

WIND FARM SPG

GOOD PRACTICE GUIDANCE – Landscape and Visual Amenity

The table below summarises a suggested approach to how landscape and visual amenity could be considered in the process of producing Supplementary Planning Guidance (SPG) for on-shore wind farms over 20MW in size. It is important to consider potential landscape and visual impacts during the process, including in helping to identify broad areas of search and those areas which should be afforded significant protection.

The approach uses a method based upon landscape character assessment as defined in *Landscape Character Assessment – Guidance for England and Scotland (SNH/CA)*. Landscape character assessment (LCA) is a method of identifying and describing the differences between all landscapes and highlighting the features or patterns that are important in distinguishing one landscape from another. LCA is widely used by planning authorities in the UK as a spatial planning tool. It is a means of identifying and understanding the baseline resource so that judgements about the capacity landscapes in relation to a range of different developments such as housing, forestry or renewable energy can be made.

The approach outlined below recommends assessing the sensitivity and capacity of a landscape to change by wind energy development. Landscape sensitivity is about the degree of change that could be accommodated *without* significant detrimental effects on landscape character. Once landscape sensitivity has been assessed judgements about landscape capacity can be made. Landscape capacity is about the amount of development that can be accommodated in the landscape within certain thresholds of acceptable change. Thresholds should be based on the findings of the sensitivity assessment.

Multiple wind farm developments may give rise to cumulative landscape and visual effects. Whilst the aim of the SPG is to guide development to areas where it can best be accommodated the objective for such areas should be to minimise cumulative impacts. SPG's could usefully set out the key principles to be followed when siting and designing a wind farm to fit not only with the landscape but also other schemes.

Throughout, the preparation of the SPG should give consideration to cross boundary wind farm capacity to ensure that areas of potential capacity are not compromised and to recognise the sensitive landscapes in adjoining local authority areas.

Approach to Considering Landscape and Visual Impacts in SPG

Step	Activity	Description	Relevant Published Guidance/Advice
1	<p>Define Landscape Character</p> <p>Review existing SNH Landscape Character Assessment that coincides with the planning authority boundary.</p> <p>Augment or amend existing LCA.</p>	<p>The assessment and mapping work for the series of SNH LCA documents was undertaken at a scale that may not necessarily reflect the landscape resource for the planning authority area or be appropriate to consider the larger scale effects of wind farm development. It may be necessary to amalgamate similar, smaller character types or divide larger character types.</p>	<p>Landscape Character Assessment – Guidance for England and Scotland, 2002 (SNH/CA).</p> <p>The relevant SNH Landscape Character Assessment.</p>
2	<p>Define Visual Envelopes</p> <p>Identify, describe and map key views.</p> <p>Identify landscape features, such as ridges, that form visual barriers.</p> <p>Identify, describe and map 'visual envelopes'.</p>	<p>The visual resource should be assessed and described in parallel with the landscape resource as the two are related.</p> <p>'Visual envelopes' may not necessarily coincide precisely with landscape character types. By mapping 'visual envelopes' a better understanding of intervisibility between and across different LCT's will be obtained.</p>	<p>Landscape Character Assessment – Guidance for England and Scotland, 2002 (SNH/CA).</p> <p>Guidelines for Landscape and Visual Impact Assessment 2nd Edition, 2002 (IEMA/LI)</p> <p>The relevant SNH Landscape Character Assessment.</p>
3	<p>Define a Wind Farm Typology</p> <p>Develop a wind farm typology appropriate to the landscape of the planning authority area.</p>	<p>The typology should cover a range of sizes of potential wind farms ranging from small to large. The typology will need to relate to the size of the planning authority area and the type and distribution of different landscapes found within it. The wind farm typology selected must accord with the likely character of a modern wind farm development particularly with regard to turbine height.</p>	<p>The relevant SNH Landscape Character Assessment.</p> <p>Guidelines on the Environmental Impacts of Windfarms and Small Scale Hydroelectric Schemes, SNH 2001.</p> <p>Designing Windfarms in the Landscape Consultation Draft, 2008 (SNH)</p>

