform	Relatively narrow and deep , gently meandering river valleys . <i>VS4: Hills/Valleys / Levels</i>			Red
	Landcover Pattern	Landcover is characterised by a mosaic of woodland, open hillsides, grassland, pasture and scrub. <i>VS3: Hillside Scarp slopes grazing / Open lowland valleys / mosaic lowland valleys</i> <i>VS5: Field pattern/mosaic/Mixture</i>			Red
	Built Environment	Man-made influences are limited to the local road network and dispersed settlement pattern. <i>VS6: Scattered Rural/Farm</i> <i>VS27: Good/Fair</i>			Red
Visual	Skylines and Settings	The lower lying parts of this landscape unit are typically not seen as skyline features. The more elevated parts form prominent undulating skylines .		Amber	
	Movement	Occasional road traffic brings infrequent movement to much of this landscape, although in the west the A548 is significantly busier. <i>VS18:Frequent/Infrequent/Occasional</i>		Amber	
	Visibility, Key Views, Vistas	Views to and from the valley floors and lower valley sides are contained by landform and vegetation. By contrast, there are extensive views from the higher valley sides out across the Rhos Hills to Snowdonia National Park and the Clwydian Range. <i>VS9: Open/Exposed/Enclosed</i>		Amber	
	Typical Receptors (in descending)	These include occupiers, users and visitors of the following: <ul style="list-style-type: none"> • Dispersed settlements • Local attractions and public rights of way 		Amber	

	order of sensitivity)	<ul style="list-style-type: none"> The local road network 			
	Intervisibility/ Associations with Adjacent Landscapes	Intervisibility with surrounding landscape units is dependent on local topography and vegetation cover. There are some views to and from Snowdonia National Park to the west and more limited views to and from the Clwydian Range to the east.		Amber	
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> Snowdonia National Park The Clwydian Range and Dee Valley AONB Elwy and Aled Valleys SLA Rhyd Y Foel to Abergele SLA Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape Registered Parks and Gardens Hillforts 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High LANDMAP evaluation. VS46: <i>Moderate/High</i> VS47: <i>Moderate/High</i> VS48: <i>Moderate/High</i>		Amber	
	*Remoteness / Tranquillity	Typically a tranquil and relatively remote rural landscape with occasional development and human activity, principally minor roads and dispersed settlements. VS24: <i>Attractive; Exposed; Wild; Remote / Attractive; sheltered; Settled; Tranquil / Unattractive; Settled; Attractive; sheltered</i>			Red
Value	*Landscape Value	Much of this landscape unit is regionally designated as the Elwy and Aled Valleys SLA or Rhyd Y Foel to Abergele SLA. Typical High LANDMAP evaluation, with some areas Outstanding . VS50: <i>Moderate/High</i> VS49: <i>Moderate/High</i> LH45: <i>Low/Moderate/High/Outstanding</i> LH42: <i>Low/Moderate/High/Outstanding</i> GL31: <i>Moderate/High/Outstanding</i> GL33: <i>Moderate/High/Outstanding</i>			Red
	Cultural Heritage Value	Part of this landscape unit lies within Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape. The area includes a number of Registered Parks and Gardens and a hillfort. Typical High LANDMAP evaluation, with some areas as Outstanding . HL38: <i>Unassessed/Moderate/High/Outstanding</i> HL35: <i>Unassessed/Low/Moderate/High/Outstanding</i> HL40: <i>Moderate/High/Outstanding</i>			Red
	Summary of Sensitivity to Wind	The natural characteristics of these undeveloped, relatively remote and scenic river valleys with their mosaic of pasture, woodland and scrub impart a	High		

Energy Developments	high degree of sensitivity and have resulted in much of the landscape unit being designated as the Elwy and Aled Valleys SLA or Rhyd Y Foel to Abergele SLA. This sensitivity is further enhanced by important cultural heritage features.	
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Deep Valleys
- Regional Landscape Character Map for Wales, 9 Rhos Hills
- Countryside Council for Wales, Historic Landscapes Register, Area 38 Lower Elwy Valley (HLW (C) 4)
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 3 Aled and Elwy valleys
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

5.9 B7 Conwy Valley

Location and Extent

This landscape unit comprises the valley of the River Conwy which flows north from the Migneint moor, through the town of Llanrwst to the estuary in Conwy town.

Key Characteristics

- Typically small to medium scale
- River valley floodplain and valley sides
- Cultural heritage interest
- Developed coastline

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria			Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a small to medium scale landscape. <i>VS8: Small / Medium</i>			Red
	*Landform	Distinctive broad and deep valley with a flat river floodplain and strongly undulating valley sides with gentle coastal slopes to the north. <i>VS4: Hills/Valleys / Levels / Rolling/Undulating</i>			Red
	Landcover Pattern	Landcover within the valley comprises a mosaic of woodland and pasture with a high prevalence of field and hedgerow trees. Modern development is concentrated in the far north of this landscape unit. <i>VS3: Hill & Lower Plateau Mosaic / Open Lowland Valleys / Urban / Hill & Lower Plateau Grazing / Mosaic Rolling Lowland</i> <i>VS5: Field Pattern/Mosaic / Development / Water</i>			Red
	Built Environment	Man-made influences are most evident to the north where the developed coastline includes the town of Conwy, the A55 tourist route and the North Wales Coast Railway. Other man-made influences include the A470 which runs down the valley, and several pylon lines that cross the valley east-west. Elsewhere, settlement is sparser and modern development much more limited . <i>VS6: Clustered / Scattered Rural/Farm / Mixture / Urban / No settlements</i> <i>VS27: Fair / Good</i>		Amber	
Visual	Skylines and Settings	The valley sides and bottom of the valley do not form skyline features; however the surrounding valleys sides rise to prominent undulating skylines .			Red
	Movement	Road traffic brings movement into this landscape. This is more frequent along the coast where most of the settlement and transport infrastructure is located . Traffic along the A470		Amber	

		brings movement along the valley. Other, more remote parts of the valley are more still in character. <i>VS18: Occasional / Infrequent / Frequent / Constant</i>			
	Visibility, Key Views, Vistas	There are some long views along the valley floor and from coastal areas. The higher valley sides afford open views to Snowdonia National Park and the Rhos Hills. <i>VS9: Enclosed</i>			Red
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> Numerous properties particularly in the north along the coast and including the town of Conwy Long distance routes including Sustrans - North Wales Coast cycle route (NCN Route 5), the North Wales Path (part of the Wales Coast Path) Open Access Areas within Snowdonia Nation Many local attractions both along the coast and inland, including Conwy Castle and Bodnant Garden Public rights of way The A55 & A470 tourist routes to local and regional/national attractions such as Snowdonia National Park The North Wales Coast Railway The local road network Passing ships and ferries 			Red
	*Intervisibility/ Associations with Adjacent Landscapes	The Rhos Hills appear as a large scale backdrop in views from the valley to the east. There are some views to and from Snowdonia National Park which lies immediately to the west. Views are afforded to and from adjacent landscape units to the north along the coast including the Creuddyn Peninsular.			Red
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> Snowdonia National Park Great Orme Heritage Coast Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site Conwy Valley SLA Great Orme and Creuddyn Peninsular SLA Pen Isaf Dyffryn Conwy (Lower Conwy Valley) and Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscape Registered Parks and Gardens Open Access Areas within Snowdonia National Park 			Red

		<ul style="list-style-type: none"> Gwydir Castle and Gwydir Uchaf Chapel Hillforts 			
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	<p>Typical High LANDMAP evaluation with some Outstanding.</p> <p>VS46: <i>Low / Moderate / <u>High</u> / Outstanding</i></p> <p>VS47: <i>Low / Moderate / <u>High</u> / Outstanding</i></p> <p>VS48: <i>Low / Moderate / <u>High</u> / Outstanding</i></p>			Red
	Remoteness / Tranquillity	<p>A sense of tranquillity and remoteness develops away from the developed and busy coastline.</p> <p>VS24: <i>Attractive; Tranquil; Sheltered; Safe; Settled; Spiritual / Attractive; Sheltered; Settled / Attractive; sheltered; Settled; Tranquil / Unattractive; Noisy; Settled (to the north)</i></p>			Red
Value	*Landscape Value	<p>Most of this landscape unit is regionally designated as the Conwy Valley SLA.</p> <p>Nationally designated features also include Sustrans - North Wales Coast cycle route (NCN Route 5).</p> <p>Typical Moderate-High LANDMAP evaluation with some Outstanding.</p> <p>VS50: <i>Low / Moderate / <u>High</u> / Outstanding</i></p> <p>VS49: <i>Low / <u>High</u> / Outstanding</i></p> <p>LH45: <i>Low / <u>Moderate</u> / High / Outstanding (immediate coastline)</i></p> <p>LH42: <i>Low / <u>Moderate</u> / High / Outstanding</i></p> <p>GL31: <i>Moderate / <u>High</u> / Outstanding</i></p> <p>GL33: <i>Moderate / <u>High</u> / Outstanding</i></p>			Red
	Cultural Heritage Value	<p>Large areas of this landscape unit lie within Pen Isaf Dyffryn Conwy (Lower Conwy Valley) and Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscapes.</p> <p>The area also includes Registered Parks and Gardens and parts of the essential setting of Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site.</p> <p>Typical Moderate-High LANDMAP evaluation, with some Outstanding.</p> <p>HL38: <i>Low / Moderate / <u>High</u> / Outstanding</i></p> <p>HL35: <i>Low / <u>Moderate</u> / High / Outstanding</i></p> <p>HL40: <i>Low / Moderate / <u>High</u> / Outstanding</i></p>			Red
Summary of Sensitivity to Wind Energy Developments		<p>This distinctive valley landscape with its mosaic of pastures, woodlands and individual trees is attractive and for the most part tranquil, which has resulted in its regional designation as an SLA.</p> <p>This, combined with its association with the Rhos Hills and intervisibility with Snowdonia National Park and the Great Orme and Creuddyn Peninsular SLA, as well as some important cultural heritage features including Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site and Pen Isaf Dyffryn Conwy (Lower Conwy Valley) and Creuddyn a Chonwy (Creuddyn</p>	High		

	and Conwy) Registered Historic Landscapes increase the sensitivity to high.	
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Regional Landscape Character Map for Wales, 7 Conwy Valley and 9 Rhos Hills
- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Unit 4 Conwy Estuary
- Countryside Council for Wales, Historic Landscapes Register 22 Lower Conwy Valley (HLW (Gw) 4)
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 6 Conwy Valley
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

5.10 C4 Limestone Farmlands (Abergele to Denbigh Coastal/Vale hills)

Location and Extent

This landscape unit comprises land which runs from Colwyn Bay and Abergele, south past Henllan, to Denbigh.

Key Characteristics

- Medium scale, rolling landscape
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. <i>VS8: Medium</i>		Amber	
	*Landform	Typically a rolling landscape with some prominent limestone ridges in the central area. <i>VS4: Rolling/Undulating / Plateau / Levels / Hills/Valleys</i>			Red
	Landcover Pattern	Mosaic of pastures and woodland, including estate woodlands and designed parklands. <i>VS3: Mosaic Rolling Lowland / Urban / Wooded Lowland Valleys</i> <i>VS5: Field Pattern/Mosaic / Woodland / Mixture / Urban</i>			Red
	Built Environment	The coastline along the northern part of this landscape unit around Colwyn Bay and Abergele is densely settled . Man-made influence is evident in the road system, including the A55 tourist route, the North Wales Coast Railway, quarries and pylon lines which punctuate the skyline south of the B5831. Elsewhere the landscape becomes more rural in character with a settlement pattern dispersed along a network of minor lanes. <i>VS6: No Settlements / Scattered Rural/Farm / Village / Urban</i> <i>VS27: Fair / Good / Unassessed</i>		Amber	
Visual	*Skylines and Settings	The Clwydian Range forms rolling skylines to the east of this landscape unit. Denbigh Castle is a prominent skyline feature . To the north west, the limestone escarpment and hills at Llanddulas create more complex and distinctive skylines . Skylines in the central section of this landscape unit are interrupted by pylon lines.			Red
	Movement	The presence of traffic on the local road network brings frequent movement into this landscape, particularly around the larger settlements and along		Amber	

		the coastline. Away from the settlements and roads movement is less frequent. <i>VS18: <u>Infrequent</u> / <u>Frequent</u> / <u>Constant</u></i>			
	Visibility, Key Views, Vistas	Views are typically enclosed by landform and vegetation , although there are some more open and extensive views from areas of higher land and along the coast. <i>VS9: <u>Enclosed</u></i>		Amber	
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> Numerous properties particularly along the coast and including Colwyn Bay and Abergele Long distance routes including the Sustrans - North Wales Coast cycle route (NCN Route 5), North Wales Path (part of the Wales Coast Path) and the Clwydian Way Open Access Areas to the west of Abergele Local attractions and public rights of way The A55 tourist route and North Wales Coast Railway The local road network 			Red
	Intervisibility/Associations with Adjacent Landscapes	Part of this landscape unit comprises a line of hills which are significant in forming the visual backdrop and skyline to the settled coastal plain. Views are typically limited by landform and vegetation; however, more open long distance views out to adjacent landscape units are afforded from areas of higher land and along the coastline.		Amber	
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> The Clwydian Range and Dee Valley AONB Rhyd Y Foel to Abergele SLA Open Access Areas to the west of Abergele Registered Parks & Gardens Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape Denbigh Castle The Marble Church (St Margaret's Church, Bodelwyddan) Hillfort 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate LANDMAP evaluation. <i>VS46: <u>Low</u> / <u>Moderate</u> / <u>High</u></i> <i>VS47: <u>Low</u> / <u>Moderate</u> / <u>High</u></i> <i>VS48: <u>Moderate</u> / <u>High</u></i>		Amber	
	*Remoteness / Tranquillity	Away from the developed and busy coastline, the sense of tranquillity increases. <i>VS24: <u>Attractive</u>; <u>Sheltered</u>; <u>Settled</u> / <u>Attractive</u>; <u>Sheltered</u>; <u>Safe</u>; <u>Settled</u> / <u>Unattractive</u>; <u>Noisy</u>; <u>Settled</u></i>		Amber	
Value	Landscape Value	Part of this landscape unit lies within the regionally designated Rhyd Y Foel to Abergele SLA.			Red

		<p>Nationally designated features include Sustrans - North Wales Coast cycle route (NCN Route 5) and small parts of Open Access Areas to the west of Abergele.</p> <p>Typical Moderate-High LANDMAP evaluation with some areas evaluated as Outstanding.</p> <p>VS50: Low / <u>Moderate</u> / <u>High</u></p> <p>VS49: Low / <u>Moderate</u> / <u>High</u></p> <p>LH45: Low / <u>Moderate</u> / <u>High</u> / <u>Outstanding</u></p> <p>LH42: Low / <u>Moderate</u> / <u>High</u> / <u>Outstanding</u></p> <p>GL31: <u>Moderate</u> / <u>High</u> / <u>Outstanding</u></p> <p>GL33: <u>Moderate</u> / <u>High</u> / <u>Outstanding</u></p>			
	*Cultural Heritage Value	<p>Parts of this landscape unit lie within Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscapes. This area includes Registered Parks & Gardens and a hillfort.</p> <p>Typical Moderate-High LANDMAP evaluation with some Outstanding.</p> <p>HL38: Low/Moderate/High/Outstanding/Unassessed</p> <p>HL35: Low/Moderate/High/Outstanding/Unassessed</p> <p>HL40: Low/Moderate/High/Outstanding</p>			Red
Summary of Sensitivity to Wind Energy Developments		<p>The combination of distinctive limestone topography, pastures, woodland and designed landscapes impart a high degree of sensitivity and have resulted in part of the area being regionally designated as the Rhyd-y-Foel to Abergele SLA. This sensitivity is further enhanced by proximity to important cultural heritage features. When combined with some sensitive visual receptors, including users of the A55 and North Wales Coast Railway the overall sensitivity of this landscape is considered high.</p>	High		

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Limestone Farmlands
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline and 9 Rhos Hills
- Countryside Council for Wales, Historic Landscapes Register, Area 38 Lower Elwy Valley (HLW (C) 4)
- Welsh Seascapes and their Sensitivity to Offshore Developments, No: 2 Regional Seascape Unit Name: Point of Ayr to Colwyn Bay
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 2 Rhyd-y-Foel to Abergele
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Bodelwyddan and Kimmel Park (Code: D/LC/9); Limestone Ridge and Valleys (Code: D/LC/10); and Denbigh Plateau (Code: D/LC/11)

5.11 C9 Limestone Escarpment and Hills

Location and Extent

A series of steep hills and cliffs located at Llandulas (Cefn yr Ogof, Rhyd-y-Foel and Crag- y-Forwyn) and Bryn Eurn Hill (between Rhos-on-Sea and Colwyn Bay). These landforms are highly distinctive features located close to the Conwy coastline.

Key Characteristics

- Typically small to medium scale
- Open hills and scarp faces
- Prominent feature in the landscape
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

			Assessed Sensitivity		
Sensitivity Criteria	Characteristics of the Landscape Unit		Lower	↔	Higher
Landscape	*Scale	Typically a small-medium scale landscape <i>VS8: <u>Small</u> / <u>Medium</u></i>			Red
	*Landform	Steep limestone hills with rock outcrops, distinctive scarp faces and scree slopes. <i>VS4: <u>Hills/Valleys</u> / <u>Rolling/Undulating</u></i>			Red
	Landcover Pattern	Landcover comprises a mosaic of wooded hillsides, scarp slopes and pastures. <i>VS3: <u>Wooded Hillside & Scarp Slopes</u> / <u>Mosaic Rolling Lowland</u> / <u>Urban</u> / <u>Hillside & Scarp Slopes Grazing</u></i> <i>VS5: <u>Field Pattern/Mosaic</u> / <u>Mixture</u> / <u>Development</u></i>			Red
	Built Environment	Man-made influences include the settlements that are found around the lower slopes and also in the quarrying at Llandulas. However, with the exception of important historical features, and within the context of the developed coastline, the majority of this landscape unit is relatively undeveloped . <i>VS6: <u>Mixture</u> / <u>Scattered Rural/Farm</u> / <u>Urban</u></i> <i>VS27: <u>Fair</u> / <u>Good</u></i>			Red
Visual	*Skylines and Settings	These hills are highly distinctive and form prominent skylines when viewed from a number of locations along and adjacent to the coastline.			Red
	Movement	Movement is limited to infrequent traffic on local roads around the base of the hills. The hill tops and higher slopes are very still . <i>VS18: <u>Infrequent</u> / <u>Constant</u></i>			Red
	Visibility, Key Views, Vistas	The higher slopes afford open and expansive views out to sea and over coastal areas including the Great Orme Headland, across the Clwydian Range, Denbigh Moors and Snowdonia National			Red

		Park. Views to and from the lower slopes are more enclosed by landform and vegetation. <i>VS9: <u>Enclosed</u> / <u>Open</u></i>			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> • Properties which are found mainly around the lower slopes • Long distance routes including Offa's Dyke Path national trail, Sustrans - North Wales Coast cycle route (NCN Route 5), the North Wales Path (part of the Wales Coast Path) and the Clwydian Way • Open Access Areas to the east of this landscape unit • Local attractions and public rights of way • The A55 tourist route and North Wales Coast Railway • The local road and network 			Red
	Intervisibility/Associations with Adjacent Landscapes	This landscape unit has a strong association and intervisibility with both adjacent and more distant landscapes , including Snowdonia National Park.			Red
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> • Snowdonia National Park • Clwydian Range and Dee Valley AONB • Great Orme Heritage Coast • Rhyd-y-Foel to Abergele SLA • Open Access Areas to the east of this landscape unit • Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscape • Registered Parks and Gardens Hillforts 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. <i>VS46: <u>Low</u> / <u>Moderate</u> / <u>High</u></i> <i>VS47: <u>Low</u> / <u>Moderate</u></i> <i>VS48: <u>Low</u> / <u>Moderate</u> / <u>High</u></i>		Amber	
	Remoteness / Tranquillity	This landscape unit is relatively tranquil and remote particularly in comparison to the adjacent densely populated coastline. <i>VS24: <u>Attractive</u>; <u>Exposed</u> / <u>Attractive</u>; <u>Exposed</u>; <u>Wild</u></i>		Amber	
Value	Landscape Value	Much of this landscape unit lies within the regionally designated Rhyd-y-Foel to Abergele SLA. Nationally designated features also include Sustrans - North Wales Coast cycle route (NCN Route 5) and Open Access Areas (to east of this landscape unit). Typical High LANDMAP evaluation with some Outstanding . <i>VS50: <u>Low</u> / <u>Moderate</u> / <u>High</u></i> <i>VS49: <u>Moderate</u> / <u>High</u></i>			Red

		<i>LH45: Low / Moderate / High / <u>Outstanding</u></i> <i>LH42: Low / Moderate</i> <i>GL31: Moderate / High</i> <i>GL33: Moderate / High</i>			
	Cultural Heritage Value	Part of a Registered Parks and Garden and hillfort lie within the eastern part of this landscape unit. Typical Moderate-High LANDMAP evaluation. <i>HL38: Low / Moderate / <u>High</u></i> <i>HL35: Low / <u>Moderate</u></i> <i>HL40: Low / Moderate / <u>High</u></i>			Red
	Summary of Sensitivity to Wind Energy Developments	The attractive small to medium scale limestone scenery of this landscape unit is regionally designated as part of the Rhyd-y-Foel to Abergele SLA. Its sensitivity is further enhanced by its prominent skylines and intervisibility with adjoining high value landscapes, including Snowdonia National Park. When combined with the presence of important cultural heritage features and many sensitive visual receptors, the overall sensitivity of this landscape is considered high.			High

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Limestone Escarpment and Hills
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline
- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Unit No: 2 Point of Ayr to Colwyn Bay
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 2 Rhyd-y-Foel to Abergele
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

5.12 C10 Great Orme and Creuddyn Peninsular

Location and Extent

This landscape unit comprises the Great Orme and Creuddyn Peninsular which lie to the north west of Conwy.

