

# **Lorg Wind Farm Grid Connection**

## **Environmental Impact Assessment Report**

### **Appendix 7.1: L&V methodology**

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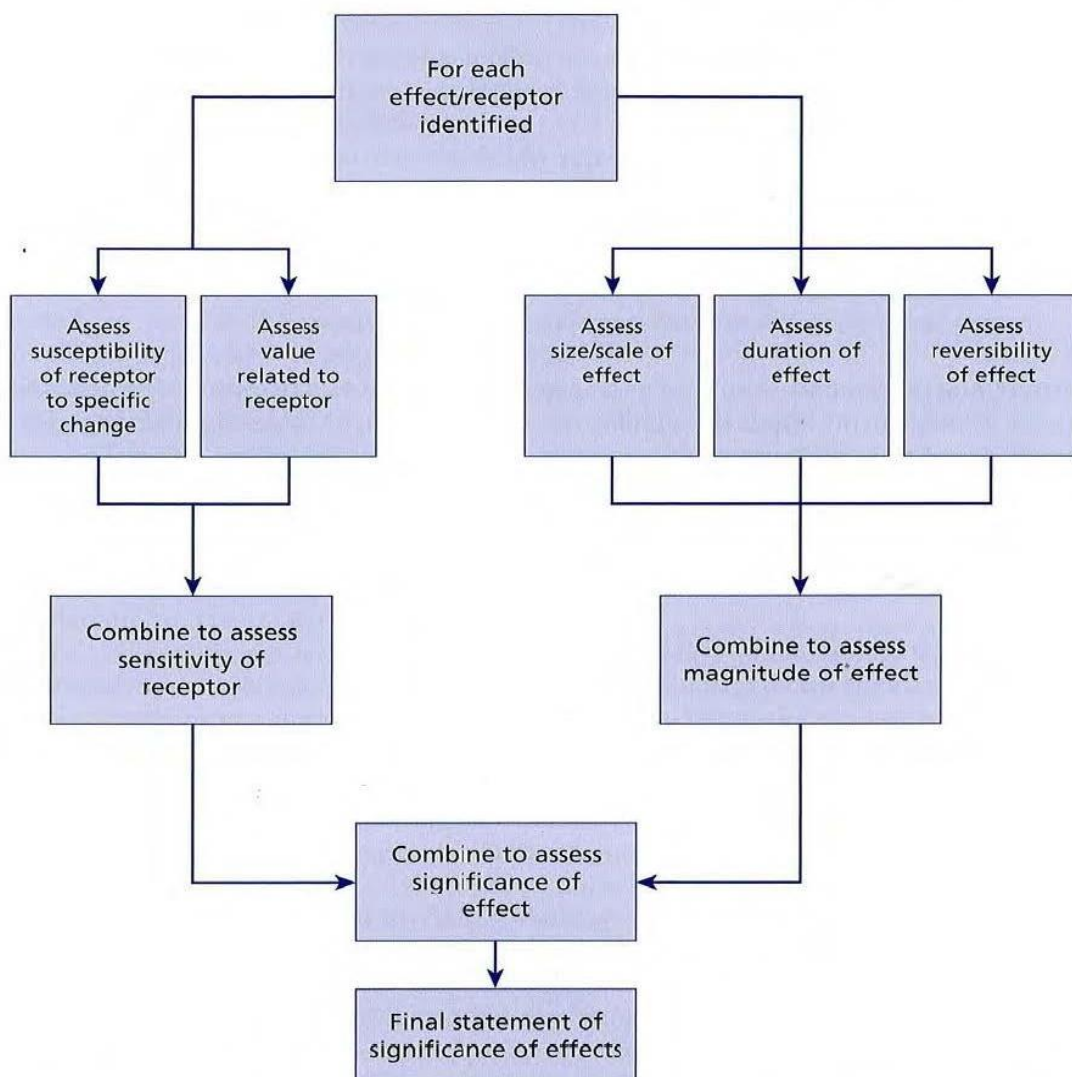
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# 1 LANDSCAPE AND VISUAL METHODOLOGY

## 1.1 Assessment Approach and Process

- 1.1.1 This Landscape and Visual Impact Assessment (LVIA) has been undertaken in accordance with best practice and following the Guidelines for Landscape and Visual Impact Assessment 3rd edition (GLVIA3) Landscape Institute (LI), and the Institute of Environmental and Sustainability Professionals (ISEP formerly known as Institute of Environmental Management and Assessment (IEMA), 2013<sup>1</sup> ).
- 1.1.2 The assessment approach and process is summarised in the flow diagram in **Plate 1.1** below from GLVIA3.