<p>4</p>	<p>Determine Landscape Sensitivity and Capacity</p> <p>Assess landscape sensitivity of each landscape character type against the wind farm typology identified above.</p> <p>Assess visual sensitivity.</p> <p>Map both landscape and visual sensitivity using GIS.</p>	<p>A sensitivity rating should be applied to each LCT and each visual envelope for each of the categories in the wind farm typology.</p>	<p>Guidelines for Landscape and Visual Impact Assessment 2nd Edition, 2002 (IEMA/LI).</p> <p>Topic Paper 6: Techniques for Judging Capacity and Sensitivity, 2002 (SNH/CA)</p>
<p>5</p>	<p>Landscape Designations</p> <p>Map all national and regional/local landscape designations and overlay onto the sensitivity map.</p>	<p>Designations are an indication of the 'value' attached to landscape and are a key factor in determining sensitivity. However, designations are not included in stage 4 as it is important to firstly understand the sensitivity to change of landform, landscape features, views and visual character in the absence of 'value' judgements. NB Whilst a landscape may be highly valued it may nonetheless be able to accommodate wind energy development. SPP6 Annex A explains the distinction between international/national designations and local/regional designations.</p>	<p>Topic Paper 4: Use of GIS and Other Computer Methods.</p>
<p>6</p>	<p>Define Broad Areas of Search</p> <p>Analyse distribution of sensitivity and designations and identify broad areas of search for wind farm development over 20MW.</p> <p>Identify buffer zones to designated landscapes.</p>	<p>This analysis of sensitivity will inform broad judgements about capacity of the area for wind farm development and also potential distribution of wind farm development. For example, an area with many adjoining LCT's of low sensitivity would indicate higher capacity. An area containing a fragmented mix of LCT's of low, medium and high sensitivity may not be suitable as an area of search for wind farms over 20MW but may be suitable for smaller scale development.</p>	<p>Landscape Character Assessment – Guidance for England and Scotland, 2002 (SNH/CA).</p>

7	<p>Define Landscape Objectives</p> <p>Set landscape objectives for broad areas of search and for all areas lying out with areas of search.</p> <p>A suggested system of landscape objectives reflecting landscape and visual sensitivity and capacity could be applied to the identified landscape units or groups of landscape units in relation to wind farm development as follows:</p> <ul style="list-style-type: none"> ◆ Maintain existing landscape character. ◆ Accept a degree of change providing this is not detrimental to key landscape characteristics and key visual resources. ◆ Accept large amounts of change that may have detrimental effects on key landscape characteristics and visual resources. 	<p>Landscape objectives in the form of thresholds can be used to refine capacity judgements. Thresholds should be based on the sensitivity assessment in step 4 combined with the designations mapping in step 5.</p> <p>Landscape objectives could also be used to refine buffer zones.</p>	<p>Landscape Character Assessment – Guidance for England and Scotland, 2002 (SNH/CA).</p> <p>The relevant SNH Landscape Character Assessment.</p>
8	<p>Cumulative Impacts</p> <p>The SPG could include key principles in relation to cumulative impacts.</p>	<p>Such key principles would be useful in minimising cumulative impacts. The purpose of these guidelines would not to be prescriptive but to ensure that there is consistency in the design of wind farms within an area of search. The guidelines should also ensure that smaller scale development outwith areas of search, or within a neighbouring area of search is not limited due to the poor siting, design or layout of schemes within an area of search.</p> <p>The guidelines should be based on the findings in steps 6 & 7 and take account of key landscape characteristics, important views and intervisibility between broad areas of search.</p>	<p>Landscape Character Assessment – Guidance for England and Scotland, 2002 (SNH/CA).</p> <p>The relevant SNH Landscape Character Assessment.</p> <p>Cumulative Effect of Windfarms, Version 2, 2005 (SNH)</p> <p>Guidelines on the Environmental Impacts of Windfarms and Small Scale Hydroelectric schemes, 2001 (SNH).</p> <p>Designing Windfarms in the Landscape Consultation Draft, 2008 (SNH).</p> <p>Visual Representation of Windfarms: Good Practice Guidance, 2007, (SNH)</p>