Key Characteristics

- Typically small to medium scale
- Dramatic limestone headlands
- Considerable cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria			Assessed Sensitivity		
			Lower	↔	Higher
Landscape	*Scale	Typically a small-medium scale landscape <i>VS8: Small / Medium</i>			Red
	*Landform	The landform of the peninsula is varied and comprises dramatic limestone headlands and cliffs with areas of gently rolling land and flatter lowland. <i>VS4: Hills/Valleys / Levels / Rolling/Undulating</i>			Red
	Landcover Pattern	Mosaic of pastures, woodland, open land, hillsides, scarp slopes and cliffs and urban settlements. <i>VS3: Hillside & Scarp Slopes Grazing / Estuary / Flat Open Lowland Farmland / Urban</i> <i>VS5: Open Land / Mixture / Development</i>		Amber	
	Built Environment	With the exception of the Great Orme Headland. Man-made influences are evident across this landscape unit and include the A55 tourist route and North Wales Coast Railway in the south and also the busy urban resort settlements of Conwy, Deganwy, Llandudno, Rhos on Sea and Colwyn Bay and pylon lines that are visible towards the middle of this landscape unit. <i>VS6: Linear / Urban / Scattered Rural/Farm / No Settlements</i> <i>VS27: Fair / Good</i>		Amber	
Visual	*Skylines and Settings	The Great Orme and Little Orme form a prominent skyline feature . Esgyryn Obelisk is a distinctive monument visible from the south.			Red
	Movement	Much of this landscape unit is very busy , particularly around the coastal settlements; however there are a number of areas where movement is much less frequent . <i>VS18: Infrequent / Frequent / Constant</i>		Amber	

	Visibility, Key Views, Vistas	Expansive views out across the sea, coastline and inland hills from the Great Orme and other high points within this landscape unit. <i>VS9: Exposed / Confined / Enclosed</i>			Red
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> Numerous properties particularly along the coast and including the towns of Conwy, Deganwy, Llandudno, Rhos on Sea and Colwyn Bay Long distance routes including Sustrans - North Wales Coast cycle route (NCN Route 5) and the North Wales Path (part of the Wales Coast Path) Open Access Areas both within this landscape unit and Snowdonia National Park Coastal attractions including the Great Orme Headland and Country Park and Little Orme Other local attractions and public rights of way The A55 tourist route and North Wales Coast Railway The local road network Passing ships and ferries. 			Red
	Intervisibility/ Associations with Adjacent Landscapes	This landscape unit has strong association and intervisibility with both adjacent and more distant landscapes , including Snowdonia National Park			Red
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> Snowdonia National Park Anglesey Coast AONB Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site Great Orme Heritage Coast Great Orme and Creuddyn Peninsular SLA Conwy Valley SLA Open Access Areas Great Orme Country Park Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscape. Registered Parks and Gardens Hillforts 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High LANDMAP evaluation with some areas Outstanding . <i>VS46: Low / Moderate / High</i> <i>VS47: Low / Moderate / High</i> <i>VS48: Low / Moderate / High / Outstanding</i>		Amber	
	Remoteness / Tranquillity	There is a strong and locally important contrast between the busy developed areas of coastline			Red

		and the tranquil and remote undeveloped parts of the headland. <i>VS24: Attractive; Exposed; Wild; Unattractive; Smell / Attractive; Exposed; Wild / Attractive; Unattractive; Noisy; Settled / Exposed / Attractive; Exposed; Wild / Attractive; Settled; Sheltered; Safe</i>			
Value	Landscape Value	Much of this landscape unit lies within the regionally designated Great Orme and Creuddyn Peninsular SLA and also contains the nationally identified Great Orme Heritage Coast. Nationally designated features also include the Sustrans - North Wales Coast cycle route (NCN Route 5) and Open Access Areas. Typical High LANDMAP evaluation with some areas Outstanding . <i>VS50: Low / Moderate / <u>High</u></i> <i>VS49: Low / Moderate / <u>High</u></i> <i>LH45: Low / Moderate / High / Outstanding</i> <i>LH42: <u>Low</u> / Moderate / High / Outstanding</i> <i>GL31: Moderate / High / Outstanding</i> <i>GL33: Moderate / High / Outstanding</i>			Red
	*Cultural Heritage Value	Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site is wholly contained within this landscape unit. Much of this landscape unit lies within Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscape. A number of Registered Parks and Gardens are also present. Typical High-Outstanding LANDMAP evaluation. <i>HL38: Low / Moderate / <u>High</u> / <u>Outstanding</u></i> <i>HL35: Low / Moderate / High / <u>Outstanding</u></i> <i>HL40: Moderate / Outstanding</i>			Red
Summary of Sensitivity to Wind Energy Developments		The Great Orme and Creuddyn Peninsular is a distinctive and popular section of coastline, which is designated as both Great Orme and Creuddyn Peninsular SLA and nationally identified as the Great Orme Heritage Coast. Its sensitivity is further enhanced by its prominent skylines and intervisibility with adjoining high value landscapes, including Snowdonia National Park. When combined with the presence of important cultural heritage features, including the Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site and the many sensitive visual receptors, the overall sensitivity is considered high.	High		

Key Reference Sources Used for this Evaluation

- LANDMAP
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline
- Countryside Council for Wales, Historic Landscapes Register: 23 Creuddyn and Conwy (HLW (Gw) 5)

- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Units as follows: 3 Rhos Point to Great Ormes Head; 4 Conwy Estuary; and 5 Great Ormes Head to Puffin Island
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 1 Great Orme and Creuddyn Peninsular
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

5.13 D1 Aled Hiraethog Hills (West)

Location and Extent

This landscape unit comprises the undulating uplands of the Rhos Hills.

Key Characteristics

- Typically medium scale
- Undulating / rolling hills & valleys
- Generally open with a mosaic of grassland, gorse scrub and woodland.

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. <i>VS8: Small / <u>Medium</u> / large</i>		Amber	
	*Landform	Landform mainly comprises hills and valleys - typically rolling / undulating . <i>VS4: <u>Hills/Valleys</u> / <u>Rolling/Undulating</u> / Levels</i>		Amber	
	*Landcover Pattern	Mosaic of upland grazing, pastures, gorse scrub and woodland. <i>VS3: Hill & Lower Plateau Grazing / Hill & Lower Plateau Mosaic / Hillside & Scarp Slopes Grazing</i> <i>VS5: <u>Field Pattern/Mosaic</u> / Mixture / Woodland / Development</i>			Red
	Built Environment	Man-made influences include pylon lines which cross the northern end of this landscape unit in an east west direction. Elsewhere influences are typically limited to scattered rural properties and small settlements which are linked by a few minor roads. <i>VS6: Clustered / Mixture / <u>Scattered Rural/Farm / Village</u></i> <i>VS27: <u>Unassessed</u> / Poor / <u>Fair</u> / Good</i>			Red
Visual	*Skylines and Settings	Parts of this landscape unit form prominent and uninterrupted skylines .			Red
	Movement	Local road traffic introduces infrequent movement into the landscape. <i>VS18: Rare / Occasional / <u>Infrequent</u> / Frequent</i>			Red
	Visibility, Key Views, Vistas	Views are variable depending on the landform and vegetation cover. From the higher more open areas there are expansive views northwards across the sea and coastline and westwards to Snowdonia National Park. Views from lower lying areas are typically contained by intervening landform. <i>VS9: Open / Exposed / Enclosed</i>		Amber	

	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> • Small dispersed settlements and properties • Long distance routes including the Clwydian Way • Open Access Areas • Local attractions and public rights of way • The local road network 			Red
	Intervisibility/Associations with Adjacent Landscapes	The elevated parts of this landscape unit have a strong association and visibility with surrounding uplands including Snowdonia National Park; whereas lower lying areas are more contained .		Amber	
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> • Snowdonia National Park • The Clwydian Range and Dee Valley AONB • Open Access Areas • Elwy and Aled Valleys SLA • Rhyd Y Foel to Abergele SLA • Conwy Valley SLA • Open Access Areas • Dyffryn Clwyd (The Vale of Clwyd), Pen Isaf Dyffryn Elwy (Lower Elwy Valley) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes • Registered Parks and Gardens • Hillforts 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. VS46: <i>Low / Moderate / High</i> VS47: <i>Low / Moderate / High</i> VS48: <i>Low / Moderate</i>		Amber	
	*Remoteness / Tranquillity	Away from settlements and roads, this landscape unit has typically a tranquil and in places remote quality . VS24: <i>Attractive; Sheltered / Attractive; Sheltered; Safe / Attractive; Exposed; Wild; Remote / Attractive; Tranquil; Sheltered; Safe; Settled; Spiritual / Tranquil; Exposed</i>			Red
Value	Landscape Value	A large part of this landscape unit lies within the regionally designated Elwy and Aled Valleys and Rhyd-y-Foel to Abergele SLAs. Several Open Access Areas are also found within this landscape unit. Typical Moderate-High LANDMAP evaluation with some areas Outstanding . VS50: <i>Low / Moderate / High</i> VS49: <i>Low / Moderate / High / Outstanding</i> LH45: <i>Low / Moderate / High / Outstanding</i> LH42: <i>Low / Moderate / High</i> GL31: <i>Moderate / High / Outstanding</i> GL33: <i>Moderate / High / Outstanding</i>			Red

	Cultural Heritage Value	<p>This area includes Registered Parks and Gardens, hillforts and small areas of Dyffryn Clwyd (The Vale of Clwyd), Pen Isaf Dyffryn Elwy (Lower Elwy Valley) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes.</p> <p>Typical Moderate LANDMAP evaluation with some areas Outstanding.</p> <p>HL38: <i>Moderate / High / Unassessed</i></p> <p>HL35: <i>Low / Moderate / High / Unassessed</i></p> <p>HL40: <i>Moderate / High / Outstanding</i></p>			Red
	Summary of Sensitivity to Wind Energy Developments	<p>This medium scale landscape of undulating and rolling hills and valleys comprises a farmland mosaic of pastures, scrub and woodland. It is a tranquil and scenic landscape which has resulted in parts of it being regionally designated as Elwy and Aled Valleys and Rhyd-y-Foel to Abergele SLAs. Its sensitivity is further enhanced by the number of sensitive visual receptors and by its prominent skylines and intervisibility with adjoining high value landscapes, including Snowdonia National Park.</p>			High

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Aled Hiraethog Hills
- Regional Landscape Character Map for Wales, 9 Rhos Hills and 10 Denbigh Moors
- Countryside Council for Wales, Historic Landscapes Register, Area 38 Lower Elwy Valley (HLW (C) 4)
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 2 Rhyd-y-Foel to Abergele and SLA 3 Elwy and Aled Valley
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

5.14 D2 Hill Forest (Clocaenog Forest)

Location and Extent

This landscape unit falls within both Denbighshire and Conwy and encompasses much of Clocaenog Forest.

Key Characteristics

- Large scale
- Predominantly commercial conifer forest
- A number of existing wind farms

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	*Scale	Large scale landscape. <i>VS8: Large</i>	Yellow		
	Landform	Landform mainly comprises high hills and slopes which are typically rolling / undulating with some areas of upland plateau . <i>VS4: Rolling/Undulating / Plateau</i>		Amber	
	*Landcover Pattern	Landcover is dominated by commercial conifer forestry interspersed with pockets of moorland and settled farmland which form breaks within the forest. <i>VS3: Wooded Hillside & Scarp Slopes / Wooded Uplands & Plateaux</i> <i>VS5: Woodland</i>	Yellow		
	*Built Environment	Man-made influences include some large scale wind farms and commercial forestry plantations. There is little settlement and few roads. Much of this landscape unit lies within TAN8 SSA A. <i>VS6: No Settlements</i> <i>VS27: Unassessed / Fair</i>	Yellow		
Visual	Skylines and Settings	Simple skylines are interrupted by conifer plantations and wind turbines. The forest forms a prominent skyline feature in some views.	Yellow		
	Movement	Away from the wind turbines, the landscape has a typically still character . <i>VS18: Occasional</i>		Amber	
	Visibility, Key Views, Vistas	Views are typically contained by the dense tree stands and in places by the local landform. However, there are some extensive views out across the surrounding uplands where areas of forestry have been felled and also from the higher ground and more open edges of this landscape unit. <i>VS9: Confined</i>		Amber	

	Typical Receptors (in descending order of sensitivity)	<p>These include occupiers, users and visitors to the following:</p> <ul style="list-style-type: none"> • Properties (mainly located outside this landscape unit) • Long distance routes including Offa's Dyke Path national trail, the Clwydian Way and Hiraethog Trail long distance routes • Open Access Areas • Local attractions and public rights of way • The A5 (views towards the southern parts of this landscape unit) • The local road network 			Red
	Intervisibility/ Associations with Adjacent Landscapes	Where views are open, this landscape unit has a strong association and intervisibility with surrounding upland areas. In some places there are attractive views of the woodland edge and rolling landform from adjacent landscape units. This effect is however masked where large scale blanket forestry forms the main component of the view.		Amber	
	Views to and from Important Landscapes and Cultural Heritage Features	<p>These include:</p> <ul style="list-style-type: none"> • The Clwydian Range and Dee Valley AONB • Cerrigydrudion and A5 Corridor SLA • Dyffryn Clwyd (The Vale of Clwyd) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes • Open Access Areas 		Amber	
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	<p>Typical Moderate LANDMAP evaluation.</p> <p>VS46: <i>Low</i></p> <p>VS47: <i>Moderate / High</i></p> <p>VS48: <i>Low / Moderate</i></p>		Amber	
	Remoteness / Tranquillity	<p>Being predominantly unsettled and with relatively few local roads, this landscape unit has a sense of remoteness. The forestry activities and presence of wind turbines locally reduce the sense of tranquillity.</p> <p>VS24: <i>Sheltered; Smell; Other / Unattractive; Remote</i></p>		Amber	
Value	Landscape Value	<p>Typical Moderate LANDMAP evaluation.</p> <p>VS50: <i>Low</i></p> <p>VS49: <i>Low / Moderate</i></p> <p>LH45: <i>Low / Moderate / High</i></p> <p>LH42: <i>Low / Moderate</i></p> <p>GL31: <i>Moderate / High</i></p> <p>GL33: <i>Moderate / High</i></p>		Amber	
	Cultural Heritage Value	<p>Part of this landscape unit falls within Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape.</p> <p>Typical High LANDMAP evaluation with some Outstanding.</p> <p>HL38: <i>High / Outstanding / Unassessed</i></p>			Red

		HL35: <i>High / Unassessed</i> HL40: <i>Low / Moderate / High</i>			
Summary of Sensitivity to Wind Energy Developments	Although the presence of commercial forestry and existing wind farm development within this large scale upland landscape lessen sensitivity, the elevation and prominence of the skyline in views from the wider landscape provide a slight counterbalance. Nevertheless the overall sensitivity is still considered low. This is reflected in the fact that much of the area lies within TAN8 SSA A		Low		

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Hill Forest
- Regional Landscape Character Map for Wales, 10 Denbigh Moors
- Countryside Council for Wales, Historic Landscapes Register, 39 Denbigh Moors (HLW (C) 5)
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003
- Denbighshire Landscape Strategy 2003, Character Area: Clocaenog Forest (Code: D/LC/24)

5.15 D3 Cerrig Uplands

Location and Extent

This landscape unit comprises the area of uplands lying between the Denbigh Moors and Snowdonia National Park. The historic route of the A5 runs through this landscape unit, running from Tynan in the south east to Pentrefoelas and Snowdonia National Park in the north west.

Key Characteristics

- Medium to large scale
- Upland landscape
- Predominantly improved pasture

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria			Assessed Sensitivity		
Characteristics of the Landscape Unit			Lower	↔	Higher
Landscape	Scale	Typically a medium-large scale landscape. <i>VS8: <u>Medium</u> / Large</i>		Amber	
	Landform	Upland landscape comprising broad valleys and high hills . <i>VS4: High Hills/Mountains / <u>Hills/Valleys</u> / Levels / Rolling/Undulating</i>		Amber	
	Landcover Pattern	Mainly pasture , with some wetlands and rough grassland. Tree cover is sparse and confined to the smaller valleys and shelter belts. <i>VS3: Open Upland Valleys / Hill & Lower Plateau Grazing / Upland Grazing</i> <i>VS5: <u>Field Pattern/Mosaic</u> / Open Land</i>		Amber	
	*Built Environment	Man-made influences are relatively limited . Small clustered villages are concentrated along the A5, whilst elsewhere there is typically a dispersed pattern of farms and rural properties. Some wind turbines are present in this landscape unit. <i>VS6: Clustered / <u>Scattered Rural/Farm</u> / No Settlements</i> <i>VS27: <u>Fair</u> / Good / Unassessed</i>		Amber	
Visual	Skylines and Settings	Simple sweeping skylines are occasionally interrupted by individual field and hedgerow trees, wood poles, dispersed rural properties and occasional wind turbines.		Amber	
	Movement	Away from the A5 road corridor, movement in this landscape is relatively infrequent . <i>VS18: Frequent / Infrequent / Occasional</i>		Amber	
	*Visibility, Key Views, Vistas	This is a typically open and exposed landscape unit with long ranging views, particularly from the more elevated areas. <i>VS9: Open / Exposed</i>			Red

	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> • Small villages along the A5 corridor and dispersed individual properties • Long distance routes including the Clwydian Way and Hiraethog Trail • Open Access Areas • Local attractions and public rights of way • The A5 tourist route to regional/national attractions outside this landscape unit • The local road network 			Red
	Intervisibility/Associations with Adjacent Landscapes	There is a strong association with neighbouring upland areas including Snowdonia National Park, the Berwyn Mountains and the Denbigh Moors.			Red
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> • Snowdonia National Park • The Clwydian Range and Dee Valley AONB • Cynwyd and Llandrillo AOB • Hiraethog SLA • Cerrigydrudion and A5 Corridor SLA • Open Access Areas • Y Berwyn (Berwyn) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. VS46: <i>Moderate / High</i> VS47: <i>Low / Moderate / High</i> VS48: <i>Moderate / High</i>		Amber	
	Remoteness / Tranquillity	Away from the A5 road corridor, this landscape unit has a remote and tranquil character . VS24: <i>Attractive; Tranquil; Exposed / Tranquil; Exposed / Exposed / Settled</i>			Red
Value	*Landscape Value	Much of the south east part of this landscape unit, including east of the A5 lies within the regionally designated Cerrigydrudion and A5 Corridor SLA. Typical Moderate LANDMAP evaluation. VS50: <i>Moderate / High</i> VS49: <i>Low / Moderate / High</i> LH45: <i>Low / Moderate / High</i> LH42: <i>Low / Moderate / High</i> GL31: <i>Moderate / High</i> GL33: <i>Moderate / High</i>			Red
	Cultural Heritage Value	Typical Moderate-High LANDMAP evaluation. HL38: <i>Low / Moderate / High</i> HL35: <i>Low / Moderate / High</i> HL40: <i>Moderate / High</i>		Amber	
Summary of Sensitivity to Wind Energy Developments		Although this large scale highly rural upland landscape has characteristics which lessen its landscape sensitivity, part of it is regionally	High		

	designated as the Cerrigydrudion and A5 Corridor SLA and it also has a strong association and intervisibility with surrounding high value landscapes and cultural heritage features, particularly with Snowdonia National Park. This increases its overall sensitivity.	
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Cerrig Uplands
- Regional Landscape Character Map for Wales, 10 Denbigh Moors
- Countryside Council for Wales, Historic Landscapes Register, 39 Denbigh Moors (HLW (C) 5)
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 4 Hiraethog
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

5.16 D4 Maerdy Hills

Location and Extent

This landscape unit comprises a series of undulating hills which lie to the south of the Clocaenog Forest and run south from Derwen past Maerdy to the southern boundary of Conwy.

Key Characteristics

- Small to medium scale
- Undulating upland rural landscape

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	*Scale	This is a small to medium scale landscape. <i>VS8: Small / Medium</i>			Red
	Landform	Landform mainly comprises hills and valleys and is typically rolling or undulating . <i>VS4: Hills/Valleys / Rolling/Undulating</i>		Amber	
	Landcover Pattern	Mosaic of pastoral farmland and woodland. <i>VS3: Open/Wooded Mosaic Upland Valleys / Hill & Lower Plateau Grazing / Open Upland Valleys</i> <i>VS5: Field Pattern/Mosaic</i>			Red
	Built Environment	The influence of modern development is limited to the northern half of this landscape unit which lies within TAN 8 SSA A and includes some existing turbines . Elsewhere there is typically a dispersed pattern of isolated farms and rural properties with some small clustered villages along the A5 road corridor. <i>VS6: Scattered Rural/Farm</i> <i>VS27: Unassessed / Fair / Good</i>		Amber	
Visual	Skylines and Settings	This landscape unit has some prominent undeveloped skylines .			Red
	Movement	Away from the A5 road corridor, movement in this landscape is relatively infrequent . <i>VS18: Occasional / Infrequent / Frequent</i>			Red
	Visibility, Key Views, Vistas	Views within this landscape unit are typically enclosed by landform and vegetation. However, there are some longer views of surrounding uplands to and from the higher ground. <i>VS9: Enclosed</i>		Amber	
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> • Small villages along the A5 corridor and dispersed individual properties 			Red

		<ul style="list-style-type: none"> Long distance routes including the Clwydian Way and Hiraethog Trail Open Access Areas Local attractions and the public rights of way The A5 tourist route to regional/national attractions outside this landscape unit The local road network 			
	Intervisibility/Associations with Adjacent Landscapes	The higher parts of this landscape unit have some intervisibility and association with adjoining landscapes but generally this is a visually contained landscape unit.		Amber	
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> Snowdonia National Park The Clwydian Range and Dee Valley AONB Cynwyd and Llandrillo AOB Open Access Areas Cerrigydrudion and A5 Corridor SLA Registered Historic Landscapes Hillforts 		Amber	
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High LANDMAP evaluation. VS46: <i>High</i> VS47: <i>Moderate / High</i> VS48: <i>High</i>			Red
	*Remoteness / Tranquillity	Away from the A5 road corridor this landscape unit typically has a remote and tranquil character. VS24: <i>Attractive; Tranquil; Sheltered; Safe; Settled / Attractive; Safe; Remote; Settled; Wild / Attractive; Tranquil; Exposed</i>			Red
Value	Landscape Value	The southern part of this landscape unit lies within the regionally designated Cerrigydrudion and A5 Corridor SLA. Typical Moderate-High LANDMAP evaluation. VS50: <i>High</i> VS49: <i>Moderate / High</i> LH45: <i>Low / Moderate / High</i> LH42: <i>Low / Moderate / High</i> GL31: <i>Moderate / High</i> GL33: <i>Moderate / High</i>		Amber	
	Cultural Heritage Value	This area includes a scheduled hillfort. Typical Moderate-High LANDMAP evaluation. HL38: <i>Moderate / High / Unassessed</i> HL35: <i>Moderate / High / Unassessed</i> HL40: <i>Moderate / High</i>		Amber	
Summary of Sensitivity to Wind Energy Developments		Small to medium scale landscape with a mosaic of pastoral farmland and woodland. The southern part of this unit is regionally designated within the Cerrigydrudion and A5 Corridor SLA. Sensitivity is further enhanced by the presence of sensitive visual receptors, the remote and typically tranquil	Medium-High		

	<p>character and by the fact that the area includes some prominent skylines.</p> <p>Whilst these features all lend a high sensitivity, the northern parts of this landscape unit are within TAN 8 SSA A and include existing wind turbines which lower the sensitivity, particularly to the north.</p>	
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Maerdy Hills
- Regional Landscape Character Map for Wales, RLCA 10
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012) SLA 5 Cerrigydrudion and A5 Corridor
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003
- Denbighshire Landscape Strategy 2003, Character Area: Melin-y-Wig Hills (Code: D/LC/26)

5.17 D5 Edeirnion Hills

Location and Extent

This landscape unit comprises the strongly undulating rural landscape which stretches from Clwydd - Newydd southwards to the A5, and includes the hills to the west of Corwen.

Key Characteristics

- Medium scale
- Strongly undulating rural landscape

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

			Assessed Sensitivity		
Sensitivity Criteria		Characteristics of the Landscape Unit	Lower	↔	Higher
Landscape	Scale	Medium scale landscape. <i>VS8: Medium</i>		Amber	
	Landform	The complex landform comprises rounded and interlocking strongly undulating hills and valley slopes . <i>VS4: <u>Rolling/Undulating</u> / Hills/Valleys</i>		Amber	
	Landcover Pattern	Mosaic of pastoral farmland with some large areas of open hillside and scarp slopes. Woodland blocks are more prevalent in the north and south of this landscape unit. <i>VS3: Hillside & Scarp Slopes Grazing / Hillside & Scarp Slopes Mosaic / <u>Open Hillside & Scarp Slopes</u></i> <i>VS5: Field Pattern/Mosaic</i>			Red
	*Built Environment	With the exception of the historic village of Gwyddelwern, settlement is limited to remote farms and rural properties which are linked by a dense network of narrow winding lanes. Pylon lines and wind turbines are present to the south, and the main A494 Ruthin to Corwen road runs through this landscape unit. A metal recycling scrap yard locally influences the landscape. <i>VS6: <u>Scattered Rural/Farm</u> / Village / No Settlement</i> <i>VS27: Unassessed</i>		Amber	
Visual	*Skylines and Settings	This landscape unit has some prominent undeveloped skylines although in places these are interrupted by wind turbines and pylon lines.		Amber	
	Movement	Away from the A5 road corridor, movement in this landscape is relatively infrequent . <i>VS18: Infrequent</i>		Amber	
	Visibility, Key Views, Vistas	Views within this landscape unit are typically enclosed by landform and vegetation. However,		Amber	

		there are some longer views to and from the higher ground. <i>VS9: Open / Enclosed</i>			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> The historic village of Gwyddelwern and dispersed individual properties Long distance routes including the Clwydian Way, Brenig Way and Dee Valley Way Open Access Areas The A5 tourist route to regional/national attractions outside this landscape unit Local attractions and the public right of way The local road network 			Red
	*Intervisibility/Associations with Adjacent Landscapes	The southernmost part of this landscape unit has strong visual associations with adjacent units; whereas the northern parts are more visually self-contained .		Amber	
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> Snowdonia National Park The Clwydian Range and Dee Valley AONB Cynwyd and Llandrillo AOB Open Access Areas Dyffryn Clwyd (The Vale of Clwyd) and Y Berwyn (Berwyn) Registered Historic Landscapes Hillforts 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. <i>VS46: High</i> <i>VS47: Moderate / High</i> <i>VS48: Moderate / High</i>		Amber	
	Remoteness / Tranquillity	Although this landscape is typically tranquil , the well-developed farmed character, presence of settlement and dense network of local roads gives a reduced sense of remoteness . <i>VS24: Attractive; Safe; Settled / Attractive; Sheltered; Settled / Attractive; Tranquil; Safe; Settled</i>		Amber	
Value	Landscape Value	The south eastern corner and far eastern part of this landscape unit lie within the Clwydian Range and Dee Valley AONB. There is also a small Open Access Area to the south east. Typical Moderate-High LANDMAP evaluation with some Outstanding areas to the south in relation to geological value. <i>VS50: Moderate / High</i> <i>VS49: Moderate</i> <i>LH45: Moderate</i> <i>LH42: Moderate</i> <i>GL31: Moderate / High / Outstanding</i>		Amber	

		GL33: <i>Moderate</i> / <i>High</i> / <i>Outstanding</i>			
	Cultural Heritage Value	The area includes a hillfort and part of the A5 historic route. Typical High LANDMAP evaluation. <i>HL38: Low / Moderate / <u>High</u> / Unassessed</i> <i>HL35: High / Unassessed</i> <i>HL40: Low / Moderate / <u>High</u></i>		Amber	
	Summary of Sensitivity to Wind Energy Developments	This is a medium scale landscape comprising a complex pattern of rounded and interlocking hills and valleys. Part of it lies within the Clwydian Range and Dee Valley AONB which increases sensitivity in that particular locality. Sensitivity is enhanced by a number of sensitive visual receptors and by some prominent skylines and intervisibility with adjoining high value landscapes, including the AONB and Snowdonia National Park. The presence of existing wind turbines within both this and adjacent landscapes units slightly reduces the sensitivity of the local landscape to further wind energy development.		Medium-High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Edeirnion Hills
- Regional Landscape Character Map for Wales, 15 Vale of Llangollen and Dee Valley and 12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Woodlands South of Ruthin (Code: D/LC/22); Denbigh and Ruthin Hills (Code: D/LC/23); Gwyddelwern Quarries (Code: D/LC/27); Llanellidan and Gwyddelwern Hills (Code: D/LC/28); and Rug Estate Parkland (Code: D/LC/30)
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14 (Nb. Area located just outside the AONB)

5.18 D8 Upland Plateau

Location and Extent

This landscape unit comprises a strongly undulating upland plateau.

