

Landscape Sensitivity Assessment Guidance

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Paragraphs are numbered consecutively for the first two sections. Paragraphs in the "Undertaking an Assessment" section are numbered to accord with the relevant stages: for Stage 1, numbering is 1.1, 1.2 etc., for Stage 2, mumbering is 2.1, 2.2 and so on.

Acknowledgements

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During consultation the guidance was examined by a wide range of experts including those from the Landscape Institute's Technical Committee and GLVIA Panel. This final version is clearer and more straightforward as a result. Thank you to all who commented.

Introduction

- 1 Landscape Sensitivity Assessments are strategic appraisals of the relative sensitivity of landscapes to development types or land use changes. They are an important tool to help guide development to less sensitive locations.
- 2 NatureScot has produced this technical guide on how to undertake a landscape sensitivity assessment to help planning authorities, landscape practitioners and others undertake these studies. The guidance is the Scottish equivalent of Natural England's (NE) <u>Approach</u> to Landscape Sensitivity <u>Assessment</u> and guidelines from Natural Resources Wales (NRW).
- In Scotland this guidance supersedes "Landscape Character Assessment (LCA) Guidance Topic Paper 6; Techniques and Criteria for judging Capacity and Sensitivity["] (2002). We piloted the approach set out in the guidance on two landscape sensitivity assessment studies in 2020 and 2021. To complement it, we have also updated our 2010 guidance on commissioning these assessments and this is available on our website.

Background

- 4 Scotland's landscapes are important they play a vital role in our health, economy and international reputation ("Programme for Government" (2019) page 58, National Planning Framework 3 para 4.4). They underpin our sense of place and wellbeing and are valued by communities and society. Landscapes provide essential benefits to humans and make a significant contribution to Scotland's natural capital. They create jobs, support the economy and provide the infrastructure that sustains our lives (also known as ecosystem services). Built development, both old and new, can be an important and valued component of Scotland's landscapes.
- 5 Our landscapes continue to change in response to natural processes and human interventions, including new development and land management practices. The climate emergency and our response to it is likely to accelerate the pace of landscape change in the next decade. The scope for landscapes to accommodate new land uses and development types without reducing some of the environmental benefits (ecosystem services) they provide varies from place to place. Locating the right development in the right place helps to reduce adverse landscape and visual effects. Landscape sensitivity assessments can help guide and deliver positive changes to landscape, for example by steering new native woodland planting and wind farms to less sensitive locations.
- 6 Landscape sensitivity is a measure of the ability of a landscape to accommodate change arising from specified development types or land management. It combines judgements of the susceptibility of the landscape to change and the values attached to the landscape. Sensitivity assessments or studies provide an indication of this in a manner which is robust, repeatable and capable of standing up to scrutiny.
- 7 Landscape sensitivity assessments are primarily used as a strategic evidence base for planning and land management policy. They are an important tool, particularly in the early stages of spatial planning. The planning system is used to guide development and

how our local places will change into the future. The processes of development planning and development management decide where development should and should not happen. Planning reform, including provisions in the Planning (Scotland) 2019 Act, has sought to strengthen and simplify development planning. Once the new system is fully in place the statutory development plan for any place in Scotland will consist of the National Planning Framework (NPF) which covers all of the country, and the Local Development Plan (LDP) for the planning authority area.



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Landscape Sensitivity Studies are not an end-point in themselves but they serve to inform plans, policies, guidance and strategies at a range of scales. They can help with:

- preparation of development plans;
- topic-based spatial planning for known development pressures-
- site-search exercises for new development and changing land uses e.g. housing, woodland and forestry, recreational facilities, infrastructure;
- landscape-scale management plans; and also
- individual proposals, where their indication of relative sensitivity can inform the site selection process, pre-application stages, and can provide information for subsequent Landscape and Visual Impact Assessment (LVIA).

On the last point, sensitivity assessments can help to steer development towards better locations and inform a proposal's LVIA. They should never be used in isolation to determine the acceptability of a development type in landscape terms. They do not

replace the need for individual LVIAs and/or Environmental Assessments for individual proposals (See paragraph 18 and Figure 2).