**Plate 1.1: Assessment of Significance**



<sup>1</sup> Landscape Institute (LI) and Institute of Environmental Management and Assessment (IEMA) (2013). *Guidelines for Landscape and Visual Impact Assessment*, 3<sup>rd</sup> edition, 2013

- 1.1.3 **Table 1.1** to **Table 1.8** set out the decision-making framework for assessing sensitivity and magnitude, and how these are considered together to reach an assessment of significance. In all cases these tables are guidelines, not hard and fast rules.
- 1.1.4 Conclusions about the sensitivity of receptors, the magnitude of impacts and the significance of effects are always based on professional judgement.

## 1.2 Assigning Value and Sensitivity

### Landscape Receptors

- 1.2.1 Landscape effects can be defined as the changes in the character and quality of the landscape as a result of a development, through:
- the impact on the landscape fabric (changes the development may cause to specific features and elements that make up the landscape);
  - the impact on the overall patterns of elements and on the perceptual and aesthetic aspects that give rise to landscape character and regional and local distinctiveness; and
  - the impact on valued landscapes such as public open space, designated landscapes or otherwise valued landscapes, including wild land.
- 1.2.2 The sensitivity of the landscape receptors has been arrived at by considering the landscape receptor value and the susceptibility of the landscape receptor to the change proposed, generally in accordance with **Table 1.1.1** and **Table 1.2** below.
- 1.2.3 Reference is normally made to the relevant Landscape Character Assessments.

**Table 1.1: Landscape receptor value**

Value	Recognition	Features	Quality / Condition
High	Typically, a landscape or feature of international or national recognition: National Scenic Areas, National Parks, World Heritage Sites (where designated for landscape reasons), designed landscapes on the Historic Environment Scotland (HES) Register.	Typically, a strong sense of place with landscape/ features worthy of conservation; no or few detracting features.	A very high-quality landscape/ feature; attractive landscape/ feature; exceptional/ distinctive.
Medium	Regional recognition or undesignated, but locally valued landscape/ features: Local Landscape Areas, locally listed designed landscapes and Regional Parks.	Typically, contains distinguishing features worthy of conservation; evidence of some degradation and/ or some detracting elements.	Ordinary to good quality landscape/ feature with some potential for substitution; a reasonably attractive landscape/ feature; fairly typical and commonplace.
Low	Typically, an undesignated landscape/ feature.	Few landscape features worthy of conservation, evidence of degradation, with many detracting features.	Ordinary landscape/ feature with high potential for substitution; quality that is typically commonplace and unremarkable; limited variety or distinctiveness.

Value	Recognition	Features	Quality / Condition
Negligible	Typically, an undesignated landscape/ feature.	No landscape features worthy of conservation; evidence of degradation with many detracting features.	Low quality landscape/ feature with very high potential for substitution; limited variety or distinctiveness; commonplace.

**Table 1.2: Susceptibility of the landscape receptor to change**

Susceptibility to proposed change	
High	Low ability to accommodate the specific proposed change; undue consequences for the maintenance of the baseline situation (receptor value) and/ or achievement of relevant planning policies/ strategies.
Medium	Moderate ability to accommodate the specific proposed change; some undue consequences for the maintenance of the baseline situation (receptor value) and/ or achievement of relevant planning policies/ strategies.
Low	High ability to accommodate the specific proposed change; little or no undue consequences for the maintenance of the baseline situation (receptor value) and/ or achievement of relevant planning policies / strategies.
Negligible	Very high ability to accommodate the specific proposed change; no undue consequences for the maintenance of the baseline situation (receptor value) and/or achievement of relevant planning policies/ strategies.

### Landscape Sensitivity

- 1.2.4 Susceptibility and value can be combined in different ways although it is generally accepted that a combination of high susceptibility and high value is likely to result in the highest sensitivity, whereas a low susceptibility and low value is likely to result in the lowest level of sensitivity. As noted in GLVIA3 there can be complex relationships between the value attributed to a landscape and its susceptibility to change, which can be particularly important when considering change in or close to designated landscapes.
- 1.2.5 Landscapes considered highly susceptible to the proposed change are normally considered to be of high sensitivity unless there are particularly strong reasons associated with the landscape value that lead to a reduction in sensitivity.
- 1.2.6 Similarly, receptors considered of low or medium susceptibility are usually in the same category of sensitivity, unless there are reasons associated with the landscape value that lead to an increase in sensitivity.
- 1.2.7 **Table 1.3**, below, summarises typical characteristics of the different levels of sensitivity. It should be noted that the levels are indicative and the levels shown are arbitrary divisions of a continuum. Professional judgement is always used to determine the overall level.