Key Characteristics

- Small to medium scale
- Strongly undulating upland plateau

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

			Assessed Sensitivity		
Sensitivity Criteria	Characteristics of the Landscape Unit		Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. <i>VS8: Small / Medium</i>		Amber	
	*Landform	Strongly undulating, slightly rugged, upland plateau . <i>VS4: Hills/Valleys</i>	Yellow		
	Landcover Pattern	Mainly upland grazing with pockets of scrub and woodland. <i>VS3: Hill & Lower Plateau Mosaic / Hill & Lower Plateau Grazing</i> <i>VS5: Field Pattern/Mosaic</i>	Yellow		
	*Built Environment	This landscape unit is sparsely settled . Modern development includes pylon lines which cross this landscape unit and are visible from a number of locations. <i>VS6: Scattered Rural/Farm / Clustered</i> <i>VS27: Fair / Good</i>		Amber	
Visual	Skylines and Settings	Simple and open skylines are interrupted by pylon lines .	Yellow		
	Movement	Infrequent movement within this landscape imparts a still character. <i>VS18: Occasional / Infrequent / Frequent</i>			Red
	Visibility, Key Views, Vistas	Views within this landscape unit are typically enclosed by landform and vegetation . However, there are some expansive views to and from the higher ground. <i>VS9: Open / Enclosed</i>		Amber	
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> • Occasional dispersed properties • Local attractions and public rights of way • The local road network 		Amber	
	*Intervisibility/Associations	The higher parts of this landscape unit have an association and intervisibility with adjoining upland			Red

	with Adjacent Landscapes	landscapes, including Snowdonia National Park and the Great Orme Headland .			
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> • Snowdonia National Park • Great Orme Heritage Coast • Conwy Valley SLA • Elwy and Aled Valleys SLA • Rhyd Y Foel to Abergele SLA • Creuddyn a Chonwy (Creuddyn and Conwy) and Pen Isaf Dyffryn Conwy (Lower Conwy Valley) Registered Historic Landscapes • Registered Parks and Gardens 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. VS46: <i>Moderate</i> / <i>High</i> VS47: <i>Moderate</i> / <i>High</i> VS48: <i>Moderate</i> / <i>High</i>		Amber	
	Remoteness / Tranquillity	Although the area typically has a tranquil character , existing pylon lines lessen the sense of remoteness. VS24: <i>Attractive; Tranquil; Sheltered; Safe; Settled; Spiritual / Tranquil; Exposed</i>		Amber	
Value	Landscape Value	The very western edges of this landscape unit fall within the regionally designated Conwy Valley SLA. Typical Moderate LANDMAP evaluation. VS50: <i>Moderate</i> / <i>High</i> VS49: <i>Moderate</i> / <i>High</i> LH45: <i>High</i> LH42: <i>Low</i> GL31: <i>Moderate</i> / <i>High</i> GL33: <i>Moderate</i> / <i>High</i>		Amber	
	Cultural Heritage Value	Typical Moderate LANDMAP evaluation. HL38: <i>Moderate</i> HL35: <i>Low</i> / <i>Moderate</i> HL40: <i>Moderate</i>		Amber	
Summary of Sensitivity to Wind Energy Developments		The medium-high sensitivity of this open upland plateau arises from the presence of sensitive visual receptors and views to and from important landscape and cultural heritage features including Snowdonia National Park and the Great Orme Headland.	Medium-High		

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Upland Plateau
- Regional Landscape Character Map for Wales, 9 Rhos Hills
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

5.19 D10 Moorland Plateau (Denbigh Moors)

Location and Extent

This landscape unit comprises the upland areas of the Mynydd Hiraethog (Denbigh Moors).

Key Characteristics

- Typically vast in scale
- Predominantly rolling upland moorland plateau
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria			Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically vast in scale . <i>VS8: Small / Large / Vast</i>	Yellow		
	Landform	A rolling upland plateau . <i>VS4: Hills/Valleys / Plateaux</i>	Yellow		
	Landcover Pattern	Extensive tracts of blanket bog and heather moorland with some wooded areas and large lakes. Coniferous forestry plantation is particularly prevalent in the east. <i>VS3: Upland Moorland / Wooded Upland & Plateaux / Mosaic Upland & Plateaux / Lake</i> <i>VS5: Open Land / Woodland / Water</i>	Yellow		
	*Built Environment	The landscape is unsettled with little modern development other than some wind turbines in the far north west and north eastern parts of the landscape unit. <i>VS6: No Settlement</i> <i>VS27: Fair / Good</i>			Red
Visual	Skylines and Settings	A plateau landscape with typically simple, open and largely uninterrupted skylines with the exception of existing wind turbines which interrupt the skyline to the far north west and north east.		Amber	
	Movement	Movement is rare within this landscape. <i>VS18: Rare / Occasional / Infrequent</i>			Red
	Visibility, Key Views, Vistas	There are some open and expansive views across the undulating moorland to surrounding uplands including Snowdonia National Park and the Clwydian Range and Dee Valley AONB. <i>VS9: Open / Exposed / Enclosed</i>		Amber	
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> • Relatively few properties (located in adjacent landscape units) 		Amber	

		<ul style="list-style-type: none"> Long distance routes including Offa's Dyke Path national trail, the Clwydian Way and Hiraethog Trail Open Access Areas Local attractions and public rights of way Local road network 			
	Intervisibility/ Associations with Adjacent Landscapes	The higher parts of this landscape unit have an association and intervisibility with adjoining and other upland landscapes, including Snowdonia National Park.			Red
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> Snowdonia National Park The Clwydian Range and Dee Valley AONB Cynwyd and Llandrillo AOB Open Access Areas Hiraethog SLA Open Access Areas Dyffryn Clwyd (The Vale of Clwyd) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes Hillforts 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High LANDMAP evaluation. VS46: <i>Low / Moderate / High</i> VS47: <i>Moderate / High</i> VS48: <i>Moderate / High</i>		Amber	
	Remoteness / Tranquillity	This landscape unit is tranquil and has a remote wilderness quality . VS24: <i>Tranquil; Exposed; Remote; Wild; Spiritual; Threatening</i>			Red
Value	*Landscape Value	The western part of this landscape unit lies within the regionally designated Hiraethog SLA. Almost half of this landscape unit comprises Open Access Areas. Much of this landscape unit falls within TAN8 SSA A and there are a number of existing wind turbines. Typical High-Outstanding LANDMAP evaluation. VS50: <i>Low / Moderate / High</i> VS49: <i>Low / Moderate / High / Outstanding</i> LH45: <i>Low / Moderate / High / Outstanding</i> LH42: <i>Low / Moderate / High / Outstanding</i> GL31: <i>Moderate / High</i> GL33: <i>Low / Moderate / High / Outstanding</i>			Red
	Cultural Heritage Value	More than half of this landscape unit lies within the Denbigh Moors Registered Historic Landscape. Typical High-Outstanding LANDMAP evaluation. HL38: <i>Moderate / High / Outstanding</i> HL35: <i>Moderate / High</i> HL40: <i>Moderate / High / Outstanding</i>			Red

Summary of Sensitivity to Wind Energy Developments	<p>A remote, exposed and open landscape with high landscape value reflected in the western half of the area being regionally designated as the Hiraethog SLA. There are expansive views to and from important landscapes and cultural heritage features, including Snowdonia National Park and the Clwydian Range and Dee Valley AONB. Whilst these features all lend a high sensitivity, the northern extent of the area lies within TAN8 SSA A and is likely to have a lower sensitivity.</p>	<p>High</p>
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Moorland Plateau
- Regional Landscape Character Map for Wales, 10 Denbigh Moors
- Countryside Council for Wales, Historic Landscapes Register, 39 Denbigh Moors (Mynydd Hiraethog) (HLW (C) 5)
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 4 Hiraethog
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003
- Denbighshire Landscape Strategy 2003, Character Area: Brenig/Forest (Code: D/LC/25)

5.20 D11 Moorland Plateau

Location and Extent

Located to the far south west of the study area; this landscape unit lies adjoins the eastern boundary of Snowdonia National Park.

Key Characteristics

- Typically large scale
- High and strongly undulating upland plateau

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically large scale . <i>VS8: Medium / Large</i>	Yellow		
	Landform	High and strongly undulating upland plateau broken by upland valleys. <i>VS4: Hills/Valleys / High Hills/Mountains</i>		Amber	
	Landcover	Extensive tracts of blanket bog and heather moorland with some wooded areas and pastures. <i>VS3: Upland Moorland / Open Upland Valleys</i> <i>VS5: Field Pattern/Mosaic / Open Land</i>	Yellow		
	*Built Environment	The landscape is typically unsettled . <i>VS6: Clustered / No Settlements</i> <i>VS27: Good / Unassessed</i>			Red
Visual	Skylines and Settings	Garn Prys is a prominent skyline feature which is visible from a number of locations from both within and outside this landscape unit.			Red
	Movement	With the exception of occasional movement , this landscape unit has a relatively still character . <i>VS18: Occasional / Frequent</i>			Red
	*Visibility, Key Views, Vistas	There are open and expansive views across the undulating moorland to Snowdonia National Park, the Denbigh Moors and intervening areas to the north. <i>VS9: Open / Exposed</i>			Red
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> Occasional properties Open Access Areas Local attractions and public rights of way Visitors to regional/national attractions outside this landscape unit travelling along the A5 The local road network 			Red

	Intervisibility/ Associations with Adjacent Landscapes	The higher parts of this landscape unit have a strong association and intervisibility with adjoining upland landscapes, including Snowdonia National Park .			Red
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> • Snowdonia National Park • Open Access Areas • Hiraethog SLA • Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High LANDMAP evaluation. <i>VS46: Moderate / High</i> <i>VS47: Low / High</i> <i>VS48: Moderate / High</i>		Amber	
	Remoteness / Tranquillity	This landscape unit typically has a tranquil and remote character . <i>VS24: Tranquil; Exposed; Remote; Threatening</i>			Red
Value	*Landscape Value	This landscape unit adjoins Snowdonia National Park and comprises some Open Access Areas. Typical High-Outstanding LANDMAP evaluation. <i>VS50: Moderate / High</i> <i>VS49: Low / High</i> <i>LH45: Moderate / High / Outstanding</i> <i>LH42: Low / Moderate / Outstanding</i> <i>GL31: Moderate</i> <i>GL33: Moderate</i>			Red
	Cultural Heritage Value	Typical Moderate LANDMAP evaluation. <i>HL38: Low / Moderate</i> <i>HL35: Moderate</i> <i>HL40: Moderate / High</i>	Yellow		
Summary of Sensitivity to Wind Energy Developments		This area of open upland moorland is largely unsettled and has a remote and tranquil character. There is a strong association and intervisibility with Snowdonia National Park and expansive views to and from other important landscapes and cultural heritage features. When combined with a number of sensitive visual receptors this significantly increases the sensitivity of the landscape.	Very High		

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Moorland Plateau
- Regional Landscape Character Map for Wales, RLCA 6 Snowdonia / Eryri and RLCA 10 Denbigh Moors
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

5.21 D15 Moorland Ridge

Location and Extent

This landscape unit comprises distinctive upland hills in Conwy, Mwdwl-eithin to the north of the A5 and Foel Goch and associated hills to the south of the A5.

Key Characteristics

- Typically large scale
- Upland moorland landscape
- Mostly continuous and undulating high ridgelines
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria Characteristics of the Landscape Unit			Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a large scale landscape . <i>VS8: Medium / Large / Vast</i>	Yellow		
	*Landform	Strongly undulating upland hills which form distinctive ridgelines . <i>VS4: High Hills/Mountains / Hills/Valleys</i>			Red
	Landcover Pattern	Landcover mainly comprises upland moorland . <i>VS3: Upland Moorland / Open Upland Valleys</i> <i>VS5: Open Land / Field Pattern/Mosaic</i>	Yellow		
	Built Environment	This landscape unit is typically unsettled and there is little modern development . <i>VS6: No Settlements / Scattered Rural/Farm</i> <i>VS27: Fair</i>			Red
Visual	*Skylines and Settings	The ridgelines of this landscape unit are distinctive skyline features that form the backdrop to views from lower lying areas.		Amber	
	Movement	Although there is occasional movement , this landscape is typically relatively still . <i>VS18: Rare / Occasional</i>			Red
	Visibility, Key Views, Vistas	There are open and expansive views , including to and from the Clwydian Range and Snowdonia National Park in particular from the south of this landscape unit. <i>VS9: Open / Exposed</i>			Red
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> • Occasional properties • Long distance routes including Offa's Dyke Path national trail, the Hiraethog Trail and Clwydian Way • Open Access Areas • Local attractions and public rights of way 			Red

		<ul style="list-style-type: none"> Visitors to regional/national attractions outside this landscape unit travelling along the A5 The local road network 			
	Intervisibility/Associations with Adjacent Landscapes	This landscape unit has strong associations and intervisibility with upland areas, including the Denbigh Moors, Clwydian Range and Dee Valley AONB, Berwyn Mountains and Snowdonia National Park.			Red
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> Snowdonia National Park The Clwydian Range and Dee Valley AONB Denbigh Moors SLA Cerrigydrudion and A5 corridor SLA Open Access Areas Dyffryn Clwyd (The Vale of Clwyd), Mynydd Hiraethog (Denbigh Moors) and Y Berwyn (Berwyn) Registered Historic Landscapes Hillforts 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High LANDMAP evaluation. VS46: <i>High</i> VS47: <i>Moderate</i> VS48: <i>High</i>		Amber	
	*Remoteness / Tranquillity	This landscape unit has a typically tranquil and remote character. VS24: <i>Tranquil; Exposed; Wild; Attractive; Remote / Attractive; Tranquil; Exposed</i>			Red
Value	Landscape Value	This landscape unit contains some Open Access Areas. Typical Moderate-High LANDMAP evaluation. VS50: <i>High</i> VS49: <i>Moderate / High</i> LH45: <i>Low / Moderate / High</i> LH42: <i>Low / Moderate</i> GL31: <i>Moderate / High</i> GL33: <i>Moderate / High</i>		Amber	
	Cultural Heritage Value	Typical Moderate LANDMAP evaluation. HL38: <i>Moderate / High</i> HL35: <i>Low / Moderate / High</i> HL40: <i>Moderate / High</i>		Amber	
Summary of Sensitivity to Wind Energy Developments		This area of large scale upland moorland is largely unsettled and has a remote and tranquil character. There is a strong association and intervisibility with the Denbigh Moors, Clwydian Range and Dee Valley AONB, Berwyn Mountains and Snowdonia National Park and extensive views to and from important landscapes and cultural heritage features. When combined with some sensitive	High		

	visual receptors the sensitivity of the landscape is significantly increased.	
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Moorland Ridge
- Regional Landscape Character Map for Wales, RLCA 10 Denbigh Moors
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

5.22 D16 Marginal Upland (East Conwy Valley)

Location and Extent

This landscape unit is situated between the River Conwy valley to the west and Rhos Hills to the east.

Key Characteristics

- Small to medium scale landscape
- Open and exposed uplands
- Mosaic of pasture and woodlands

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	*Scale	Small to medium scale landscape. <i>VS8: Small / Medium</i>			Red
	Landform	Sloping landform rising up to rolling and undulating uplands. <i>VS4: Hills/Valleys / Levels / Rolling/Undulating</i>			Red
	Landcover Pattern	Landcover comprises a mosaic of pasture and small areas of woodland. <i>VS3: Hill & Lower Plateau Mosaic / Hill & Lower Plateau Grazing</i> <i>VS5: Field Pattern/Mosaic</i>			Red
	Built Environment	Modern development is evident in the local road network, dispersed settlement pattern and pylon lines that run east to west across this landscape unit and wind turbines to the south. <i>VS6: Clustered / Scattered Rural/Farm / Mixture</i> <i>VS27: Good / Fair / Poor</i>		Amber	
Visual	*Skylines and Settings	The more elevated parts of this landscape unit form prominent skyline features , particularly in views out of the Conwy Valley and from Snowdonia National Park. Skylines are interrupted by wind turbines and pylon lines in some places.			Red
	Movement	This landscape is typically still in character, although infrequent traffic on the local road network and more frequent traffic on the A548 introduce some movement . Rotating turbine blades also introduce movement in the south. <i>VS18: Occasional / Infrequent / Frequent</i>		Amber	
	Visibility, Key Views, vistas	This landscape unit is typically open and exposed . The more elevated areas afford extensive westerly views to Snowdonia National Park with less prominent southerly views to the Denbigh Moors and distant easterly views to the higher parts of the Clwydian Range. <i>VS9: Open / Exposed</i>			Red

	Typical Receptors (in broadly descending order of sensitivity)	These include occupiers, users and visitors to the following: <ul style="list-style-type: none"> • Dispersed settlements • Open Access Areas in adjacent landscape units • Local attractions and public rights of way • The local road network 			Red
	Intervisibility/Associations with Adjacent Landscapes	There is a strong association and intervisibility with Snowdonia National Park and to a lesser extent with adjacent upland areas to the south and east and coastal areas to the north.			Red
	Views to and from Important Landscapes and Cultural Heritage Features	These include: <ul style="list-style-type: none"> • Snowdonia National Park • The Clwydian Range and Dee Valley AONB • Conwy Valley SLA • Open Access Areas (to the south) • Great Orme Heritage Coast • Dyffryn Clwyd (The Vale of Clwyd), Pen Isaf Dyffryn Conwy (Lower Conwy Valley) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes • Registered Parks and Gardens • Hillforts 			Red
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate - High LANDMAP evaluation. <i>VS46: Moderate / High</i> <i>VS47: Moderate / High</i> <i>VS48: Moderate / High</i>		Amber	
	Remoteness / Tranquillity	This landscape unit is typically tranquil and relatively remote in character. <i>VS24: Tranquil; Exposed / Tranquil; Exposed; Threatening</i>			Red
Value	*Landscape Value	Much of this landscape unit lies within the regionally designated Conwy Valley SLA. Typical Moderate-High LANDMAP evaluation with some areas Outstanding . <i>VS50: Moderate / High</i> <i>VS49: Moderate / High</i> <i>LH45: Low / Moderate / Outstanding</i> <i>LH42: Low / Moderate / High</i> <i>GL31: Moderate / High / Outstanding</i> <i>GL33: Moderate / High / Outstanding</i>			Red
	Cultural Heritage Value	Typical Moderate-High LANDMAP evaluation with some very small sections of Outstanding areas to the south. <i>HL38: Moderate / High / Outstanding</i> <i>HL35: Moderate / High</i> <i>HL40: Moderate / High / Outstanding</i>		Amber	
Summary of Sensitivity to Wind Energy Developments		This area of small to medium scale sloping pastures and woodlands is sparsely settled and has a remote and tranquil character, which has	High		

	<p>resulted in its inclusion within the regionally designated Conwy Valley SLA. The area forms a prominent skyline feature, particularly in from views from the Conwy Valley and from Snowdonia National Park. There is a strong association and intervisibility with Snowdonia National Park and extensive views to and from important landscapes and cultural heritage features, including the Great Orme Heritage Coast. This, combined with the presence of other sensitive visual receptors imparts a high degree of sensitivity.</p>	
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Regional Landscape Character Map for Wales, 7 Conwy Valley and 9 Rhos Hills
- Welsh Seascapes and their Sensitivity to Offshore Developments, 4 Conwy Estuary and 5 Great Ormes Head to Puffin Island;
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 6 Conwy Valley
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

6. SECTION 5: EVALUATION OF LANDSCAPE STRATEGY AREAS AND CAPACITY ASSESSMENTS

- 6.1 A total of 15 Landscape Strategy Areas were identified across the study area as illustrated in Figure 6. These are listed below in Table 5.1 together with an overall evaluation of their landscape and visual sensitivity in relation to wind energy development.

Table 5.1: Summary of Strategy Areas and Overall Sensitivity

Landscape Strategy Area		Overall Sensitivity	Landscape Strategy Area Location ²⁰		Page Number
Ref	Name		Conwy	Denbighshire	
2	Vale of Clwyd	High	5%	95%	102
3	South Clwydian Hills	Medium-High	5%	95%	104
7	Clocaenog Forest	Low	50%	50%	106
8	Cerrig Uplands	High	90%	10%	108
9	Denbigh Moors	High	80%	20%	110
10	Rhos Hills	High	60%	40%	112
11	Elwy Valley	High	95%	5%	114
12	Conwy Valley	High	100%		116
13	North West Conwy Coast	High	100%		118
14	Colwyn Coast	High	95%	5%	120
15	Coastal Flats	Medium	45%	55%	122

6.2 Approach to Evaluating Landscape Strategy Areas

The following text describes the how the evaluation, capacity assessment and guidance notes are presented for each strategy area:

- Each strategy area has a key plan and text describing its location and landscape context.
- The references for the landscape units which are found within each strategy area are also listed.
- A statement of the overall sensitivity of the strategy area in relation to wind energy development is presented, together with a justification of the assessment.
- A list of the landscape, visual and cultural heritage characteristics and qualities which are susceptible to wind energy development is provided for each strategy area. Designated features are listed separately. It should be noted that Registered Historic Landscapes and the Heritage Coast, whilst not statutorily protected, are considered to be of national value and are therefore included within the list of designations for the relevant area.
- The landscape strategy for the area is set out including the landscape objective(s) for the area, a record of operational and consented wind energy development (March 2013), an indication of the relative amounts of wind energy development which might be accommodated (indicative capacity) and area specific guidance notes regarding the scale, design and siting of wind energy developments in relation to each area.

It is important to note that the strategy area evaluation sheets must be read together with the relevant sensitivity evaluation sheets (these are listed before each table and also illustrated on each key plan for ease of reference).

²⁰ The location of each strategy area is split into approximate percentage coverage where the landscape strategy areas include parts of Conwy and Denbighshire

6.3 Strategy Area 2 - Vale of Clwyd

Location and Context

The Vale of Clwyd strategy area is located between the upland areas of the Clwydian Hills to the east and Rhos Hills to the west. This area extends from the urban fringes of Rhyl and Prestatyn on the coast south to Llanelidan.

Landscape Units Included within this Strategy Area

A1 and A6 with small parts of B4; C3; D5 and D17

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High (Red)	<p>This is a highly valued landscape which lies close to and partly within the Clwydian Range and Dee Valley AONB and includes other important landscape and cultural heritage designations. The area is also informally valued as a tranquil and historically settled landscape and provides a number of low key outdoor recreational opportunities. Parts of the area are open and serve as the foreground to views of the AONB and the Rhos Hills.</p>
<p>Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development</p>	<p>Designated Features within the Strategy Area</p> <ul style="list-style-type: none"> Approximately 2% of the strategy area lies within the Clwydian Range and Dee Valley AONB. Offa's Dyke Path national trail runs through an urban environment to the far north east (thus lessening the sensitivity of this feature in this particular area). Sustrans - North Wales Coast cycle route (NCN Route 5). Approximately 60% of the strategy area is within Dyffryn Clwyd (The Vale of Clwyd) Registered Historic Landscape.* Important scheduled monuments including Denbigh Castle, the Marble Church and Rhuddlan Castle. Registered Parks and Gardens.* <p>Other Susceptible Landscape, Visual and Cultural Heritage Features</p> <ul style="list-style-type: none"> Broad river valley defined by the Clwydian Range to the east and the Rhos Hills to the west. Scenic landscape back-dropped by views of surrounding hills. Complex and historic pattern of pastoral farmland, woodland settlements and historic parkland. Much of this area has a tranquil and undisturbed character. Although views within and along the valley are often contained by vegetation, from many parts there is good intervisibility with the Clwydian Range and Rhos Hills. North of the A55 there are typically more open views towards the coast. High numbers of sensitive visual receptors, including users of the A55 torusit route and visitors to the coast and Rhos Hills, users of Offa's Dyke Path, Brenig Way, Clwydian Way, Dyserth Cycleway, the North Wales Path and the Sustrans - North Wales Coast cycle route (NCN Route 5). Historic landscape with a rich time-depth and a number of important features which are also visitor attractions. <p>*(undesigned but recognised as being of national value)</p>
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection

Baseline Wind Energy Development (March 2013)	1 no. micro scale development, located just off the A55 to the east of St Asaph.
Indicative Overall Capacity	Despite this strategy area's partial AONB status and high sensitivity there may be capacity for further micro scale development in addition to the one already present near St Asaph, but only where this relates well to the existing built environment. This could typically comprise single turbines up to 20m blade tip height. These should be clearly separated so that their effects remain local and there is no collective / cumulative defining influence on the landscape.
Guidance on Siting	<ul style="list-style-type: none"> ▪ Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Conserve the natural beauty of the valley and the Clwydian Range and Dee Valley AONB, its special qualities and its wider setting. ▪ Consider the effects of development on the wider setting of the Rhos Hills. ▪ Maintain the tranquillity of the valley and adjoining areas. ▪ Ensure that the developments are clearly separate so that their effect on the perception of landscape remains local and there is no collective defining influence on the experience of the landscape. ▪ Maintain the integrity of Dyffryn Clwyd (The Vale of Clwyd) Registered Historic Landscape. ▪ Protect the settings and key views to and from important cultural heritage such as Denbigh Castle, the Marble Church and Rhuddlan Castle. ▪ Maintain intervisibility between cultural heritage features on the neighbouring hilltops. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid siting any turbines within the sight lines of key views. ▪ Avoid cumulative effects on the coastline, popular viewpoints and routes such as the A55, A525, Offa's Dyke Path national trail, Brenig Way, Clwydian Way, Dyserth Cycleway, the North Wales Path and the Sustrans - North Wales Coast cycle route (NCN Route 5) – use visualisations to assess sequential views (including views to existing turbines). ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics.

6.4 Strategy Area 3 - South Clwydian Hills

Location and Context

The South Clwydian Hills strategy area is located towards the south of Denbighshire between the Clwydian Range and Dee Valley AONB and Clocaenog Forest.

Landscape Units Included within this Strategy Area

D5 with a small part of D4

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
Medium – High Amber	This is a moderately valued landscape which lies close to the western edge of the Clwydian Range and Dee Valley AONB . The south western part of this area lies close to and forms part of the wider setting of the Cerrigydrudion and A5 Corridor Special Landscape Area . The area is also informally valued for its scenic and tranquil rural character and provides a number of outdoor recreational opportunities. There is an openness and visibility to and from the higher ground.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	<p>Designated Features within the Strategy Area</p> <ul style="list-style-type: none"> ▪ Small Open Access Area to the south east. <p>Other Susceptible Landscape, Visual and Cultural Heritage Features</p> <ul style="list-style-type: none"> ▪ Complex interlocking pattern of strongly undulating and rolling hills and valley slopes. ▪ Complex mosaic of pastoral farmland with some large areas of woodland, open hillside and scarp slopes. ▪ Much of this area has a tranquil and undisturbed character and is informally valued for its low key recreational opportunities. ▪ Although views to and from less elevated parts of this area are typically enclosed by landform and vegetation, long distance and panoramic views are afforded from the higher accessible hilltops, with views to and from Snowdonia National Park and the Clwydian Range and Dee Valley AONB, including from the Caer Drewyn Hillfort.
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	<p>Landscape Protection - all areas that lie within or contribute to the outlook and setting of the AONB.</p> <p>Landscape Accommodation - areas that do not contribute to the outlook and setting of the AONB and are outside the AONB.</p>
Current Wind Energy Development (March 2013)	1 no. micro scale development and 3 no. small scale developments located to the east of the A494, near the small settlement of Gwyddelwern.
Indicative Overall Capacity	<p>Strategically this area lies between and serves as a narrow buffer between the areas of wind development proposed within TAN 8 SSA A at Clocaenog Forest and the AONB. Any development within this strategy area may exacerbate the effects of development within the SSA and may harm the special qualities of the AONB.</p> <p>Notwithstanding this, the parts of this strategy area which are not deemed to contribute to the setting or views to and from the AONB may have the</p>

	<p>capacity for some additional micro/small scale wind energy development. This could typically comprise single turbines up to 50m blade tip height where this relates well to the existing built environment. Developments should be clearly separated so that their effects remain local and there is no collective / cumulative defining influence on the landscape.</p>
Guidance on Siting	<p>Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply:</p> <ul style="list-style-type: none"> ▪ Conserve the natural beauty of the Clwydian Range and Dee Valley AONB, its special qualities and its wider setting. The effect of wind development both within and beyond the AONB needs to be considered using visualisations. This strategy area occupies one of the narrowest stretches of landscape between the developments around Clocaenog Forest and the AONB. Development must avoid creating a sense of unacceptable encroachment, encirclement, prominence, or discordance, individually or cumulatively on the AONB. ▪ Proliferation of smaller-scale wind energy developments can lead to a cumulative impact within such a sensitive landscape. It is therefore important to consider the locations of existing and proposed turbines when planning a new development. ▪ Ensure that any developments are clearly separate so that their effect on the perception of landscape remains local and there is no collective defining influence on the experience of the landscape. This requires a particularly careful consideration of the cumulative effects of existing and proposed developments. ▪ Conserve the natural beauty of the nearby Cynwyd and Llandrillo AOB, its special qualities (including tranquillity and sense of wilderness) and wider setting. Wind energy development must avoid creating a sense of unacceptable encroachment, encirclement, prominence or discordance in relation to the AOB, either individually or cumulatively. ▪ Ensure that the distinctive pattern and scale of the hills and valleys is not compromised by tall turbines. ▪ Maintain the tranquillity of the landscape and adjoining areas. ▪ Protect key views to and from important cultural heritage features such as Caer Drewyn Hillfort. ▪ Ensure new access tracks do not damage any historic field patterns and replant any hedges affected by construction. ▪ Avoid siting development along open natural skylines, open hill slopes and within sight lines of key views. ▪ Avoid cumulative effects on popular viewpoints, and routes including the A494 and Clwydian Way, Brenig Way and Dee Valley Way long distance routes and visitor attractions such as Llantysilio Mountain to the south – use visualisations to assess sequential views (including views to existing turbines). ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics.

6.5 Strategy Area 7 - Clocaenog Forest

Location and Context

The Clocaenog Forest strategy area falls within both Denbighshire and Conwy and encompasses the much of Clocaenog Forest.

Landscape Units Included within this Strategy Area

D2

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
Low (Yellow)	Much of this heavily afforested strategy area lies within TAN 8 SSA A , which means that there is a presumption that the landscape can accommodate a degree of landscape change arising from the wind energy development. There are a number of existing and proposed developments both within it and in neighbouring areas to the west. Therefore it is considered to have a low sensitivity to wind energy development.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	<p>Designated Features within the Strategy Area</p> <ul style="list-style-type: none"> Approximately 10% of the strategy area is within Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape.* <p>Other Susceptible Landscape, Visual and Cultural Heritage Features</p> <ul style="list-style-type: none"> Pockets of moorland and settled farmland which form breaks within the forest. Relatively remote and in places, tranquil landscape. The landscape is informally valued as an important place for outdoor recreation. Although views are typically contained by trees there are some extensive views to and from adjoining upland landscapes. The rolling well-treed skyline is prominent in many views from the surrounding area. Provides the setting for the Clwydian Way and Hiraethog Trail. Historic landscape with a rich time-depth. <p>*(undesigned but recognised as being of national value)</p>
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	<p>New Landscape</p> <p>There is a presumption in favour of wind energy development in this area.</p>
Baseline Wind Energy Development (March 2013)	<p>The following wind energy developments are present in this strategy area:</p> <ul style="list-style-type: none"> 1 No. micro scale development 4 No. small scale developments 1 No. medium scale developments 3 No. very large scale development (very large scale wind farm)
Indicative Overall Capacity	<p>The capacity of this area is not considered as part of this study due to its inclusion within TAN8 SSA A. However, any proposed developments within the area would need to consider the following guidance and be subject to review on a case by case basis.</p>
Guidance on Siting	<p>Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply:</p>

	<ul style="list-style-type: none"> ▪ Consider the effects of development on views to and from Snowdonia National Park and the Clwydian Range and Dee Valley AONB. ▪ Maintain the integrity of the Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features. ▪ Maintain the tranquillity of the valley and adjoining hillsides. ▪ Avoid siting wind energy development along open natural skylines, open hill slopes and within sight lines of key views. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid cumulative effects on popular routes including the Clwydian Way, Hiraethog Trail and local viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Consider views from residential receptors, particularly those that already have views of existing wind energy developments within TAN 8 SSA A - siting should aim to avoid overbearing cumulative visual effects.
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6.6 Strategy Area 8 - Cerrig Uplands

Location and Context

The Cerrig Uplands strategy area is located along the south western boundary of Conwy, extending from the Denbigh Moors and Clocaenog Forest south to the fringes of Snowdonia National Park.

Landscape Units Included within this Strategy Area

D3; D4; D11; and D15

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High (Red)	<p>This is a highly scenic landscape, much of which is locally designated as the Cerrigydrudion and A5 Corridor Special Landscape Area. The remote, tranquil and sparsely populated uplands are informally valued as the 'gateway landscape' to Snowdonia National Park. The area is also valued for providing low key outdoor recreational opportunities. There is an openness and notable intervisibility with highly sensitive landscapes outside this area such as Y Berwyn and particularly with the National Park.</p> <p>The north eastern part of this landscape adjoins Clocaenog Forest and lies within TAN 8 SSA A is of lower sensitivity due to the presence of existing wind turbines.</p>
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	<p>Designated Features within the Strategy Area</p> <ul style="list-style-type: none"> Approximately 30% of the strategy area is within Cerrigydrudion and A5 Corridor Special Landscape Area. Approximately 5% of the strategy area is within Hiraethog Special Landscape Area. Open Access Land. <p>Other Susceptible Landscape, Visual and Cultural Heritage Features</p> <ul style="list-style-type: none"> High scenic quality. Open valley with a small upland plateau to the north west. Informally valued as a remote and typically tranquil landscape which forms the gateway to Snowdonia National Park – the A5 historic route is one of the main tourist routes into the Park and has strong cultural associations. The west and south west part of the area afford extensive panoramic views to and from Snowdonia National Park. Typically open, expansive and far reaching views into and out of this area from areas of higher ground. Provides the setting for low key outdoor recreation. Provides the setting for the Clwydian Way and Hiraethog Trail.
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	<p>Three landscape objectives apply within this strategy area, as follows:</p> <p>In areas within TAN 8 SSA A the objective is Landscape Change. This is because it is recognised that there is a presumption in favour of wind energy development in TAN 8 areas.</p> <p>In the Special Landscape Area and areas within close proximity to Snowdonia National Park the objective is Landscape Protection.</p> <p>For all other parts of this strategy area the most appropriate approach is considered to be Landscape Accommodation.</p>

Baseline Wind Energy Development (March 2013)	<p>Within this strategy area the following wind energy developments are mainly located just south of Moel Gwern-nannau, to the south west of Cerrigydrudion:</p> <ul style="list-style-type: none"> ▪ 4 no. micro scale development ▪ 6 no. small scale developments ▪ 3 no. medium scale developments ▪ 3 no. large scale developments (large scale wind farms)
Indicative Overall Capacity	<p>This strategy area has different landscape objectives and therefore varying capacity to accommodate wind energy development. Outside TAN 8 SSA A it is considered that there may be some capacity for small to medium scale wind energy development although this is likely to be very limited in the Special Landscape Area and close to Snowdonia National Park and will also be dependent on other existing and proposed developments. The overriding aim must be to avoid cumulative effects and protect the setting and views to and from the National Park.</p>
Guidance on Siting	<p>Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply:</p> <ul style="list-style-type: none"> ▪ Consider the effects of development on the approach and views to and from Snowdonia National Park. ▪ Conserve the natural beauty of the Cerrigydrudion and A5 Corridor Special Landscape Area, its special qualities and its wider setting. The siting and design of any proposed wind energy development should not significantly alter the perception of tranquillity and remoteness for which a large part of this area is valued. ▪ Avoid siting wind energy development along open natural skylines, open hill slopes and within sight lines of key views. ▪ Protect the settings of designated and other important cultural heritage features and key views to and from these features. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid cumulative effects on popular routes including the A5 historic route, the Clwydian Way, Hiraethog Trail and local viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Consider views from residential receptors, particularly those that already have views of existing wind energy developments within TAN 8 SSA A - siting should aim to avoid cumulative visual effects.

6.7 Strategy Area 9 - Denbigh Moors

Location and Context

The Denbigh Moors strategy area is located to the west of Clocaenog Forest. Its western edge adjoins Snowdonia National Park.

Landscape Units Included within this Strategy Area

D10 and small parts of D16 and D2

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High (Red)	<p>This is a highly scenic and historic upland plateau which lies within the Hiraethog Special Landscape Area and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape.</p> <p>The moors with their extensive tracts of blanket bog and heather moorland are remote, tranquil and sparsely populated. They are greatly valued for their scenery (particularly in the west) and for providing low key outdoor recreational opportunities. There is an openness and notable intervisibility with other highly sensitive landscapes such as Snowdonia National Park and the Clwydian Range.</p> <p>The eastern part of this landscape lies within TAN 8 SSA A and is of lower sensitivity due to the presence of existing wind energy developments.</p>
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	<p>Designated Features within the Strategy Area</p> <ul style="list-style-type: none"> ▪ Approximately 60% of the strategy area is within the Hiraethog Special Landscape Area. ▪ Open Access Land. ▪ Approximately 65% of the strategy area is within the Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape.* <p>Other Susceptible Landscape, Visual and Cultural Heritage Features</p> <ul style="list-style-type: none"> ▪ High scenic quality. ▪ Extensive tracts of blanket bog and heather moorland. ▪ The overall perceptions of tranquillity and remoteness which are experienced in this area. ▪ Panoramic and far reaching views to and from other highly sensitive landscapes including Snowdonia National Park and more distantly the Clwydian Range and Dee Valley AONB. ▪ Informally valued as a remote and typically tranquil landscape which provides the setting for low key outdoor recreation. ▪ Provides the setting for the Clwydian Way and Hiraethog Trail. ▪ Historic Landscape with a rich time-depth. <p>*(undesigned but recognised as being of national value)</p>
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	<p>Two landscape objectives apply within this strategy area, as follows:</p> <p>In areas within TAN 8 SSA A the objective is Landscape Change. This is because it is recognised that there is a presumption in favour of wind energy development in TAN 8 areas.</p> <p>For all other parts of this area the objective is Landscape Protection.</p>
Baseline Wind Energy Development (March 2013)	<p>Within this strategy area the following wind energy developments are mainly located mainly in the north west of the area:</p> <ul style="list-style-type: none"> ▪ 1 no. micro scale development ▪ 1 no. small scale developments ▪ 4 no. medium scale developments

Indicative Overall Capacity	<p>This strategy area has different landscape objectives and therefore varying capacity to accommodate wind energy development. Outside TAN 8 SSA A it is considered that there may be the capacity for some small to medium scale wind energy developments although this is likely to be very limited in the Special Landscape Area, the Historic Landscape and close to Snowdonia National Park and is also heavily dependent on other existing and proposed developments. The overriding aim must be to avoid cumulative effects and protect the setting and views to and from the National Park. It is also considered important to maintain the general openness and wilderness character of the moors.</p>
Guidance on Siting	<p>Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply:</p> <ul style="list-style-type: none"> ▪ In order to maintain its remote and wild quality, all proposed wind energy development should avoid the open moorland to the north and immediately south of the A543. ▪ Consider the effects of development on views to and from Snowdonia National Park – the skyline created by the moors is important in views from the Park. ▪ Conserve the natural beauty of the Hiraethog Special Landscape Area, its special qualities and its wider setting. The siting and design of any proposed wind energy development should not significantly alter the perception of tranquillity and remoteness for which a large part of this area is valued. ▪ Maintain the integrity of the Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape. ▪ Avoid siting wind energy development along open natural skylines, open hill slopes and within sight lines of key views. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features. ▪ Avoid cumulative effects on popular routes including the A543, the Clwydian Way and Hiraethog Trail and local viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics. ▪ Consider views from residential receptors, particularly those that already have views of existing wind energy developments within TAN 8 SSA A - siting should aim to avoid overbearing cumulative visual effects. ▪ A number of small-scale wind energy developments can quickly give rise to cumulative effects in such an open landscape. It is therefore important to carefully consider the locations of existing and proposed turbines when planning a new development.

6.8 Strategy Area 10 – Rhos Hills

Location and Context

The Rhos Hills strategy area is located centrally within the study area and includes part of Conway and Denbighshire.

Landscape Units Included within this Strategy Area

C3; C4; D1; and D8

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High (Red)	<p>This is a highly scenic and historic landscape which lies within the Elwy and Aled Valleys Special Landscape Area, Rhyd Y Foel to Abergele Special Landscape Area and Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape. The mosaic of undulating hills and valleys, which are relatively remote, tranquil and sparsely settled are valued for their scenery and for providing low key outdoor recreational opportunities. The area is seen as a line of hills and natural skyline which contains the western edge of the Vale of Clwyd. There is an openness and notable intervisibility with other highly sensitive landscapes including, Snowdonia National Park and the Clwydian Range and Dee Valley AONB. There are some small scale wind energy developments scattered through the area, which locally influence the landscape.</p>
<p>Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development</p>	<p>Designated Features within the Strategy Area</p> <ul style="list-style-type: none"> ▪ Approximately 8% of the strategy area is within the Elwy and Aled Valleys Special Landscape Area. ▪ Approximately 5% of the strategy area is within the Rhyd Y Foel to Abergele Special Landscape Area. ▪ Open Access Land. ▪ Approximately 5% of the strategy area is within Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elw (Lower Elwy Valley) Historic Landscapes.* ▪ Registered Parks and Gardens.* <p>Other Susceptible Landscape, Visual and Cultural Heritage Features</p> <ul style="list-style-type: none"> ▪ High scenic quality. ▪ Mosaic of pastoral farmland, open upland grazing and woodland. ▪ The overall perceptions of tranquillity and remoteness which are experienced in this area. ▪ Although views within the valleys are contained by landform and vegetation, the higher ground provides expansive and far reaching views to and from other highly sensitive landscapes including Snowdonia National Park, the coast and the Clwydian Range and Dee Valley AONB as well as local landmarks such as Denbigh Castle. ▪ Informally valued as a remote and typically tranquil landscape which provides for low key outdoor recreation. ▪ Provides the setting for the Clwydian Way and Hiraethog Trail. ▪ Historic landscape with a rich time-depth and a number of designed parkland landscapes. <p>*(undesigned but recognised as being of national value)</p>
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	<p>Two landscape objectives apply within this strategy area, as follows: In the Special Landscape Areas the objective is Landscape Protection</p>

	For all other parts of this strategy area, the objective is Landscape Accommodation
Baseline Wind Energy Development (March 2013)	<p>The following wind energy developments are dispersed through this large strategy area:</p> <ul style="list-style-type: none"> ▪ 4 no. micro scale developments ▪ 4 no. small scale developments
Indicative Overall Capacity	<p>This strategy area has different landscape objectives and therefore varying capacity to accommodate wind energy development. Whilst there may be capacity for some micro scale and small scale wind energy development, this will be very limited within the Special Landscape Areas, Historic Landscapes and in more elevated areas which comprise the line of hills and natural skyline that contain the western edge of the Vale of Clwyd. Overall capacity is also heavily dependent on other existing and proposed developments, but could typically comprise single or small clusters of turbines up to 50m blade tip height. Small scale developments may be more appropriate to the north west where there are fewer receptors in particular in landscape unit D8; whereas micro scale may be more appropriate elsewhere.</p>
Guidance on Siting	<p>Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply:</p> <ul style="list-style-type: none"> ▪ Conserve the natural beauty of the Elwy and Aled Valleys Special Landscape Area and Rhyd Y Foel to Abergele Special Landscape Areas, their special qualities and their wider setting. The siting and design of any proposed wind energy development should not significantly alter the perception of tranquillity and remoteness for which a large part of this area is valued. ▪ Consider the effects of development on views to and from Snowdonia National Park and Clwydian Range and Dee Valley AONB. ▪ Maintain the integrity of Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscapes. ▪ This area is seen as a line of hills and natural skyline containing the western edge of the Vale of Clwyd. Avoid siting wind energy development along open natural skylines, open hill slopes and within sight lines of key views. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features. ▪ Avoid cumulative effects on popular routes including the Clwydian Way and Hiraethog Trail and local viewpoints – use visualisations to assess sequential views (including views to existing turbines).

6.9 Strategy Area 11 – Elwy Valley

Location and Context

The Elwy Valley strategy area is formed by the valleys of the Rivers Elwy and Aled and is a distinct landscape located within the wider area of the rolling uplands of the Rhos Hills.

Landscape Units Included within this Strategy Area

B2 and parts of C4 and D1

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High (Red)	This is a scenic and historic landscape which lies within the Elwy and Aled Valleys Special Landscape Area and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape . The deeply incised and unspoilt river valley is remote, tranquil and unspoilt . The higher valley sides afford long views across the Rhos Hills to Snowdonia National Park and the Clwydian Range and Dee Valley AONB .
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	<p>Designated Features within the Strategy Area</p> <ul style="list-style-type: none"> ▪ Approximately 70% of the strategy area is included within the Elwy and Aled Valleys Special Landscape Area. ▪ Approximately 5% of the strategy area is included within the Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape.* ▪ Registered Parks and Gardens.* <p>Other Susceptible Landscape, Visual and Cultural Heritage Features</p> <ul style="list-style-type: none"> ▪ Highly scenic. ▪ Deeply incised narrow river valley. ▪ Mosaic of pastures, woodland and scrub. ▪ The overall perceptions of tranquillity and remoteness which are experienced in this unspoilt area. ▪ Although views within the valleys are contained by landform and vegetation, the higher ground provides long views to and from other highly sensitive landscapes including the Rhos Hills, Snowdonia National Park and the Clwydian Range and Dee Valley AONB. ▪ Historic landscape with a rich time-depth and a number of designed parkland landscapes. <p>*(undesigned but recognised as being of national value)</p>
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection
Baseline Wind Energy Development (March 2013)	There are currently no existing or proposed wind energy developments within this strategy area.
Indicative Overall Capacity	Although this strategy area currently has no wind energy development within it, there may be scope for limited micro scale development on the upper slopes. This could typically comprise single turbines up to 20m blade tip height. These should be clearly separated so that there is no collective / cumulative defining influence on the landscape. Care must be taken to ensure that there are no adverse effects on the character or views out from the valley.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply:

	<ul style="list-style-type: none"> ▪ Conserve the natural beauty of the Elwy and Aled Valleys Special Landscape Area, its special qualities and wider setting. The siting and design of any proposed wind energy development should not significantly alter the perception of tranquillity and remoteness. ▪ Consider the effects of development on views to and from Snowdonia National Park, the Rhos Hills and the Clwydian Range and Dee Valley AONB. ▪ Maintain the integrity of the Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape. ▪ Avoid diminishing the scale of the valley through inappropriate turbine siting. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid siting any turbines within the sight lines of key views. ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics.
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6.10 Strategy Area 12 – Conwy Valley

Location and Context

The Conwy Valley strategy area is located along the eastern boundary of Denbighshire, extending from Conwy in the north south past Llanrwst.