**Table 1.3: Landscape sensitivity**

Level of sensitivity	Typical characteristics
High	<ul style="list-style-type: none"> <li>areas of landscape character that are highly valued for their scenic quality (including most statutorily designated landscapes);</li> </ul>

Level of sensitivity	Typical characteristics
	<ul style="list-style-type: none"> <li>elements/ features that could be described as unique or are nationally scarce;</li> <li>mature vegetation with provenance such as ancient woodland or mature parkland trees;</li> <li>mature landscape features which are characteristic of and contribute to a sense of place and illustrates time-depth in a landscape and if replaceable, could not be replaced other than in the long term; and/or</li> <li>no or limited scope for substitution or positive enhancement.</li> </ul>
Medium	<ul style="list-style-type: none"> <li>areas that have a positive landscape character but include some areas of alteration/degradation/or erosion of features;</li> <li>perceptual/ aesthetic aspects have some vulnerability to unsympathetic development; and/ or features/ elements that are locally commonplace; unusual locally but in moderate/ poor condition; or mature vegetation that is in moderate/ poor condition or readily replicated; and/or</li> <li>some scope for substitution or positive enhancement.</li> </ul>
Low	<ul style="list-style-type: none"> <li>damaged or substantially modified landscapes with few characteristic features of value,</li> <li>capable of absorbing major change;</li> <li>landscape elements/ features that might be considered to detract from landscape character such as obtrusive man-made artefacts (e.g. power lines, large scale developments, etc.); and/or</li> <li>scope for substitution or positive enhancement.</li> </ul>
Negligible	<ul style="list-style-type: none"> <li>areas that are relatively bland or neutral in character with few/ no notable features;</li> <li>a landscape that includes areas of alteration/ degradation or erosion of features;</li> <li>landscape elements/ features that are commonplace or make little contribution to local distinctiveness; and/or</li> <li>opportunities for the restoration of landscape through mitigation measures associated with the proposal.</li> </ul>

## Visual Receptors

- 1.2.8 Visual effects relate to changes in available views of the landscape and the effect of those changes on people, including:
- the immediate impact of the Proposed Development on the content and character of views (e.g. through intrusion or obstruction and/ or the change or loss of existing elements in a specific view); and
  - the broader impact, considering the overall change in visual amenity enjoyed by receptors in the area.
- 1.2.9 The sensitivity of a visual receptor reflects their susceptibility to change and any values which may be associated with the specific view. It varies depending on a number of factors such as the activity of the viewer, their reasons for being there and their expectations and the duration of view.
- 1.2.10 Certain views are highly valued for either their cultural or historical associations, which can increase the sensitivity of the viewer. However, whilst a valued view may serve to increase the overall visual receptor sensitivity, a low value will not necessarily reduce sensitivity.
- 1.2.11 GLVIA3 advises that it is helpful to consider (but not restricted to) the following:
- nature of the view (full, partial or glimpsed);
  - proportion of the Proposed Development visible (full, most, part or none);

- distance of the viewpoint from the Proposed Development and whether it would be the focus of the view or only a small element;
- whether the view is stationary, transient or sequential; and
- the nature of the changes to the view.

1.2.12 Additionally, the seasonal effects of vegetation are considered, in particular, the varying degree of screening and filtering of views.

1.2.13 The sensitivity of the visual receptors has been arrived at by considering the susceptibility of the visual receptor to the change proposed (guided by **Table 1.4** below) and any values associated with the particular view (guided by **Table 1.5** below).