Landscape Units Included within this Strategy Area

B7 and D16

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High (Red)	<p>This is a highly valued valley landscape, which is enclosed by Snowdonia National Park and the Rhos Hills, lies close to and partly within the Conwy Valley Special Landscape Area and Pen Isaf Dyffryn Conwy (Lower Conwy Valley) Registered Historic Landscape. The area is also informally valued as a tranquil and relatively remote landscape and provides a number of low key outdoor recreational opportunities. There is openness and intervisibility between the higher ground and Snowdonia National Park, and the landscape serves as part of the wider setting of the Park.</p>
<p>Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development</p>	<p>Designated Features within the Strategy Area</p> <ul style="list-style-type: none"> ▪ Approximately 80% of the strategy area is included within the Conwy Valley Special Landscape Area. ▪ Parts of the essential setting of Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site. ▪ A small area of Open Access Land to the far west of the area. ▪ Sustrans - North Wales Coast cycle route (NCN Route 5). ▪ Approximately 20% of the strategy area is included within Pen Isaf Dyffryn Conwy (Lower Conwy Valley) Registered Historic Landscape.* ▪ Registered Parks and Gardens.* <p>Other Susceptible Landscape, Visual and Cultural Heritage Features</p> <ul style="list-style-type: none"> ▪ Highly scenic landscape which serves as part of the wider setting of Snowdonia National Park - the A470 is one of the main tourist routes into the Park. ▪ Well defined broad valley with a flat floodplain and strongly undulating valley sides. ▪ Mosaic of woodland and pasture with numerous field and hedgerow trees. ▪ Informally valued as a remote and typically tranquil landscape. ▪ Some long ranging views are afforded within the valley itself in particular to the north and south along the flat valley floor. ▪ The higher valley sides afford extensive westerly views to and from Snowdonia National Park and more distantly to the Denbigh Moors and the Clwydian Range and Dee Valley AONB. ▪ Informally valued for low key outdoor recreation opportunities including long distance routes such as the North Wales Path (part of the Wales Coast Path). ▪ Historic landscape with a rich time-depth and a number designed parkland landscapes. <p>*(undesigned but recognised as being of national value)</p>
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection

Baseline Wind Energy Development (March 2013)	2 no. medium scale developments are located to the south east of this area, adjacent to the Denbigh Moors. There is also one micro scale development just outside this area to the north west within Snowdonia National Park.
Indicative Overall Capacity	This strategy area may have scope for further micro scale development on the higher slopes. This could typically comprise single turbines up to 20m blade tip height. These should be clearly separated so that there is no collective / cumulative defining influence on the landscape. Care must be taken to ensure that there are no adverse effects on the character or views out from the valley.
Guidance on Siting	<p>Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply:</p> <ul style="list-style-type: none"> ▪ Conserve the natural beauty of the Conwy Valley Special Landscape Area, its special qualities and wider setting. The siting and design of any proposed wind energy development should not significantly alter the perception of tranquillity and remoteness. ▪ Development should not compromise the natural beauty and wider setting of Snowdonia National Park – the open skylines of this strategy area are an important component of views from the Park and should be protected. ▪ Maintain the integrity of Pen Isaf Dyffryn Conwy (Lower Conwy Valley) Registered Historic Landscape. ▪ Avoid diminishing the scale of the valley through inappropriate turbine siting. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features including Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid siting any turbines within the sight lines of key views. ▪ Avoid cumulative effects on the A470 and other popular routes and local viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics. ▪ A number of small-scale wind energy developments can lead to a cumulative effect on such a sensitive landscape. It is therefore important to consider the locations of existing and proposed turbines when planning a new development.

6.11 Strategy Area 13 – North West Conwy Coast

Location and Context

The North West Conwy Coast strategy area is located along northern coastline of Conwy from the western edge of Colwyn Bay to Llanfairfechan in the far west.

Landscape Units Included within this Strategy Area

A8; B7; and C10

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High (Red)	<p>This highly valued section of coastline comprises the Great Orme Heritage Coast – a series of dramatic limestone headlands and high hills and mountains interspersed with areas of more gentle coastal slopes and flatter lowland. In recognition of its natural beauty and historic value, much of it is designated within the Great Orme and Creuddyn Peninsular Special Landscape Area and Creuddyn a Chonwy (Creuddyn and Conwy) Historic Landscape. It contains Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site and also forms part of the wider setting of Snowdonia National Park at a point where the mountains drop sharply down to meet the coast. One of the defining features of this strategy area is the complex coastal landform which creates locally important contrasts, not only in the scenery but also in the perception of tranquillity, wildness and remoteness within just a short distance.</p>
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	<p>Designated Features within the Strategy Area</p> <ul style="list-style-type: none"> ▪ Approximately 20% of the strategy area is included within the Great Orme and Creuddyn Peninsular Special Landscape Area. ▪ Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site. ▪ Great Orme Heritage Coast.* ▪ Sustrans - North Wales Coast cycle route (NCN Route 5). ▪ Approximately 70% of the strategy area is included within the Gogledd Arllechwedd (North Arllechwedd) and Creuddyn a Chonwy (Creuddyn and Conwy) Historic Landscapes.* ▪ Scheduled hillforts. ▪ Registered Parks and Gardens.* <p>Other Susceptible Landscape, Visual and Cultural Heritage Features</p> <ul style="list-style-type: none"> ▪ A mix of dramatic limestone headlands and high hills and mountains extending to the sea interspersed with more gentle coastal slopes and flatter lowland. The landform creates some highly distinctive skylines. ▪ Typically small to medium scale. ▪ A mosaic of pastures, woodland, open land, hillside and scarp slopes and cliffs with some large settlements and the A55 tourist route. ▪ This section of the North Wales Coast is a popular tourist destination. ▪ Elevated and panoramic views are afforded out from the Great Orme and other high points within this landscape strategy area to surrounding landscapes and seascapes, including Snowdonia National Park and Anglesey. Likewise views are afforded back to this area (particularly to the higher parts) from both upland and coastal areas. ▪ High numbers of sensitive visual receptors, including users of the A55 tourist route and North Wales Coast Railway and visitors to the coast and Great Orme headland, users of the North Wales Path (part of the Wales Coast Path) long distance route and the North Wales Coast cycle route (NCN Route 5).

	<p>Historic landscape with a rich time-depth and a number of hilltop features and designed parkland landscapes. *(undesigned but recognised as being of national value)</p>
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection
Baseline Wind Energy Development (March 2013)	<p>The following wind energy developments are located close to the A55:</p> <ul style="list-style-type: none"> ▪ 2 no. micro scale developments.
Indicative Overall Capacity	<p>This strategy area may have the capacity for further micro scale wind energy development. This could typically comprise single turbines up to 20m blade tip height. Any new development should be very carefully sited to ensure that the special qualities of the area, including Snowdonia National Park are protected. It is recommended that wind energy development avoid the particularly sensitive Great Orme headland in order to minimise potential adverse effects in this area.</p>
Guidance on Siting	<p>Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply:</p> <ul style="list-style-type: none"> ▪ Conserve the natural beauty of the Great Orme and Creuddyn Peninsular Special Landscape Area, its special qualities and wider setting. ▪ Development should not compromise the natural beauty and wider setting of Snowdonia National Park – the dramatic skylines of this strategy area are an important component of views from the Park and should be protected. ▪ Maintain the integrity of the Creuddyn a Chonwy (Creuddyn and Conwy) Historic Landscape. ▪ Wind energy development should not interrupt the open skylines or diminish the scale of the limestone headland and cliffs. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features including in particular Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site. ▪ Avoid siting any turbines within the sight lines of key views. ▪ Avoid cumulative effects for users of the A55, the North Coast Railway and other popular routes such as the North Wales Path (part of the Wales Coast Path) and North Wales Coast cycle route (NCN Route 5), local attractions and viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Site turbines close to existing buildings to avoid the proliferation of development within the more open parts of the landscape and erosion of rural characteristics. ▪ New onshore turbines could create significant cumulative effects between onshore and offshore developments by bringing the offshore ‘wind farm’ seascape towards the landscape - even small-scale wind energy developments when viewed together with the nearby large offshore wind farms could lead to adverse cumulative effects in this area. It is particularly important to use visualisations to assess potential cumulative effects in this area.

6.12 Strategy Area 14 – Colwyn Coast

Location and Context

The Colwyn Coast strategy area is located along the northern coastline of Conwy, from Colwyn Bay in the West to Abergele in the east and extends south past Dolwen.

Landscape Units Included within this Strategy Area

A3; A5; C4; and C9

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High (Red)	<p>Although the immediate coastal strip is largely developed for settlement and tourism, further inland a series of low rolling hills comprise a mosaic of pastoral farmland, small woodland blocks, estate woodlands and historic parklands. In recognition of its natural beauty and historic value, much of it is designated within the Rhyd Y Foel to Abergele Special Landscape Area. One of the defining features of this strategy area is the contrast between the busy and developed coastline and the perception of tranquillity and remoteness within just a short distance.</p>
<p>Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development</p>	<p>Designated Features within the Strategy Area</p> <ul style="list-style-type: none"> ▪ Approximately 50% of the strategy area is included within the Rhyd Y Foel to Abergele Special Landscape Area. ▪ Sustrans - North Wales Coast cycle route (NCN Route 5). ▪ Bodelwyddan Castle. ▪ Scheduled hillforts. ▪ Registered Parks and Gardens.* <p>Other Susceptible Landscape, Visual and Cultural Heritage Features</p> <ul style="list-style-type: none"> ▪ Low lying, linear coast backed by steep sided low rolling hills encroach on the low lying coastline. ▪ The developed coastal strip is a popular tourist destination. ▪ Inland mosaic of pastoral farmland, small woodland blocks, estate woodlands and historic parkland landscapes. ▪ The unspoilt, relatively remote and tranquil hills provide a strong contrast to the busy and developed coastal strip. ▪ Views to the sea, coastal fringe and Clwydian Range and Dee Valley AONB are afforded from the higher ground to the south of the area and from the coastline. These include views of large offshore wind farms. ▪ The limestone escarpments of landscape unit C9 are prominent landscape features within this area. ▪ High numbers of sensitive visual receptors, including residents and visitors to the coast and its many attractions and users of the North Wales Path (part of the Wales Coast Path) and North Wales Coast cycle route (NCN Route 5). ▪ Historic landscape with a number of hilltop features and designed parkland landscapes. <p>*(undesigned but recognised as being of national value)</p>
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection
Baseline Wind Energy Development (March 2013)	<p>Within this strategy area the following wind energy developments are located within Colwyn Bay.</p> <ul style="list-style-type: none"> ▪ 1 no. small scale development.

Indicative Overall Capacity	<p>It is considered that this strategy area may have landscape capacity for further micro to small scale wind energy development. This could typically comprise single turbines up to 20m blade tip height. Any new development should be very carefully sited to avoid cumulative effects between onshore and offshore developments.</p>
Guidance on Siting	<p>Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply:</p> <ul style="list-style-type: none"> ▪ Conserve the natural beauty of the Rhyd Y Foel to Abergele Special Landscape Area, its special qualities and wider setting. ▪ Wind energy development should not interrupt the open skylines and the sensitive hillsides in this area. ▪ Wind energy development should not interrupt the open skylines or views to prominent landforms such as the limestone escarpments of landscape unit C9. ▪ Protect the settings of designated and other important cultural heritage features and key views to and from these features. ▪ Avoid siting any turbines within the sight lines of key views, particularly out to sea. ▪ Avoid cumulative effects on views from the A55 tourist route, the North Coast Railway and other popular routes, including the North Wales Path (part of the Wales Coast Path) and North Wales Coast cycle route (NCN Route 5), local attractions and viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ In rural areas, site turbines close to existing buildings to avoid the proliferation of development within the more open parts of the landscape and erosion of rural characteristics. ▪ New onshore turbines could create significant cumulative effects between onshore and offshore developments by bringing the offshore ‘wind farm’ seascape towards the landscape - even small-scale wind energy developments when viewed together with the nearby large offshore wind farms could lead to adverse cumulative effects in this area. It is particularly important to use visualisations to assess potential cumulative effects in this area.

6.13 Strategy Area 15 – Coastal Flats

Location and Context

The Coastal Flats strategy area is located along the coastline of Denbighshire, extending from Abergele in the west past Prestatyn in the east.

Landscape Units Included within this Strategy Area

A4

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
Medium (Amber)	<p>This strategy area comprises large scale, flat coastal farmland with a narrow settled coastal fringe, which includes a major communications corridor along the A458 and the North Coast Railway. The developed coastline is a popular tourist destination.</p> <p>The area where Gronant Dunes are located is particularly tranquil and scenic and the sensitivity in this locality is therefore considered high.</p>
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	<p>Designated Features within the Strategy Area</p> <ul style="list-style-type: none"> ▪ Sustrans - North Wales Coast cycle route (NCN Route 5). ▪ Offa's Dyke Path national trail runs through the urban area to the far north east. The fact it runs through an urban environment in this Area lessens the sensitivity of this feature in this particular area. <p>Other Susceptible Landscape, Visual and Cultural Heritage Features</p> <ul style="list-style-type: none"> ▪ The developed coastal strip is a popular tourist destination. ▪ Gronant Dunes are particularly tranquil and scenic natural landscape feature in this area. ▪ Expansive views are afforded to surrounding hills, settled lowlands, coastal fringe and Clwydian Range and Dee Valley AONB. These include views of large offshore wind farms. ▪ High numbers of sensitive visual receptors, including residents and visitors to the coast and its many attractions and users of Offa's Dyke Path, Clwydian Way, North Wales Path (part of the Wales Coast Path) and the North Wales Coast cycle route (NCN Route 5). ▪ Provides the setting for the North Wales Coast cycle route (NCN Route 5), Offa's Dyke Path, the North Wales Path (part of the Wales Coast Path) and the Clwydian Way.
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Accommodation
Baseline Wind Energy Development (March 2013)	<p>Within this strategy area the following wind energy developments are mainly located in and around Rhyl.</p> <ul style="list-style-type: none"> ▪ 3 no. micro scale developments. ▪ 1 no. small–medium scale development (10 no. 18m high turbines. which is classed as 'small–medium' scale due to its low output of 60kW).
Indicative Overall Capacity	<p>It is considered that this strategy area may have landscape capacity for further micro to small scale wind energy development. This could typically comprise single turbines up to 20m blade tip height. Any new development should be very carefully sited to avoid cumulative effects between onshore and offshore developments. Developments on or adjacent to Gronant Dunes should be avoided.</p>
Guidance on Siting	<p>Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply:</p>

	<ul style="list-style-type: none"> ▪ Development should not compromise the natural beauty and wider setting of the Gronant Dunes. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features. ▪ Avoid siting any turbines within the sight lines of key views, particularly out to sea. ▪ Avoid cumulative effects on views from the A55 tourist route, the North Coast Railway and other popular routes, including Offa's Dyke Path, Clwydian Way, North Wales Path (part of the Wales Coast Path) and the North Wales Coast cycle route (NCN Route 5), local attractions and viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ In rural areas, site turbines close to existing buildings to avoid the proliferation of development within the more open parts of the landscape and erosion of rural characteristics. ▪ New onshore turbines could create significant cumulative effects between onshore and offshore developments by bringing the offshore 'wind farm' seascape towards the landscape - even small-scale wind energy developments when viewed together with the nearby large offshore wind farms could lead to adverse cumulative effects in this area. It is particularly important to use visualisations to assess potential cumulative effects in this area.
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7. SECTION 6: GUIDANCE FOR WIND ENERGY DEVELOPMENT WITHIN STRATEGY AREAS

- 7.1 The following guidance notes should be read in conjunction with the more specific guidance notes that are included within the descriptions for each strategy area. They are intended to aid the integration of wind turbines into the landscape through good siting and design. The following notes are summarised from guidelines set out in *Scottish Natural Heritage (2012) Siting and Design of Small Scale Wind Turbines of between 15 and 50 metres in height*. Useful guidance is also provided in the following documents. Although aimed at larger windfarm developments, the guidance set out in these documents is frequently transferable and should be considered when designing and siting small scale developments:
- Design Commission for Wales (2012) Designing Wind Farms in Wales
 - Scottish Natural Heritage (2009) Siting and Designing Wind Farms in the Landscape

7.2 Choice of Turbines

Small turbines offer a greater choice of variety, styles, design and colours than large commercial scale turbines and their selection should be carefully considered in relation to the site in which they are to be located. This is particularly important when other turbines are present to ensure that there aren't conflicting styles in the same locality.

7.3 Factors Relating to Turbines

Turbine Colour

Turbine colour should be chosen to help blend the structure into the landscape. The same colour should be used for all components of the turbine. A very light grey is commonly used because it minimises the visibility of the turbines when they are seen against the skyline, which is how most large scale turbines are viewed. Smaller scale turbines are more likely to be viewed against a vegetated backdrop and may benefit from being a darker grey green colour. In all cases the aim should be to minimise visibility and reflectivity of the turbine components.

7.4 Turbine Size and Scale

Although small scale turbines are likely to have fewer landscape and visual effects than large commercial models, they can still visually dominate nearby landscape features. Identifying the main landscape and visual characteristics of the landscape in which the turbines are to be sited is an important determinant in selecting the most appropriate size. Landscapes with a simple, strong and mainly horizontal form are better able to accommodate taller turbines and large turbine groupings as the height of turbines appears more proportionate to the landscape. Small scale turbines, smaller groupings or individual turbines tend to be better suited to smaller scale, more complex landscapes where there are other features such as buildings, trees or hedges. A useful rule is that turbines should generally be no more than 50% higher than nearby buildings.

7.5 Turbine Layout

Although there is scope to present a small group of turbines as a coherent visual image, this may be difficult where there are other built elements such as buildings, wood poles and masts present with the result that visual conflict can arise. Where possible turbine layout should respond to existing landscape patterns, whether field boundaries, building or vegetation patterns. In all cases, turbine layout should respect the underlying landform.

7.6 Micrositing

Micrositing of turbines often takes place during construction due to unforeseen circumstances such as ground conditions. This can affect the original design concept, particularly the relationship with nearby vertical features such as trees and masts. It is preferable if developers undertake pre-application ground surveys to minimise the requirement for micrositing at the construction stage.

7.7 Ancillary Infrastructure

Visual impacts of any ancillary developments and visual conflicts with between turbines and ancillary structures should be minimised by:

- Sensitively siting and designing ancillary equipment and infrastructure (e.g. using local landform, locally appropriate materials, architectural style and colours to more successfully integrate them into their surroundings).
- Using turbines with integral transformers.
- Siting turbines as close as possible to the point of use or grid connection to avoid long sections of overhead power lines or cable runs (more applicable to large scale wind farm developments).
- Utilising existing tracks to avoid tree and hedgerow removal, which may have adverse landscape effects. New tracks if required should follow existing landscape features such as field and woodland boundaries.
- Minimising cut and fill operations.
- Designing fencing or walling to fit the local situation, whilst maintaining the required security.
- Identifying locations for new tree and shrub planting to provide long term screening.

7.8 Factors Relating to Location Landscape Character

This sensitivity and capacity study provides the basis for identifying the key landscape characteristics of the site and the wider area. It also identifies the sensitivity of the landscape to turbines and any special qualities which should be protected. However, this is a strategic study and in all cases turbine applications (large or small scale) must be considered on their individual merits and detailed analysis is required to fully appreciate the nature of the development, site and its surroundings.

Impacts on landscape character are likely to be related to:

- Scale of the landscape – whether it is small or large and whether the proposed turbines are of an appropriate scale.
- Influence on the tranquillity of the landscape – turbines creates movement, the amount depending on the particular model.
- Settlement pattern – turbines should be carefully sited in relation to existing buildings.
- Topography – turbines can dominate small scale or intricate landform if not carefully sited.
- Skylines – turbines can affect the simplicity of skyline or ridges even if located below such features.

7.9 Areas with a Sense of Wilderness

Rural areas which are particularly valued for their remoteness or wildness can be affected by the introduction of turbines, although this is less likely to be the case if the turbines are located close to farms or other existing buildings. However, incremental erosion of the special qualities of remoteness and wildness should be avoided.

Some locations close to centres of population are valued as an important recreational resource and have a sense of wildness even though they are close to urban areas. Locating turbines in these areas should be very carefully considered.

7.10 Landscapes of High value

All landscapes are valued but this report identifies landscapes which are designated for their international, national or regionally valued qualities. Again, however, this is a strategic study and in all cases turbine applications (large or small scale) must be considered on their individual merits and detailed analysis will be required to fully appreciate the nature of the development, site and its surroundings and effect on any locally designated or higher value landscapes.

7.11 Siting and Design Factors

There are a number of factors to be considered when developing proposals:

- **Landform**

Smaller turbines have more potential to utilise landform (often in conjunction with vegetation) to help lessen their visual impact than larger scale commercial models.

As the viewer's eye tends to be drawn towards the skyline, turbines should be set back from ridges and skylines to reduce their visibility within the wider landscape. Where siting on a skyline is unavoidable then the aim should be to retain a balance of skyline features or to provide a new focal point in an otherwise featureless skyline.

Siting of turbines on distinctive or prominent summits or skylines should generally be avoided. Shallower side slopes or gently undulating landform below ridgelines should be selected where possible.

It is often preferable for wind energy developments to be grouped upon the most level part of the site so the development appears to be less visually confusing when viewed from different elevations and directions.

- **Landscape Pattern**

Turbines can be sited to reflect patterns in the landscape, for example field and woodland boundaries or coastal edges. Conversely, care must be taken not to site turbines so that they conflict with patterns in the landscape.

Groupings of turbines can affect how they appear in the landscape. For example three dispersed turbines could be grouped to form a single feature in a visually complex landscape, whilst in a larger scale landscape, a single turbine with the same generating capacity may be preferable.

Multiples of turbines of a smaller size are most likely to be preferable in more lowland landscapes, where there are many other scale indicators.

- **Focal Features**

Turbines are likely to become focal features in the landscape particularly when new or unfamiliar designs are introduced. Care is required to ensure that they do not cause visual conflict or competition with other focal points. The siting of turbines should therefore be carefully considered to protect views to and from important landscape and cultural heritage features and their wider setting.

Turbines can highlight features which would otherwise be hidden. For example a turbine next to a farm could draw attention to its presence when the farm itself is hidden by buildings or trees.

- **Perspective**

The size of features in the landscape influences the perception of perspective. For example if larger turbines are seen in front of smaller ones, the smaller ones can appear further away than they actually are. Conversely, if smaller turbines are in front of larger ones, the larger ones can appear further away.

- **Relationship with Settlement and Urban Landscapes**

Turbines should be carefully located in relation to nearby settlements, buildings and other structures. In sparsely settled rural landscapes, turbines should be located to existing buildings or structures.

Views to/from, or on the approach to settlements (including dispersed properties) should be carefully considered when siting wind energy developments. Turbines should be located in the least visually prominent location. The type of turbine may be influenced by its proximity to settlement – a two bladed turbine is likely to visually integrate better with a busy urban setting than a calm rural location.

Turbines should be sited to minimise impacts on public viewpoints, roads and public rights of way.

- **Woodland & Trees**

Although trees and woodlands can cause turbulence which interferes with the efficiency or longevity of turbines, in some locations there may be the opportunity to screen small scale turbines close to trees and tall shrubs. Care should be taken to site turbines so that they do not visually dominate or compete with prominent vegetation such as parkland tree, trees on knolls, avenues etc.

Turbines should be located without the need to fell trees and woodlands particularly where they are important features in the local landscape.

Seasonal variation in leaf cover should be considered when using trees to screen turbines as should felling and restocking regimes when considering commercial forestry.

7.12 Cumulative Considerations

Potential cumulative landscape and visual effects should be carefully considered on a case by case basis, assisted by production of Zones of Theoretical Visibility (ZTVs) and appropriate visualisations (preferably from agreed viewpoints). Existing, consented and proposed turbines should be taken into account, in addition to any similar developments, which together may give rise to cumulative effects.