**Table 1.4: Susceptibility of visual receptor to change**

Susceptibility to proposed change	
High	<ul style="list-style-type: none"> <li>• residents at home;</li> <li>• walkers on long distance trails and mountain access routes.;</li> <li>• users of footpaths where the attractive nature of the countryside is a significant factor in the enjoyment of the walk;</li> <li>• cyclists on national and local cycle routes designed to provide an attractive experience;</li> <li>• road users on recognised tourist routes; and</li> <li>• visitors to landscape and heritage resources and other attractions where views of the surroundings are an important contributor to appreciation, experience and/or enjoyment.</li> </ul>
Medium	<ul style="list-style-type: none"> <li>• general road users;</li> <li>• passengers on rail lines where the trains run at low or moderate speeds;</li> <li>• users of public open space and footpaths where the nature of the surroundings is not a significant factor in the enjoyment of the activity; and</li> <li>• visitors to landscape and heritage resources and other attractions where views of the surroundings are a minor contributor to appreciation, experience and/or enjoyment.</li> </ul>
Low	<ul style="list-style-type: none"> <li>• people at their place of work or shopping;</li> <li>• users of high-speed roads and passengers in trains running at high speed;</li> <li>• people engaged in recreational activities where the view of the surroundings is secondary to the enjoyment of the activity (such as playing or spectating at outdoor sports facilities); and</li> <li>• users of public open space and footpaths where the nature of the surroundings is irrelevant to the enjoyment of the activity.</li> </ul>
Negligible	<ul style="list-style-type: none"> <li>• users of indoor facilities where the view is irrelevant to their activity.</li> </ul>

**Table 1.5: Values associated with views (which may raise the receptor sensitivity)**

Value	Recognition	Indicators of value
High	Recognised views from nationally or internationally important landscape or heritage resources, Scheduled Monuments; may be identified in planning policies or statutory documents.	High value / celebrated view; referred to in national or international guidebooks, tourist guides etc.; literary and art references; presence of interpretive facilities (e.g. visitor centre).
Medium	Recognised views from local or regionally important landscape or heritage resource, such as Local Landscape Areas or Conservation Areas; may be identified in local planning policies or supplementary planning documents.	Moderately valued view; referred to in local or regional guidebooks, tourist maps etc.; local literary and art references; presence of some interpretive facilities (e.g. parking places or sign boards).

### *Visual Sensitivity*

- 1.2.14 As with landscape, susceptibility and value can be combined in different ways to form a judgement about the sensitivity of a given receptor. It is generally accepted that a combination of high susceptibility and high value is likely to result in the highest sensitivity, whereas a low susceptibility and low value is likely to result in the lowest level of sensitivity.
- 1.2.15 However, whilst a valued view may serve to increase the overall sensitivity of the visual receptor, a low value will not necessarily reduce sensitivity. Visual receptors considered highly susceptible to the proposed change are normally considered to be of high sensitivity unless there are particularly strong reasons associated with the value of the view that lead to a reduction in sensitivity.
- 1.2.16 Similarly, receptors considered of low or medium susceptibility are usually in the same category of sensitivity, unless there are reasons associated with the value of the view that lead to an increase in sensitivity.
- 1.2.17 **Table 1.6** below, summarises typical characteristics of the different levels of sensitivity. It should be noted that the levels are indicative and the levels shown are arbitrary divisions of a continuum.

**Table 1.6: Visual sensitivity criteria**

Level of sensitivity	Typical characteristics
High	<ul style="list-style-type: none"> <li>a view or overall visual amenity which is an important reason for receptors being there (and therefore most views or overall visual amenity for highly susceptible receptors);</li> <li>a well balanced view containing attractive features and notable for its scenic quality; and</li> <li>a view which is experienced by a large number of people and/or recognised for its scenic qualities.</li> </ul>
Medium	<ul style="list-style-type: none"> <li>a view or overall visual amenity which plays a relatively small part in the reason why a receptor would be there (and therefore most views or overall visual amenity for receptors of medium susceptibility); and</li> <li>an otherwise attractive view that includes noticeable discordant features or overall visual amenity where there are noticeable visual detractors.</li> </ul>



Level of sensitivity	Typical characteristics
Low	<ul style="list-style-type: none"> <li>a view or overall visual amenity which is unlikely to be part of the receptor's experience or reasons for being there (and therefore most views or overall visual amenity for receptors of low susceptibility);</li> <li>an unattractive view or overall visual amenity where there are many visual detractors.</li> </ul>
Negligible	<ul style="list-style-type: none"> <li>a view or overall visual amenity which is irrelevant to the receptor's experience or reasons for being there.</li> </ul>

## 1.3 Assessing Magnitude of Change

1.3.1 The magnitude of landscape and visual change depends upon a combination of factors, including the size, scale and nature of change in relation to the context; the geographical extent of the area influenced; and its duration and reversibility. Typical criteria are given in **Table 1.7** below.