Cumulative consideration of new turbine developments should include simultaneous, sequential or combined views.

7.13 In Combination with Micro-Renewables

Groups of micro turbines can be prominent in some locations, by drawing the eye to their rotating blades. Rotation speeds vary considerably between small and larger bladed turbines, which if viewed together can create visual disturbance and clutter, rather than balance. Variations in rotor blade diameter should therefore be avoided.

7.14 In Combination with Other Small Scale Developments

Multiple small scale developments can dominate the landscape. Turbines should not create visual clutter with existing built development and vertical structures such as high voltage overhead power lines and communications masts. Man-made structures do not all share the same characteristics of scale, shape or form. Visual clutter and cumulative impact can occur when turbines are placed too close to vertical structures of dissimilar character such as electricity pylons and communication masts. To avoid this consider the following principles:

- Avoid inconsistent turbine height, layout and design between multiple wind energy developments.
- Consider associating particular types of turbines with specific situations. For example turbines on lattice towers in rural situations and turbines on tubular towers in urban situations. This helps create some local distinctiveness.
- Identify opportunities to lessen intervisibility between multiple developments – intervening landform and forestry are all useful in this respect.

7.15 In Relation to Important Viewpoints

Turbines should be carefully sited in relation to important viewpoints. To ensure a consistent spatial relationship between small scale turbines and other forms of development, especially tall structures such as pylons and masts, where possible ensure that developments are visually linked with landscape features such as forestry, farms, skylines or contours.

7.16 In Combination with Larger Turbines in an area

Smaller turbines when seen in combination with large turbines can create a confusing visual image. This can be lessened by:

- Using the same type of turbines design where more than one scale is visible.

- Using turbine layouts of a similar arrangement where more than one turbine group is present.
- Avoid situations where turbine rotary speeds are significantly different.

7.17 In Combination with Offshore Turbines

Onshore turbines can create visual clutter and confusing perspective when seen in combination with offshore turbines. This should be avoided wherever possible.

7.18 Filling in Gaps between Clusters of Wind Turbines

The perception of an area can be altered by introducing small turbines between clusters of windfarms which creates a visual link between all of the developments. Where site analysis indicates that visual separation is desirable, the gap between developments should be maintained.

8. APPENDIX 1

Background Documents

- Cadw (1998) *Register of Landscapes of Outstanding Historic Interest in Wales*
- Cadw (2001) *Register of Landscapes of Special Historic Interest in Wales*
- Cadw (2007) *Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process*, 2nd (revised) Edition
- Cadw (1998) *Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales*
- Cadw (2004) World Heritage Site Management Plan, The Castles and Town Walls of Edward I in Gwynedd
- The Countryside Agency and Scottish Natural Heritage (2002) *Landscape Character Assessment: Guidance for England and Scotland*
- Clark, J., Darlington, J. & Fairclough, G. (2004) *Using Historic Landscape Characterisation*
- Conwy Borough Council (1998-2003) *A Countryside Strategy for Conwy*
- Countryside Council for Wales (2008) *LANDMAP Methodology: Guidance for Wales*
- Countryside Council for Wales (2008) *LANDMAP Information Guidance Note 1: LANDMAP and Special Landscape Areas*
- Countryside Council for Wales (2010) *LANDMAP Information Guidance Note 3: Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines*
- Countryside Council for Wales (2010) *Guidance on Assessing Cumulative Landscape and Visual Impact of Wind farms in Wales*
- Countryside Council for Wales (2009) *Seascape Assessment of Wales*
- Countryside Council for Wales (et al) (2011) *Guide to Best Practice in Seascape Assessment*
- Countryside Council for Wales (2009) *Wales Landscape Character Areas*
- Countryside Council for Wales, Cadw and Welsh Assembly Government (2007) *Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process*
- Countryside Council for Wales (2008) *Energy & Natural Heritage. Countryside Council for Wales Policy Position Statement*
- Countryside Council for Wales (2009) *Welsh Seascapes and their Sensitivity to Offshore Developments*. Policy Research Report No. 08/5
- Denbighshire County Council (2003) *Denbighshire Landscape Strategy*
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9. APPENDIX 2

Planning Policy Wales

Relevant policies include the following:

5.3.6 National Parks and AONBs are of equal status in terms of landscape and scenic beauty and both must be afforded the highest status of protection from inappropriate developments. In development plan policies and development management decisions National Parks and AONBs must be treated as of equivalent status. In National Parks and AONBs, development plan policies and development management decisions should give great weight to conserving and enhancing the natural beauty, wildlife and cultural heritage of these areas.

5.3.11 Non-statutory designations, such as Special Landscape Areas or Sites of Interest for Nature Conservation, should be soundly based on a formal scientific assessment of the nature conservation, landscape or geological value of the site. Local non-statutory sites can add value to the planning process particularly if such designations are informed by community participation and reflect community values. Local planning authorities should apply these designations to areas of substantive conservation value where there is good reason to believe that normal planning policies cannot provide the necessary protection. Such designations should not unduly restrict acceptable development.

5.5.6 In National Parks or AONBs, special considerations apply to major development proposals which are more national than local in character. Major developments should not take place in National Parks or AONBs except in exceptional circumstances. This may arise where, after rigorous examination, there is demonstrated to be an overriding public need and refusal would be severely detrimental to the local economy and there is no potential for locating the development elsewhere or meeting the need in some other way.

5.7.2 Development plans should normally only propose coastal locations for development which needs to be on the coast. In particular, the undeveloped coast will rarely be the most appropriate location for development. Where new development requires a coastal location the developed coast will normally provide the best option, provided that due regard is paid to the risks of erosion, flooding or land instability.

5.7.4 Policies should aim to protect or enhance the character and landscape of the undeveloped coastline. Planning policies to be pursued in Heritage Coast areas should be incorporated in development plans. Designation as a heritage coast does not directly affect the status of the area in planning terms. However, the features which contributed to the designation of such areas may be important in formulating planning policies or making development management decisions.

6.5.24 World Heritage Sites are a material consideration to be taken into account by local planning authorities in the determination of planning applications, and by the Welsh Government in determining cases on appeal or following call-in. The impact of development proposals on both the sites and their settings should be carefully considered.

6.5.25 Local planning authorities should protect parks and gardens and their settings included in the first part of the 'Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales'. Cadw should be consulted on planning applications affecting grade 1 and II sites and the Garden History Society should be consulted on all parks and gardens on the Register. Information on the historic landscapes in the second part of the Register should be taken into account by local planning authorities in considering the implications of developments which are of such a scale that they would have a more than local impact on an area on the Register (see para 6.4.9). The effect of proposed development on a park or garden contained in the Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales, or on the setting of such a park or garden, may be a material consideration in the determination of a planning application.*

10. APPENDIX 3

Extract from LANDMAP Information Guidance Note 3: Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines

(Edited Temporary Version of June 2012 – Updated version due March 2013)

2.2 Planning Policy for Onshore Wind Energy

2.2.1 In the context of wind farm developments three types of areas have been identified in the Technical Advice Note (TAN) 8 on Renewable Energy (2005) as having differing status (points 1-3 below). However, LANDMAP information should still be used in all three of the TAN 8 contexts below (Welsh Assembly Government 2005, Annex D, section 8.4) to assist in avoiding, minimizing and compensating for impacts.

1) National Parks (NPs) and Areas of Outstanding Natural Beauty (AONBs)

TAN 8 states *“There is an implicit objective in TAN 8 to maintain the integrity and the quality of the landscape within the National Parks / AONBs of Wales i.e. no change in landscape character from wind turbine developments.”* The WAG Policy Statement on National Parks and National Park Authorities in Wales (2007) states *“In line with WAG’s policy on major developments within the Welsh Parks - and as set out in TAN 8 – there should be no significant change in landscape character as a result of wind turbine development within National Parks (or the AONBs). In conjunction with this, it is an aim of WAG that, where feasible, transmission cables should be under-grounded.”*

2) Areas within and immediately adjacent to Strategic Search Areas (SSAs)

TAN 8 Strategic Search Areas (SSAs) are considered the most appropriate locations for large scale wind farm development (Welsh Assembly Government, 2005). Within the SSAs landscape change has been accepted, and the creation of ‘wind farm landscapes’ in these areas acknowledged by Government as an outcome of delivering renewable energy targets, *“within (and immediately adjacent) to the SSAs, the implicit objective is to accept landscape change i.e. a significant change in landscape character from wind turbine development”*.

However, given the height of turbines, the visual impacts of a windfarm inside an SSA, may well affect the character of areas some distance away. Such issues arise most clearly where SSAs are close to National Parks and AONBs. An example is the Hirwaun Inquiry, 2008, where large wind turbines sited within 8km of the National Park boundary were considered to be unduly intrusive.

3) Other areas outside the SSAs

TAN 8 states that *“in the rest of Wales outside the SSAs, the implicit objective is to maintain the landscape character i.e. no significant change in landscape character from wind turbine development”*. Whilst *“most areas outside SSAs should remain free of large wind power schemes”*, wind farm schemes may be proposed on urban/industrial brownfield sites (up to 25MW), as smaller community based schemes (generally less than 5 MW) or as part of the re-powering and/or extension of existing wind farms. The LVIA should help determine if the *“environmental and landscape impacts are acceptable”* (TAN 8 2.11-2.14).

2.2.2 The Ministerial Interim Planning Policy Statement (MIPPS) 01/2005 states that *“renewable energy projects should generally be supported by local planning authorities provided environmental impacts are avoided or minimised”* (12.8.6). However the requirement in MIPPS that *“developers will need to be sensitive to local circumstances, including siting in relation to landform and other planning considerations”* (12.8.11) means that LANDMAP data will be valuable in understanding and avoiding or mitigating the impact of developments.

2.2.3 Good design principles and micro-siting is relevant in all instances to minimise the landscape and visual impacts of wind farms. When impacts have been minimized (in accordance with advice in MIPPS) the issue of whether the residual impacts are acceptable will have to be decided on a case by case basis.

11. APPENDIX 4

Operational, Consented and Proposed Wind Energy Developments (March 2013)

Table A4.1 – Operational and Consented Onshore Wind Energy Developments (Source data up to end of March 2013)

This table illustrates the typologies of the operational and consented wind energy developments in relation to each of the strategy areas.

Landscape Strategy Area	Landscape Unit	Plan Ref	Name	Status	County	Number of turbines	Height to Blade Tip (m)	Typology Relevant to Study
1	C2	E34	Tyn Llidart	Operational/Consented	Denbighshire	1	18	Micro
1	C6	E38	Foel Gollog	Operational/Consented	Denbighshire	1	15	Micro
1	B5	E40	Plas y Ial	Operational/Consented	Denbighshire	1	18	Micro
1	A2	E43	Penrallt	Operational/Consented	Denbighshire	1	18	Micro
1	D13	E44	Llainwen Ucha	Operational/Consented	Denbighshire	1	20	Micro
1	C1	E45	Cefn Du	Operational/Consented	Denbighshire	1	15	Micro
2	A6	E37	Primrose Cottage	Operational/Consented	Denbighshire	1	11	Micro
3	D5	E42	Maes Truan	Operational/Consented	Denbighshire	1	20	Micro
3	D5	E50	Tyn Y Celyn	Operational/Consented	Denbighshire	2	46	Small
3	D5	E54	Maesgwyn Ucha	Operational/Consented	Denbighshire	1	46	Small
3	D5	E55	Tyddyn Y Cae Hir	Operational/Consented	Denbighshire	1	27	Small
7	D2	E2	Brenig	Operational/Consented	Denbighshire	16	100	Very Large
7	D2	E33	Tir Mostyn	Operational/Consented	Denbighshire	25	75	Very Large
7	D1	E47	Cae Gwyn	Operational/Consented	Denbighshire	1	35	Small
7	D2	E48	Cae'r Weirglodd	Operational/Consented	Denbighshire	1	35	Small
7	D2	E51	Derwydd Bach	Operational/Consented	Denbighshire	10	121	Very Large
7	D2	E52	Cilgoed	Operational/Consented	Denbighshire	1	78	Medium

7	D1	E53	Cerrig Oerion	Operational/Consented	Denbighshire	2	46	Small
7	D1	E58	Maestyddyn Isa	Operational/Consented	Denbighshire	1	46	Small
7	D4	E59	Dyfannedd	Operational/Consented	Denbighshire	1	19	Micro
8	D3	E3	Hafotty Ucha P1	Operational/Consented	Conwy	1	60	Medium
8	D3	E5	Hafotty Ucha P2	Operational/Consented	Conwy	2	74	Medium
8	D3	E7	Hafotty Ucha P3	Operational/Consented	Conwy	1	86	Large
8	D3	E8	Ffynnon Wen	Operational/Consented	Conwy	1	12	Micro
8	D15	E14	Mwdwl Eithin	Operational/Consented	Conwy	11	100	Large
8	D3	E20	Hafod Dinbych Uchaf	Operational/Consented	Conwy	1	15	Micro
8	D10	E22	Moel Maelogen	Operational/Consented	Conwy	1	76	Medium
8	D10	E24	Fron Bella	Operational/Consented	Conwy	1	35	Small
8	D3	E25	Tyn Y Bwlch	Operational/Consented	Conwy	1	15	Micro
8	D3	E27	Tain Y Foel	Operational/Consented	Conwy	1	46	Small
8	D3	E29	Nant Yr Helyg	Operational/Consented	Conwy	1	27	Small
8	D3	E31	Maes Gwyn	Operational/Consented	Conwy	1	22	Small
8	D3	E32	Llechwedd y Gaer	Operational/Consented	Conwy	1	27	Small
8	D6	E36	Wern Ddu	Operational/Consented	Denbighshire	4	90	Large
8	D3	E39	Nant Y Wrach	Operational/Consented	Denbighshire	1	9	Micro
8	D4	E41	Clegir Canol	Operational/Consented	Denbighshire	1	30	Small
9	D10	E4	Moel Maelogen P1	Operational/Consented	Conwy	3	76	Medium
9	D10	E6	Moel Maelogen P2	Operational/Consented	Conwy	9	76	Medium
9	D10	E11	Pant Glas	Operational/Consented	Conwy	1	76	Medium
9	D10	E23	Moel Maelogen	Operational/Consented	Conwy	1	76	Medium

9	D10	E26	Cae Haidd	Operational/Consented	Conwy	1	27	Small
9	D10	E56	Wern Uchaf	Operational/Consented	Denbighshire	1	19	Micro
10	D1	E10	Bryn Nantllech	Operational/Consented	Conwy	1	9	Micro
10	D1	E19	Minffordd	Operational/Consented	Conwy	1	15	Micro
10	D1	E21	Crud Y Gwynt Farm	Operational/Consented	Conwy	1	35	Small
10	D1	E28	Bryniau Pair Isa	Operational/Consented	Conwy	1	27	Small
10	D1	E30	Foel Fawr	Operational/Consented	Conwy	1	27	Small
10	D1	E35	Llanerchgron Ucha	Operational/Consented	Denbighshire	1	12	Micro
10	D1	E46	Rhiwlas Isa	Operational/Consented	Denbighshire	1	20	Micro
10	D1	E60	Gwaenynog Bach	Operational/Consented	Denbighshire	1	46	Small
12	B7	E12	Moel Maelogen	Operational/Consented	Conwy	1	76	Medium
12	B7	E15	Moel Maelogen	Operational/Consented	Conwy	1	76	Medium
13	C10	E13	Gwynfor	Operational/Consented	Conwy	1	Rooftop	Micro
13	B7	E17	Parc Caer Seion	Operational/Consented	Conwy	1	18	Micro
14	A5	E18	Colwyn Leisure Centre	Operational/Consented	Conwy	1	21	Small
15	A4	E1	Ocean Beach Site	Operational/Consented	Denbighshire	10	18	Small-Medium
15	A4	E9	Denbigh Circle	Operational/Consented	Conwy	1	Rooftop	Micro
15	A4	E16	Corsydd	Operational/Consented	Conwy	1	12	Micro
15	A4	E49	Apollo Cinema	Operational/Consented	Denbighshire	1	18	Micro
Within 10km Buffer of Study Area Boundary								
		E61	Castell y Gwynt	Operational/Consented	Conwy SNP	1	14	Micro
		E62	Braich Ddu	Operational/Consented	Gwynedd	3	90	Large

		E63	Tyrau Duon	Operational/Consented	Conwy SNP	<i>Unconfirmed</i>	17	<i>Unknown</i>
		E64	Soughton House	Operational/Consented	Flintshire	2	15	Micro
		E65	Kingspan	Operational/Consented	Flintshire	1	<i>Unconfirmed</i>	<i>Unknown</i>
		E66	Bryn Bella	Operational/Consented	Flintshire	1	9	Micro
		E67	Ael y Bryn	Operational/Consented	Flintshire	1	Rooftop	Micro
		E68	Fron Deg	Operational/Consented	Flintshire	1	9	Micro
		E69	Claremont	Operational/Consented	Flintshire	1	9	Micro
		E70	Tyddyn y Foel	Operational/Consented	Flintshire	1	9	Micro
		E71	Bryn Oer	Operational/Consented	Flintshire	1	10	Micro
		E72	Bryn Coch Farm	Operational/Consented	Flintshire	1	11	Micro
		E73	West Coast Energy	Operational/Consented	Flintshire	1	35	Small
		E74	Pentre Bach	Operational/Consented	Flintshire	1	23	Small
		E75	Racecourse Farm	Operational/Consented	Flintshire	1	19	Micro
		E76	Fron Haul Isa	Operational/Consented	Flintshire	1	<i>Unconfirmed</i>	<i>Unknown</i>
		E77	Cymau Hall Farm	Operational/Consented	Flintshire	1	16	Micro
		E78	Ysgol Rhos Helyg	Operational/Consented	Flintshire	1	20	Micro
		E79	Moss Giel	Operational/Consented	Flintshire	1	15	Micro
		E80	Alltami Depot	Operational/Consented	Flintshire	1	<i>Unconfirmed</i>	<i>Unknown</i>
		E81	Cae March Farm	Operational/Consented	Flintshire	1	15	Micro

Table A4.2: Operational and Consented Offshore Wind Energy Developments (Source data up to end of March 2013)

Plan Ref	Name	Status	No. of turbines	Height to Blade Tip (m)
Within 10km Buffer of Study Area Boundary				
OS1	Rhyl Flats	Operational/Consented	25	132
OS2	North Hoyle	Operational/Consented	30	130
Outside 10km Buffer of Study Area Boundary				
OS3	Gwynt y Mor	Operational/Consented	160	165

Table A4.3: Other Wind Energy Development Proposals (Source data up to end of March 2013)

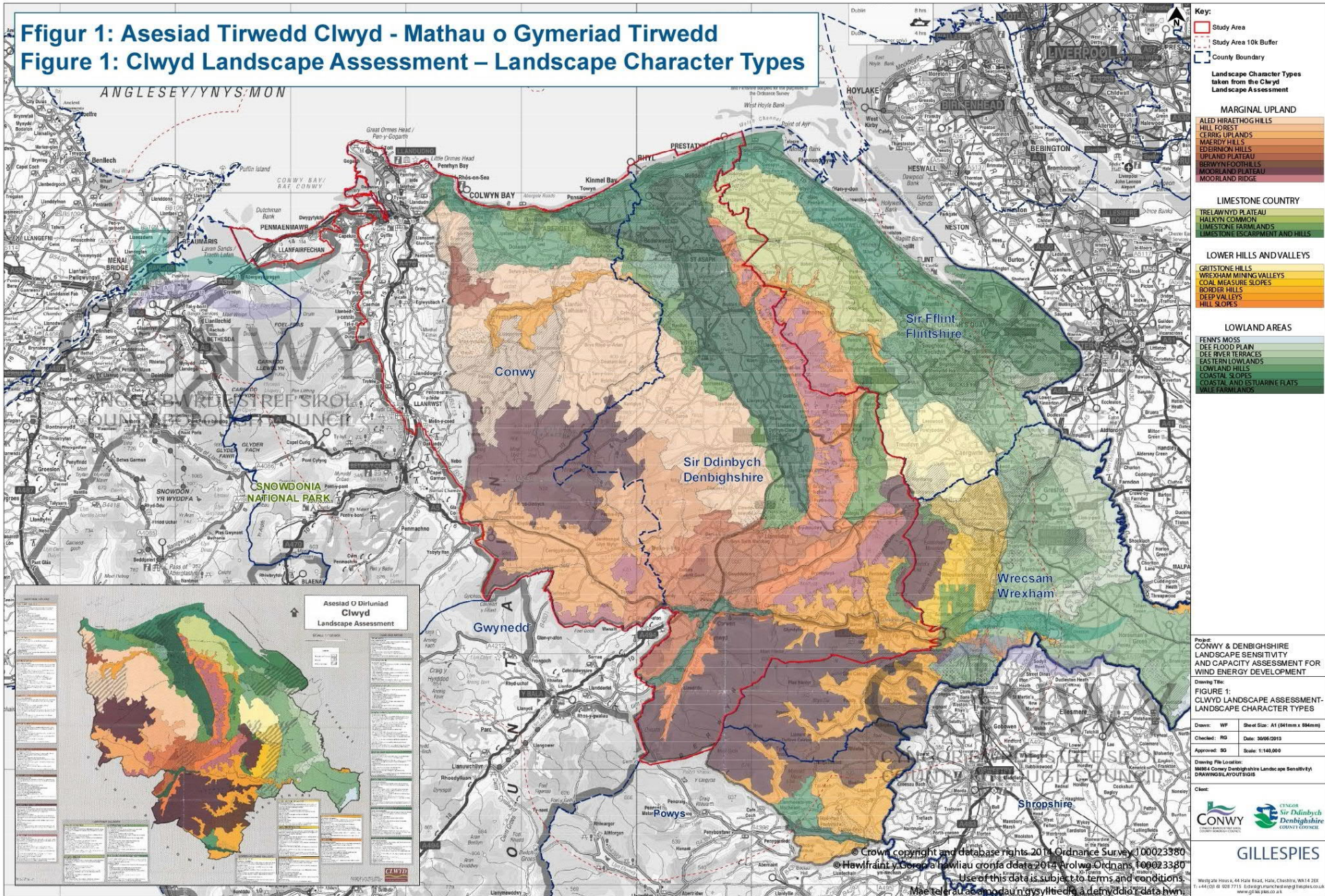
Landscape Strategy Area	Landscape Unit	Plan Ref	Name	Status	County	Number of turbines	Height to Blade Tip (m)	Typology Relevant to Study
1	B4	R22	Rhesgoed Farm	Refused	Denbighshire	1	18	Micro
1	C5	R23	Bryntirion Farm	Refused	Denbighshire	1	17	Micro
1	C1	R24	Marian Mawr	Refused	Denbighshire	1	46	Small
1	C1		Marian Mawr	Under Consideration	Denbighshire	1	46	Small
1	B5	W14	The Shippon	Withdrawn	Denbighshire	1	18	Micro
6			D7		P2	Sirior		Under Consideration
7			D2		P3	Derwydd Bach		Under Consideration
7	D2	P4	Tan y Creigiau	Under Consideration	Denbighshire	1	62	Medium
7	D4	C2	Dyfannedd	Not Implemented	Denbighshire	1	11	Micro
8	D3	RP1	Cwm Pennaner	Registered	Conwy	3	80	Medium

8	D3	RP3	Tyn Y Bryn Farm	Registered	Conwy	1	67	Medium
8	D3	RP5	Fron Isaf	Registered	Conwy	1	34	Small
8	D6	C1	Wern Ddu	Not Implemented	Denbighshire	5	80	Medium
8	D3	R5	Cwm Penanner	Refused	Conwy	8	Unconfirmed	Unknown
8	D15	R6	Mwdwl Eithin	Refused	Conwy	12	100	Large
8	D3	R19	Pen Y Gob	Refused	Conwy	1	27	Small
8	D3	W2	Hafoty Uchaf	Withdrawn	Conwy	3	Unconfirmed	Unknown
8	D3	W8	Fron Bella	Withdrawn	Conwy	1	34	Small
8	D3	W12	Maes Gwyn	Withdrawn	Conwy	1	22	Small
9	D10	RP2	Llys Dymper	Registered	Conwy	10	100	Large
9	D10	R2	Moel Llyn	Refused	Conwy	28	Unconfirmed	Unknown
9	B7	R20	Creigiau Lwrch	Refused	Conwy	2	20	Micro
9	D10	R21	Gorsedd Bran	Refused	Denbighshire	13	125	Very Large
9	D10	W1	Moel Llyn	Withdrawn	Conwy	26	Unconfirmed	Unknown
9	D10	W7	Llys Dymper	Withdrawn	Conwy	17	126	Very Large
10	D8	RP4	Coed Coch	Registered	Conwy	1	34	Small
10	D1	P1	Cil Llwyn	Under Consideration	Denbighshire	1	46	Small
10	D1	P5	Cil Llwyn	Under Consideration	Denbighshire	1	46	Small
10	D1	R1	Mynydd Glyn Lws	Refused	Conwy	6	Unconfirmed	Unknown
10	D1	R3	Mynydd Glyn Lws	Refused	Conwy	3	Unconfirmed	Unknown
10	D8	R4	Mynydd Llanellian	Refused	Conwy	4	Unconfirmed	Unknown
10	D1	R14	Tyn Ddol	Refused	Conwy	1	46	Medium
10	D1	R15	Glyn Farm	Refused	Conwy	2	Unconfirmed	Unknown

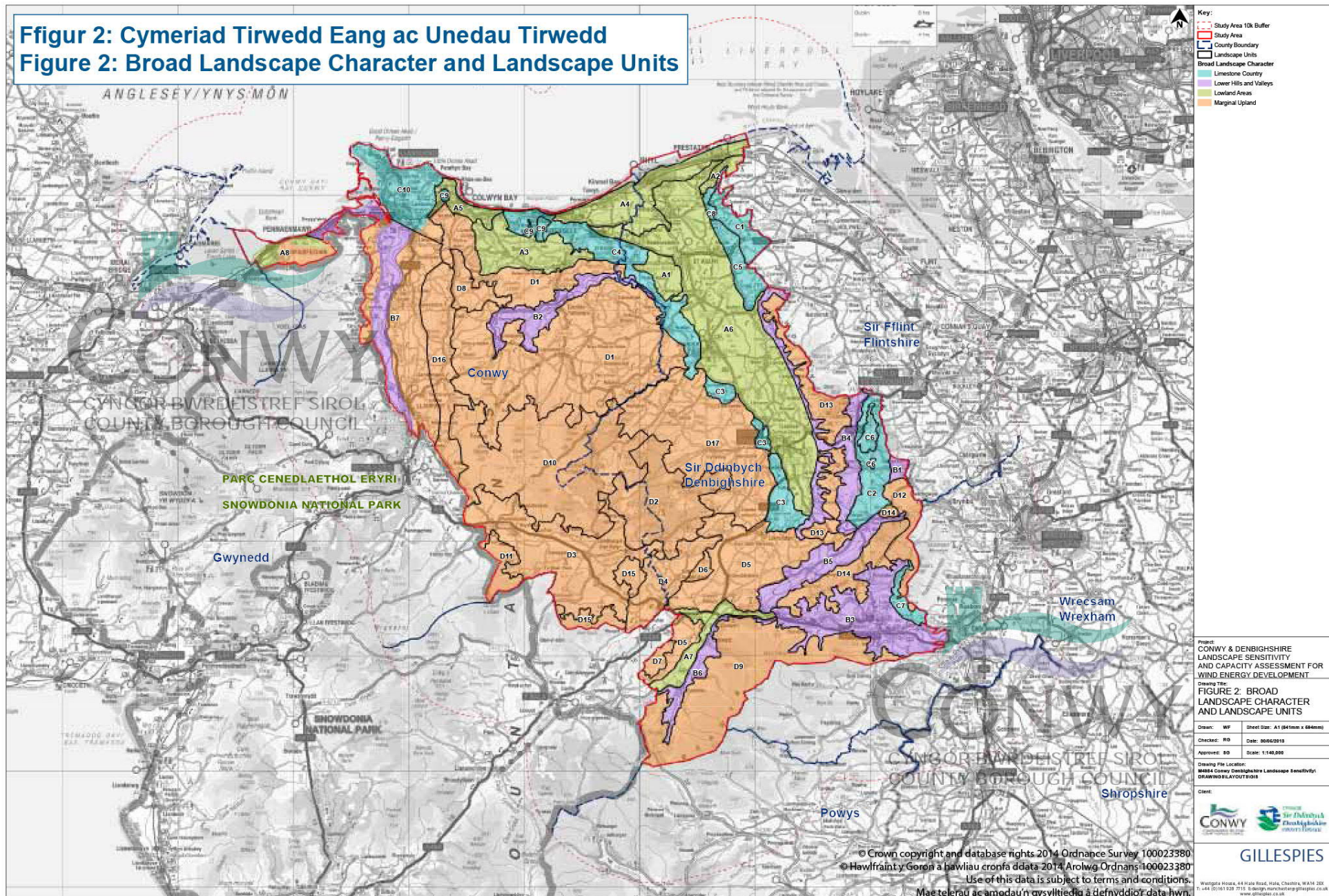
10	D8	R18	Coed Coch	Refused	Conwy	2	34	Small
10	D1	R25	Ffridd Fawr	Refused	Denbighshire	1	51	Medium
10	D1	W4	Bryn Y Maen Farm	Withdrawn	Conwy	1	35	Small
10	D1	W5	Tyddyn Ucha	Withdrawn	Conwy	1	32	Small
10	D1	W9	Minffordd	Withdrawn	Conwy	1	46	Small
10	D1	W11	Foel Fawr	Withdrawn	Conwy	1	27	Small
12	B7	R16	Tyddyn Ucha	Refused	Conwy	1	15	Micro
12	B7	R17	Bodlondeb	Refused	Conwy	2	18	Micro
12	B7	W6	Llecyn	Withdrawn	Conwy	1	17	Micro
12	B7	W10	Bodlondeb	Withdrawn	Conwy	2	18	Micro
13	C10	R8	Bryn Gwynt Lane	Refused	Conwy	1	10	Micro
13	C10	R11	Tan Y Coed	Refused	Conwy	1	17	Micro
13	C10	R13	Tan Y Coed	Refused	Conwy	1	15	Micro
14	A3	R7	Bryn Celyn	Refused	Conwy	1	11	Micro
14	C9	R9	Princess Avenue	Refused	Conwy	1	18	Micro
14	C9	R12	Princess Avenue	Refused	Conwy	1	Rooftop	Micro
14	C4	W13	Llanddulas Quarry	Withdrawn	Conwy	1	18	Micro
15	A4	R10	Corsydd	Refused	Conwy	1	12	Micro
15	A4	W3	Corsydd	Withdrawn	Conwy	1	12	Micro
Within 10km Buffer of Study Area Boundary								
		R26	Fron Deg	Refused	Flintshire	1	Unconfirmed	Unknown
		W15	Ysgol Terrig	Withdrawn	Flintshire	1	Unconfirmed	Unknown
		W16	Bryn Bella	Withdrawn	Flintshire	1	10	Micro

		W17	Kingspan	Withdrawn	Flintshire	1	138	Very Large
		W18	Ysgol Rhos Helyg	Withdrawn	Flintshire	1	15	Micro
		W19	Bryn Hedydd	Withdrawn	Flintshire	1	15	Micro
		W20	Bryn Hedydd	Withdrawn	Flintshire	1	15	Micro
		W21	Gop Farm	Withdrawn	Flintshire	1	20	Micro
		P6	Kingspan	Under Consideration	Flintshire	2	<i>Unconfirmed</i>	<i>Unknown</i>
		P7	Ty Coch	Under Consideration	Flintshire	1	<i>Unconfirmed</i>	<i>Unknown</i>

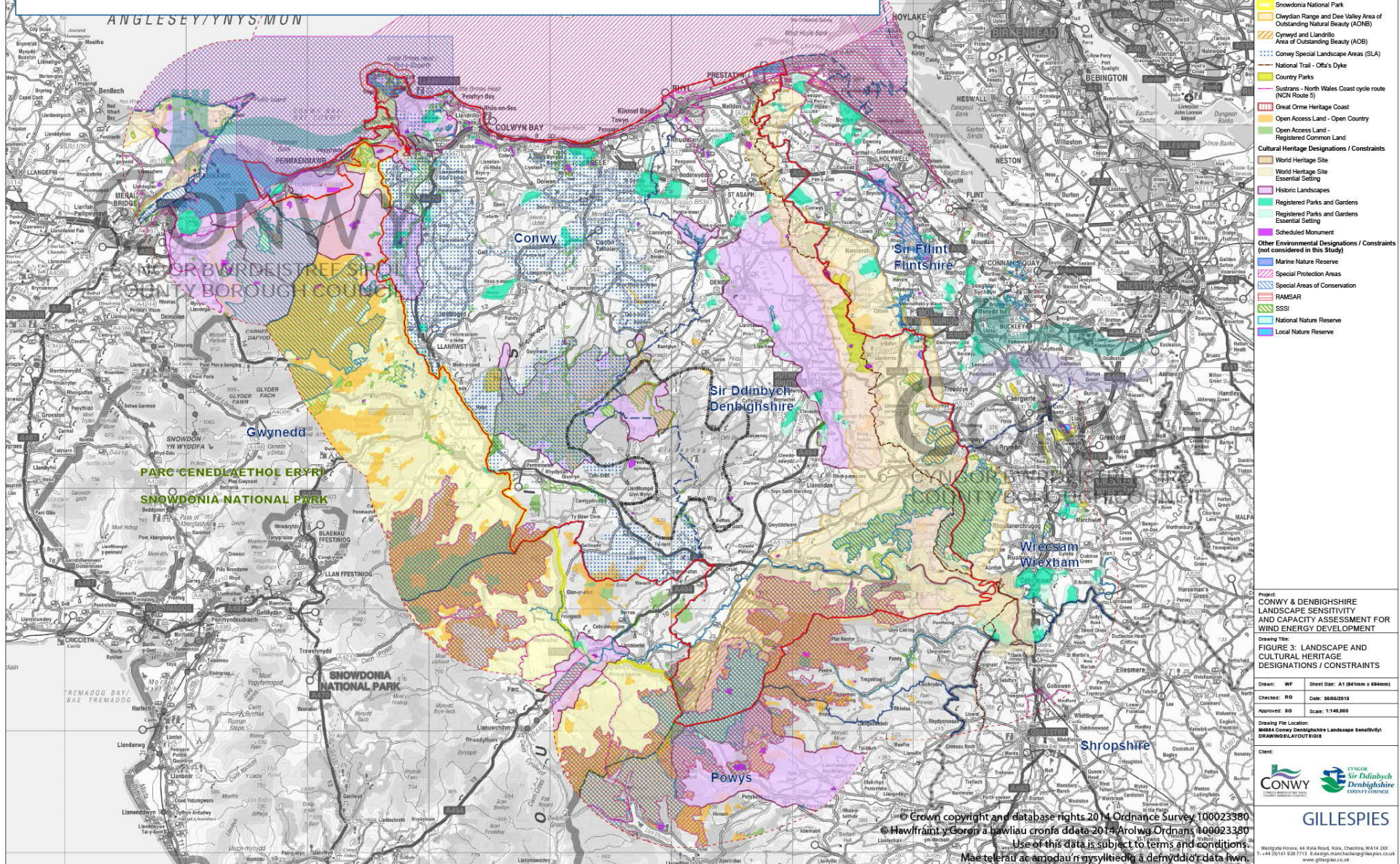
Ffigur 1: Asesiad Tirwedd Clwyd - Mathau o Gymeriad Tirwedd
Figure 1: Clwyd Landscape Assessment – Landscape Character Types

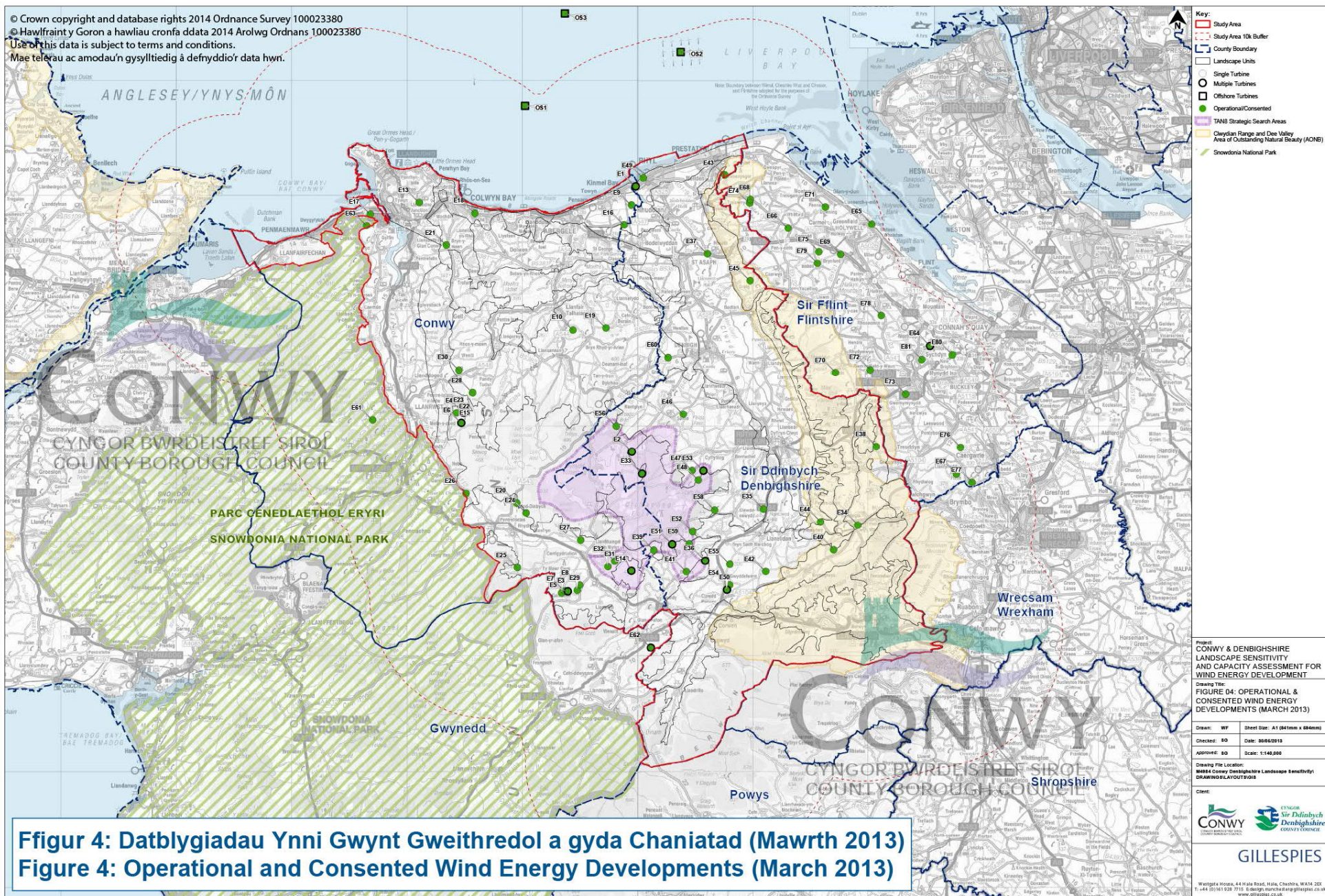


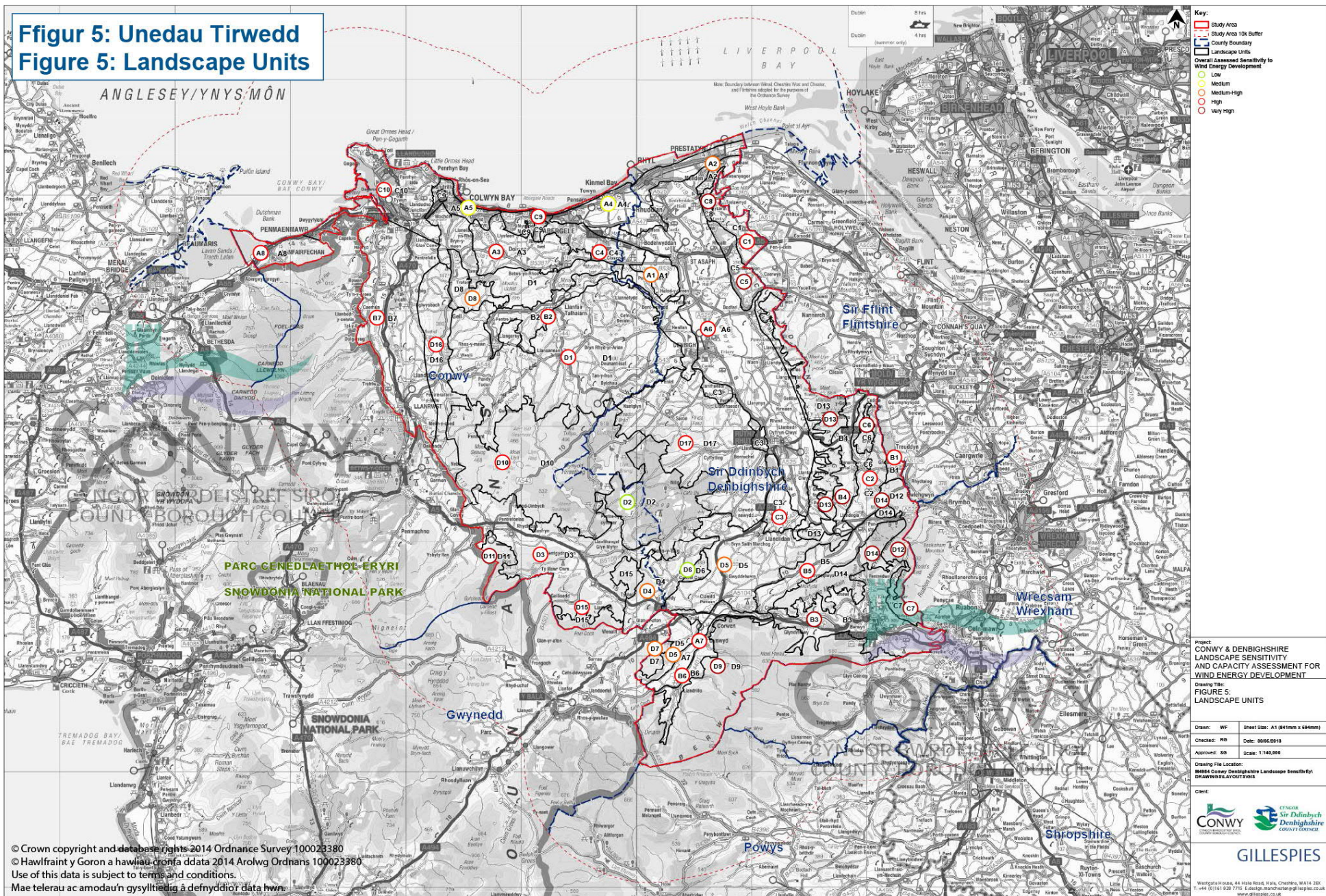
Ffigur 2: Cymeriad Tirwedd Eang ac Unedau Tirwedd
Figure 2: Broad Landscape Character and Landscape Units



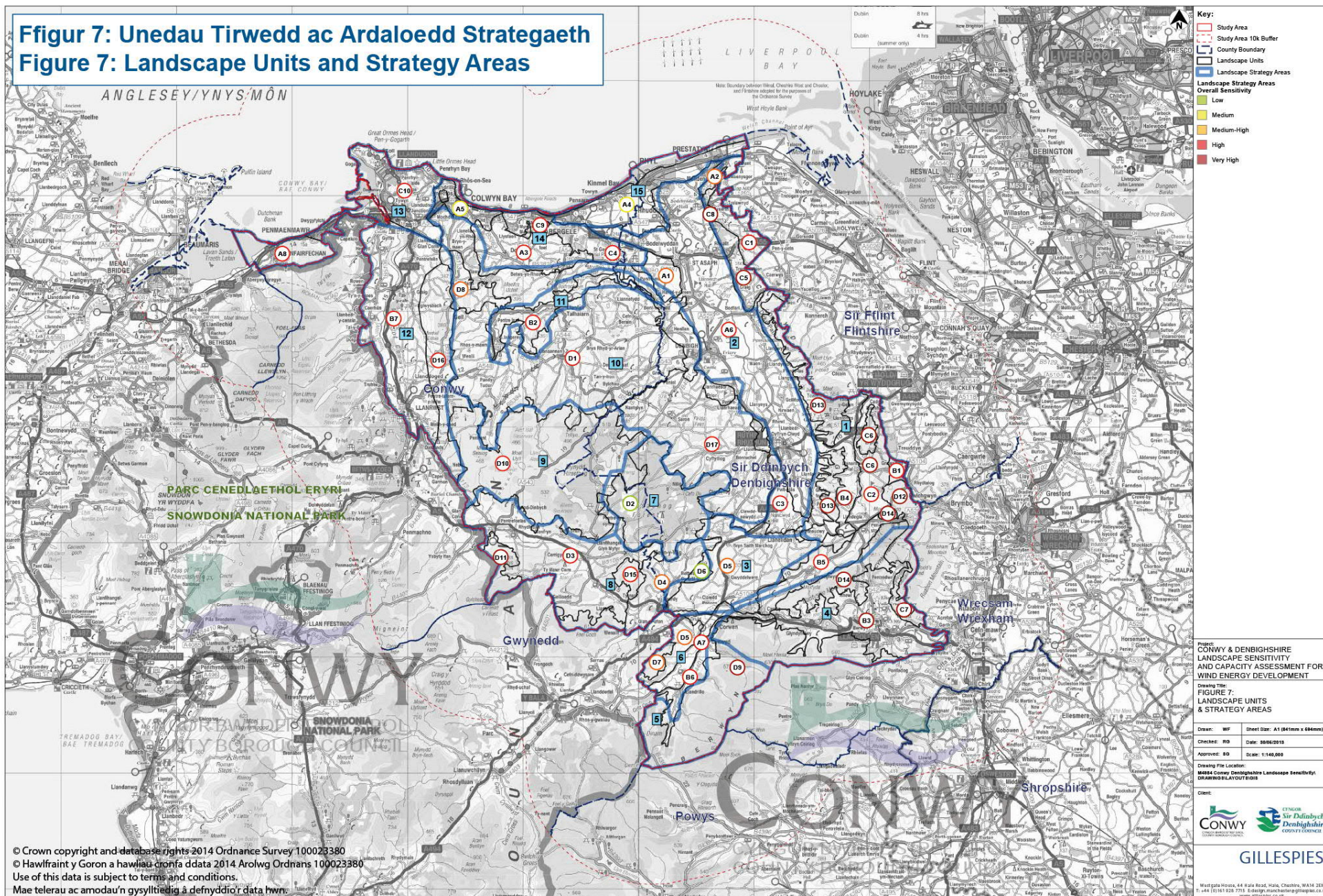
Ffigur 3: Dynodiadau/Cyfngiadau Tirwedd a Threftadaeth Ddiwylliannol
Figure 3: Landscape and Cultural Heritage Designations / Constraints