**Table 1.7: Magnitude of landscape and visual change**

Value	Size, Scale and Nature	Geographical Extent	Duration and Reversibility
High	<ul style="list-style-type: none"> <li>occupies much of the view;</li> <li>obstructs a significant portion of the view;</li> <li>forms a large or very noticeable or discordant element in the view;</li> <li>considerable change to key features or many existing elements of the landscape;</li> <li>introduces elements considered totally uncharacteristic to the existing landscape; and</li> <li>a very noticeable change to the character of the landscape.</li> </ul>	Ranging from notable change over extensive area to intensive change over a more limited area.	Long term; permanent / non-reversible or partially reversible.
Medium	<ul style="list-style-type: none"> <li>occupies a noticeable portion of the view;</li> <li>obstructs a significant portion of the view;</li> <li>forms a large or very noticeable or discordant element in the view;</li> <li>some considerable change to existing landscape elements and /or landscape character; discernibly changes the surroundings of a receptor, such that its baseline is partly altered; and</li> </ul>	Moderate changes in a localised area.	Medium term; semi-permanent or partially reversible.

Value	Size, Scale and Nature	Geographical Extent	Duration and Reversibility
	<ul style="list-style-type: none"> <li>readily noticeable.</li> </ul>		
Low	<ul style="list-style-type: none"> <li>occupies a small portion of the view;</li> <li>small change to existing landscape elements and / or landscape character;</li> <li>slight, but detectable impacts that do not alter the baseline of the receptor materially; and</li> <li>not readily noticeable.</li> </ul>	Minor changes in a localised area.	Short term / temporary; partially reversible or reversible.
Negligible	<ul style="list-style-type: none"> <li>occupies little or no portion of the view;</li> <li>hardly noticeable;</li> <li>limited or no change in existing landscape elements and / or landscape character; and</li> <li>barely distinguishable change from baseline conditions.</li> </ul>	No change discernible.	Short term / temporary reversible.

## 1.4 Level of effect and significance

- 1.4.1 Professional judgement is used to combine sensitivity and magnitude to gauge the level of effect and determine whether it is significant or not.
- 1.4.2 **Table 4.4 in Chapter 4: EIA Process and Methodology** provides guidance in how sensitivity and magnitude are combined. However, this matrix is used as a framework, not as a prescriptive formula: the level of effect (and thus significance) will vary depending on the circumstances, the type and scale of development proposed, the baseline context and other factors. **Table 1.8** below, gives typical descriptors of the levels of landscape and visual effects.
- 1.4.3 The gradations of magnitude of change and level of effect used in the assessment represent a continuum, which are described in **Chapter 4: EIA Process and Methodology** on a four-point scale: **major; moderate; minor; and negligible**. Where appropriate, this assessment uses intermediate descriptors, such as **minor to negligible, minor to moderate or moderate to major**, where the assessor considers that the effect falls between the levels used in **Table 4.4 of Chapter 4: EIA Process and Methodology**.
- 1.4.4 Effects can be either **beneficial or adverse** and, in some cases, **neutral** (neither beneficial nor adverse) and, as stated in paragraph 4.3.18 of **Chapter 4: EIA Process and Methodology**, effects assessed as moderate or greater are considered to be significant in terms of the Environmental Impact Assessment (EIA) Regulations.

**Table 1.8: Level of landscape and visual effect**

Level of Effect	Landscape effect	Visual effect
<b>Major</b>	Considerable change over an extensive area of a highly sensitive landscape, fundamentally affecting the key characteristics and the overall impression of its character.	The development would be a prominent feature or a noticeably discordant or enhancing feature substantially affecting overall visual amenity, or would result in a clearly noticeable change to a highly

Level of Effect	Landscape effect	Visual effect
		<p>sensitive and well-composed existing view.</p> <p>A clearly noticeable or substantial improvement or deterioration of the existing view.</p>
<b>Moderate</b>	Small or noticeable change to a highly sensitive landscape or more intensive change to a landscape of medium or low sensitivity, affecting some key characteristics and the overall impression of its character	<p>The development would be a noticeable feature or a somewhat discordant or enhancing feature affecting overall visual amenity, or would result in a noticeable change to a highly sensitive and well composed existing view, or would be prominent within a less well composed and less sensitivity view.</p> <p>A noticeable improvement or deterioration of the existing view.</p>
<b>Minor</b>	Small change to a limited area of landscape of high or medium sensitivity or a more widespread area of a less sensitive landscape, affecting few characteristics without altering the overall impression of its character.	<p>The development would be a visible but not particularly noticeable feature or a slightly discordant or enhancing feature affecting overall visual amenity, or would result in a small change to a highly sensitive and well composed existing view, or would be noticeable within a less well composed and less sensitivity view.</p> <p>A small improvement or deterioration of the existing view.</p>
<b>Negligible</b>	No discernible improvement or deterioration to the existing landscape character.	No discernible improvement or deterioration in the existing view.

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