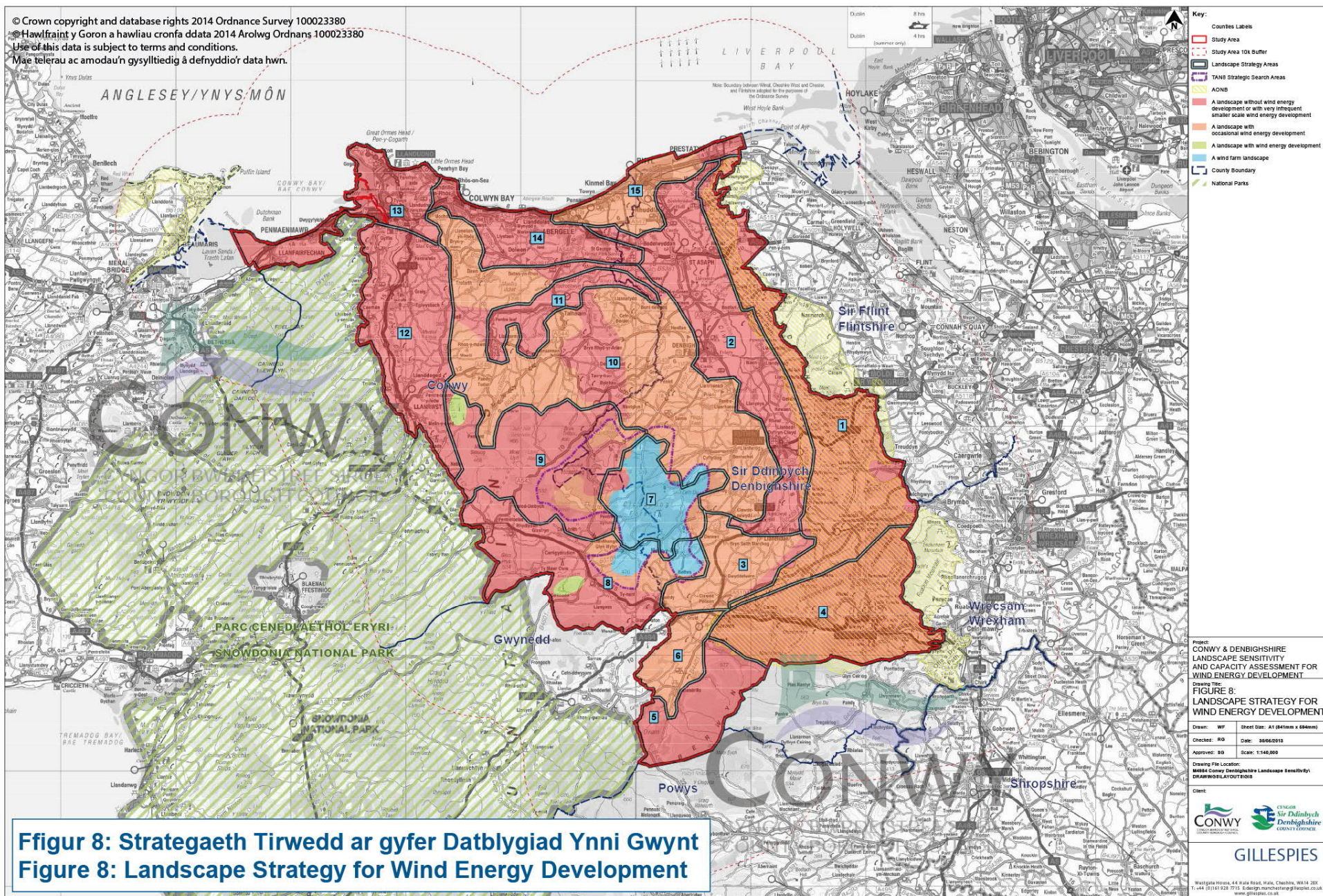


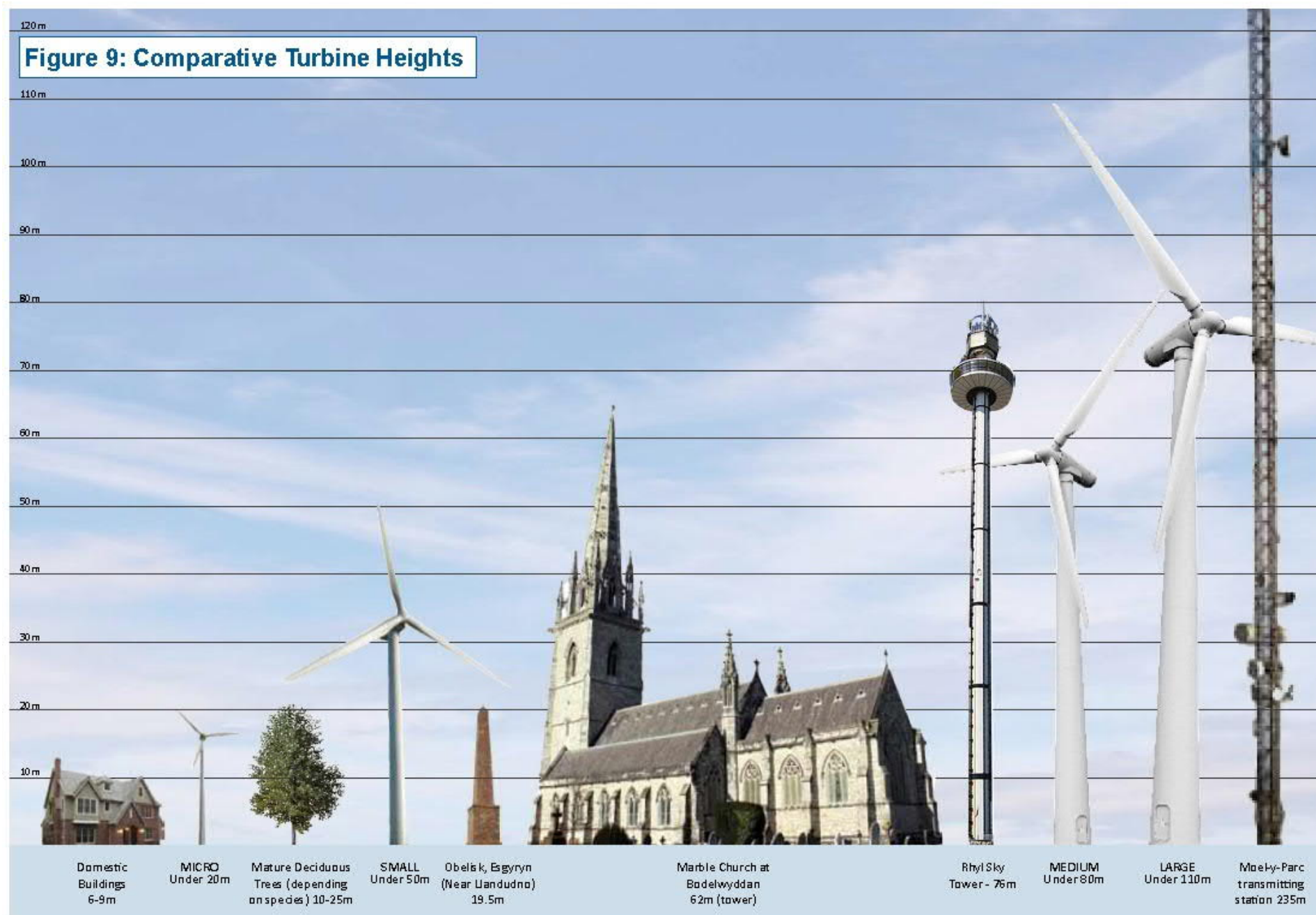




Ffigur 7: Unedau Tirwedd ac Ardaloedd Strategaeth
Figure 7: Landscape Units and Strategy Areas

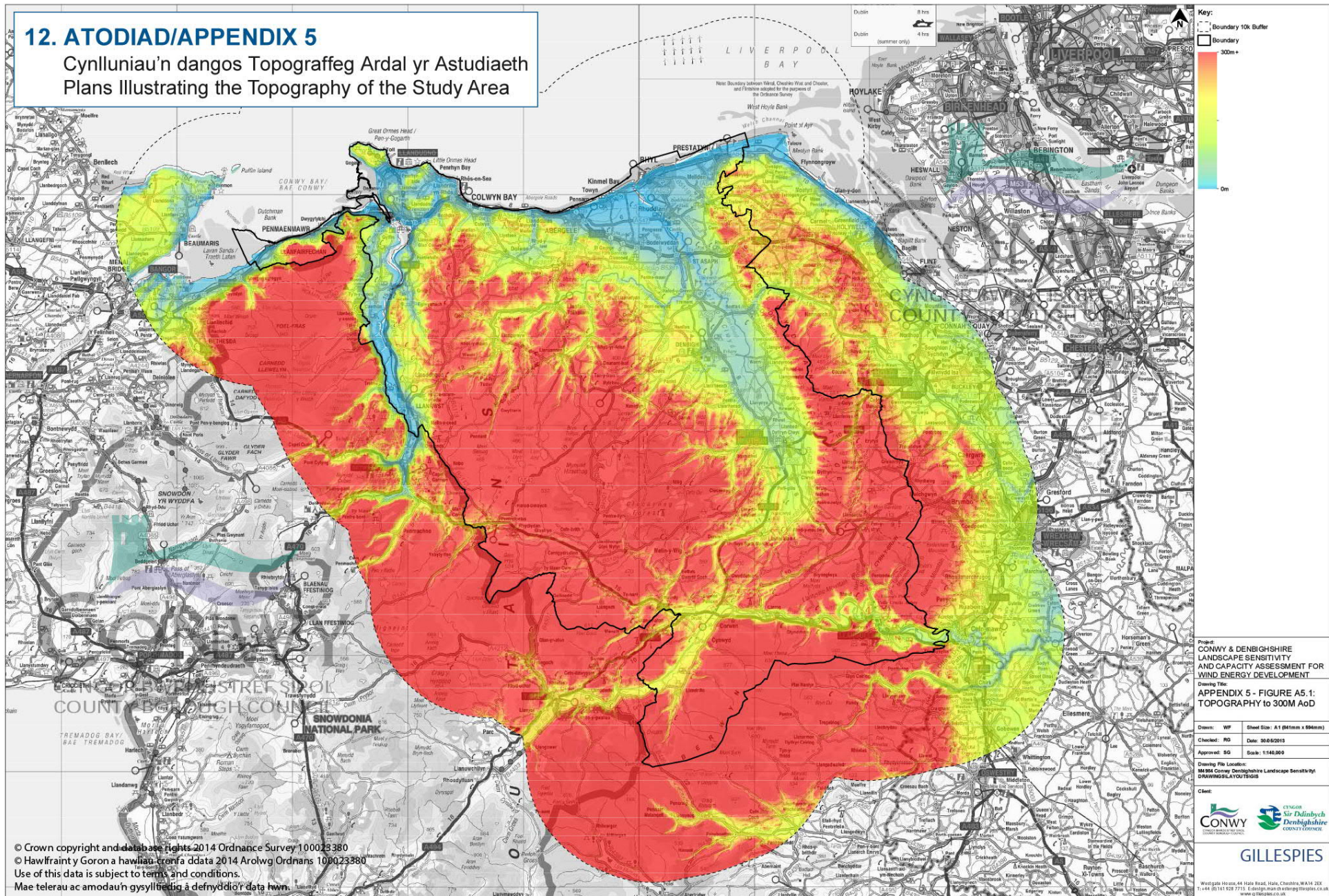


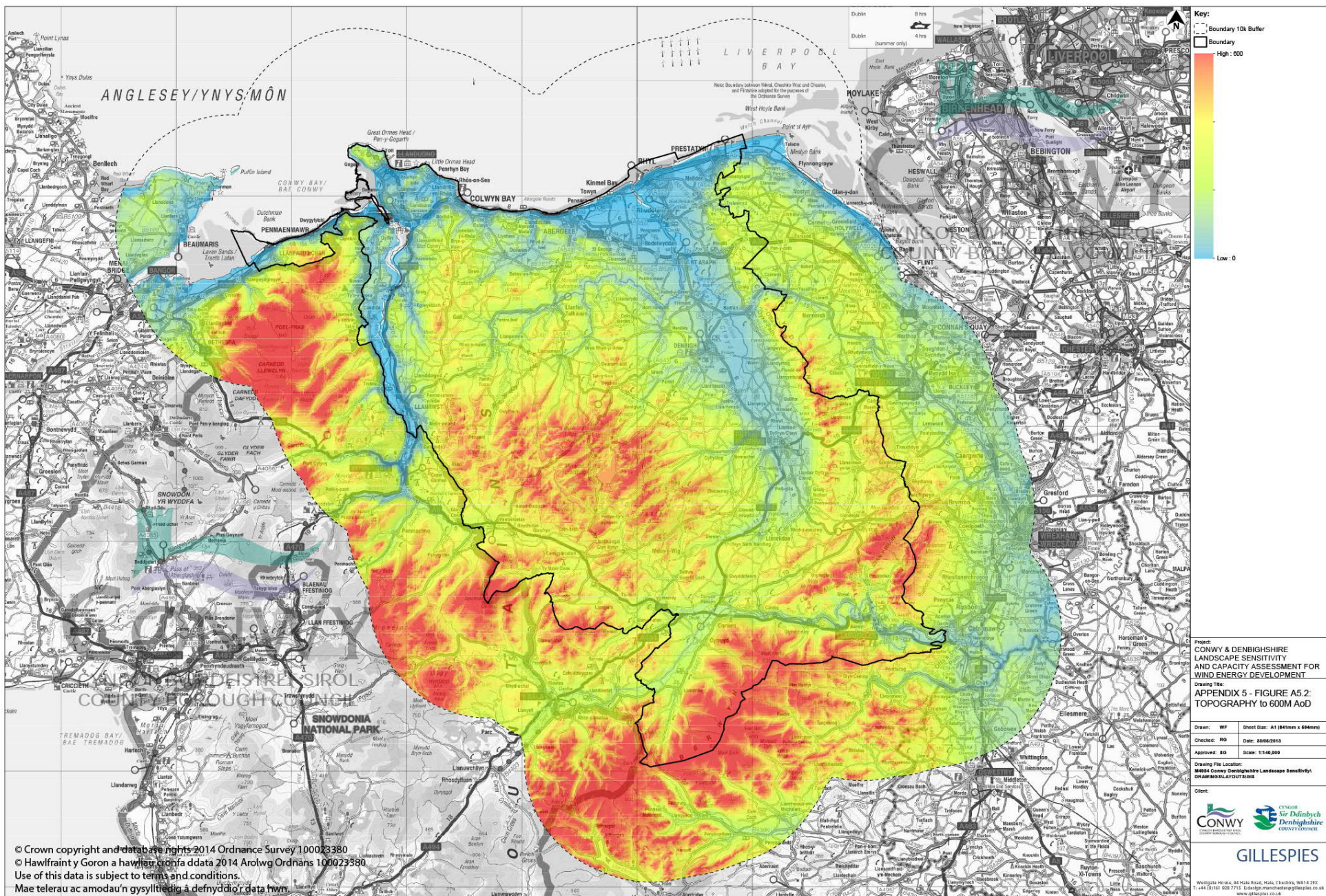


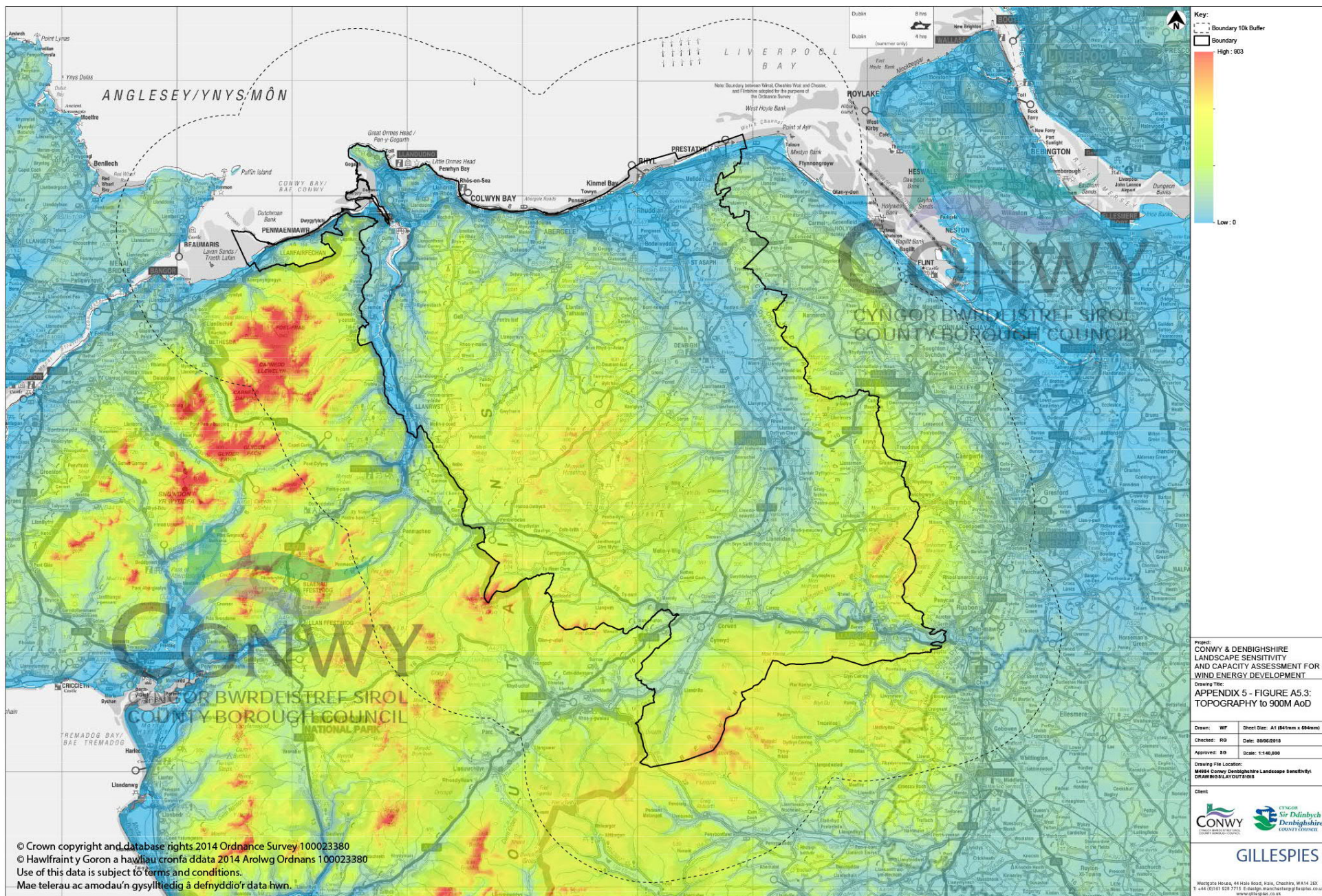


12. ATODIAD/APPENDIX 5

Cynlluniau'n dangos Topograffeg Ardal yr Astudiaeth
Plans Illustrating the Topography of the Study Area







13. APPENDIX 6

LANDMAP Data in Relation to the Study Area (March 2013)

The digital plans contained on the Appendix 6 CD illustrate the range of LANDMAP data which was used to inform the evaluations of sensitivity to wind energy developments for each of the landscape units. Information from the following 21 LANDMAP layers (Evaluated Aspect layers) was overlaid onto the study area and represents the LANDMAP data as at March 2013:

Visual & Sensory Datasets

VS3: Land Cover
VS4: Topographic Form
VS5: Land Cover Pattern
VS6: Settlement Pattern
VS8: Scale
VS 9: Enclosure
VS18: Level of Human Access
VS24: Perceptual and Sensory Qualities
VS27: Condition
VS46: Scenic Quality
VS47: Integrity
VS48: Character Sense of Place
VS49: Rarity
VS50: Overall Evaluation

Historic Landscape Datasets

HL35: Integrity
HL38: Rarity
HL40: Overall Evaluation

Geological Landscape Datasets

GL31: Rarity / Uniqueness
GL33: Overall Evaluation

Landscape Habitats Datasets

LH42: Connectivity / Cohesion
LH45: Overall Evaluation

Cultural Landscape Datasets

Although GVLIA recommends that data from all five LANDMAP layers should be used in any assessment, the Cultural Landscape information provided in the Cultural Landscape layer was not sufficiently detailed to be useful for this study²¹.

²¹ LANDMAP Information Guidance Note 3 doesn't identify any specific evaluation criteria for Cultural Landscape

14. APPENDIX 7

Glossary & Definitions

Glossary

Table A7.1 below provides a glossary of the abbreviations used in the guidance. It is followed by definitions of key words used within this report for clarity.

Table A7.1: Glossary Table

AOB	Area of Outstanding Beauty
AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
DCfW	Design Commission for Wales
GLVIA	Guidelines for Landscape and Visual Impact Assessment ²²
kW	Kilowatt
LCA	Landscape Character Area
LCT	Landscape Character Type
LDP	Local Development Plan
LSA	Landscape Strategy Area
LU	Landscape Unit
MW	Megawatt
NRW	Natural Resources Wales (formerly the Countryside Council for Wales (CCW))
PPW	Planning Policy Wales
SLA	Special Landscape Area
SNH	Scottish Natural Heritage
SPG	Supplementary Planning Guidance
SSA	Strategic Search Area
SSA A	Strategic Search Area A (Clocaenog Forest)
TAN	Technical Advice Note
ZTV	Zone of Theoretical Visibility

²² Guidelines for Landscape and Visual Impact Assessment Second edition (GLVIA) (The Landscape Institute and the Institute for Environmental Management and Assessment 2002) replaced by GLVIA Third Edition in April 2013.

Definitions

For the purposes of this study, the following definitions are taken from (or closely based on) the guidance referred to in Stage One of the Methodology (Section 2) :

Landscape is an area as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.²³ GLVIA notes that the term does not only mean landscapes that are recognised as being special or valuable but is also about the ordinary and the everyday landscapes where people live and work, and spend their leisure time. This includes rural landscapes, seascapes and townscape.

Landscape Sensitivity is related to landscape character and how susceptible this is to change. Landscapes which are highly sensitive are at risk of having their key characteristics fundamentally altered, leading to a different landscape character. Sensitivity varies according to the type of development proposed (in this case wind energy) and the landscape's individual elements, features and characteristics.

Landscape Character Type (LCT) are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern.²⁴

Landscape Character Area (LCA) are single unique areas which are the discrete geographical areas of a particular landscape type.²⁵

Landscape Units have been devised for the purpose of this report in lieu of a consistent landscape character assessment across the study area. The landscape units are primarily based on discrete geographical areas of the landscape types identified in the Clwyd Landscape Assessment undertaken in 1995 and are broadly representative of different character areas of the landscape. These areas are not formally recognised as LCAs, therefore the term landscape unit has been used.

Landscape Strategy Areas have been identified purely for the purpose of this report, in order to assign broad landscape objectives and to assess indicative overall capacity for wind energy developments. The Landscape Strategy Areas are relatively large geographical areas that have been formed following a review of the landscape unit's sensitivity assessments, supplemented by an analysis of broad landscape character, intervisibility, key visual receptors, topography (including ridgelines and water-sheds based on LANDMAP information), Ordnance Survey and GIS data, observations made during field studies and discussions with the Steering Group.

Visual Sensitivity reflects the views people have of the landscape and the effects of change on those views. When a landscape is changed, there is a probability that it will be seen by someone and often by several groups of people. This may affect both specific views and have an effect on the overall outlook (visual amenity) that people enjoy. Visual sensitivity depends both on the nature of the potential development as well as the nature of peoples' specific views and visual amenity. It also reflects the numbers and types of people who are likely to perceive the landscape and the extent to which they can accept change without perceiving effects upon their view to be negative.

Landscape Value is defined as the relative value that is attached to different landscapes by society and is often reflected in designation. Where this is the case it is important to understand what aspects of the landscape led to its designation and how these might be affected by potential development.

²³ Council of Europe, 2000 as set out in GLVIA Guidelines for Landscape and Visual Impact Assessment Second edition (GLVIA) (The Landscape Institute and the Institute for Environmental Management and Assessment 2002) replaced by GLVIA Third Edition in April 2013

²⁴ Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3) (The Landscape Institute and the Institute for Environmental Management and Assessment 2013)

²⁵ As reference 24 above.

Landscape Capacity relates to how much change arising from wind energy development can be accommodated without unacceptable adverse effects on the character or perception of the landscape and without compromising any values attached to it.

Landscape Scale in relation to the evaluation of landscape units relates to the relationship of key elements or spaces of each landscape unit, such as woodland or open space, within the whole landscape. This does not refer merely to the size of the landscape unit. It may be that a small landscape unit is assessed to be vast in scale as it is a small part of a continuous whole such as a mountain range or extensive forest. In contrast smaller scale landscapes may typically comprise elements and spaces of a community scale such as hamlets, woodland clearings, small field or woodland units.

Cumulative Effects 'the additional changes caused by a proposed development in conjunction with other similar developments or as the combined effect of a set of developments taken together'.

Cumulative Landscape Effects 'can impact on either the physical fabric or character of the landscape, or any special values attached to it'.

Cumulative Visual Effects can be caused by combined visibility, which 'occurs where the observer is able to see two or more developments from one viewpoint' and/or sequential effects which 'occur when the observer has to move to another viewpoint to see different developments'²⁶.

Tranquillity is defined as the quality of calm experienced in places with mainly natural features and activates, free from disturbance from manmade ones²⁷

²⁶Cumulative Effects, Cumulative Landscape Effects and Cumulative Visual Effects definitions taken from SNH (2012) Assessing the cumulative impact of onshore wind energy development, Inverness: Scottish Natural Heritage

²⁷ <http://en.wiktionary.org/wiki/tranquillity>