9 A finding of 'high' sensitivity does not necessarily mean that there is no ability to accommodate development and 'low' sensitivity does not necessarily mean that there is definitely potential for development. Sensitivity studies are an additional piece of information for some development types: for wind farms, for example, they sit alongside NatureScot (then SNH) guidance on <u>Spatial Planning for Onshore wind farms</u>.

Development of this guidance

10 To date, assessment techniques have been broadly based on the LCA Topic Paper 6 (Countryside Agency and Scottish Natural Heritage, 2002, "Landscape Character Assessment Guidance for England and Scotland Topic Paper 6 Techniques and Criteria for judging Capacity and Sensitivity"), SNH research on good practice (2010) and the resulting Toolkit on commissioning these studies. The publication of "Guidelines for Landscape and Visual Impact Assessment" (GLVIA3) in 2013 introduced a new definition of sensitivity:

Sensitivity = susceptibility (to change) + value (of landscape / visual resource)

In the past, many so-called capacity studies actually dealt with susceptibility rather than capacity (see Glossary). Capacity is determined by wider spatial planning, societal and technical considerations. Most older studies should be considered as landscape sensitivity assessments, or even susceptibility assessments if value was not included, unless relevant quantities, e.g. for housing, were set for the study area.

- 11 This guidance follows the same principles and method stages as:
 - Natural England's "<u>An Approach to Landscape Sensitivity Assessment</u>". Some naming is different: in this guidance the Stage 2 title is "establish assessment parameters" instead of Natural England's "gather the information to inform the sensitivity assessment"; and in Stage 3 we refer to 'factors to consider' instead of Natural England's 'indicators of susceptibility'.
 - Natural Resources Wales guidance on sensitivity assessment due to be published in February 2022.

The definitions used are also based on the Natural England Approach and Natural Resources Wales' Guidance.

12 Publication of this document provides planning authorities and other agencies with guidance to prepare or update their existing assessments in line with current thinking and practice. Existing assessments provide useful evidence and understanding to inform spatial planning. However, updating may well be beneficial, particularly for wind farm studies, as development patterns and technology change. The existing assessment criteria are likely to remain relevant and can form the basis for updating an assessment.

Audience

13 This is technical guidance primarily aimed at those, generally landscape professionals, who will be undertaking an assessment. It may also be useful to:

- those commissioning a landscape sensitivity assessment, primarily planning authorities;
- non-professional audiences such as community groups who may be involved in, or inform, the assessment process; and
- users of a sensitivity assessment, e.g. to inform strategies and/or decisionmaking.

Definitions

14 Scotland uses the widely-adopted European Landscape Convention (ELC) definition of landscape as

"An area, as perceived by people, the character of which is the result of the action and interaction of natural and human factors" (Council of Europe (2000) European Landscape Convention, Article 1, definition).

The ELC also sets out an approach to landscape which NatureScot has summarised in the following five principles (Scottish Natural Heritage and Historic Environment Scotland (2019) "People, Place and Landscape. A position statement from Scottish Natural Heritage and Historic Environment Scotland"), repeated here as they are relevant to the aims of this guidance:

- a. All landscapes Every landscape is important because everyone has a right to live in and enjoy the benefits of vibrant surroundings.
- b. Shared landscapes Scotland's landscapes are a common asset and everyone has rights and responsibilities for looking after them.
- c. Your landscapes People and communities should always be involved in decisions that shape their landscapes.
- d. Understanding landscapes Decisions need to be based on understanding and awareness of both the cultural and natural dimensions of our landscapes.
- e. Dynamic landscapes Landscapes will continue to change, but change needs to be informed and managed to ensure they remain resilient.
- 15 Landscape Character Assessment is the starting point for landscape sensitivity work. It identifies and explains the combination of elements and features that make landscapes distinct from one another by mapping and describing Landscape Character Types (LCT) that are generic, and Landscape Character Areas (LCA), that are place specific. The description of their distinctive characteristics often includes how the landscape is perceived and experienced by people. Landscape Character Assessment analyses the three main physical landscape components of landform, land cover and settlement, and assesses how these combine with landscape's intangible elements such as scale and cultural associations, to form the landscapes we see and experience. Landscape Character Assessment provides baseline information, including a shared written understanding of the key characteristics of a landscape. Scotland has national coverage of Landscape Character Assessment, as LCTs, available from NatureScot's <u>website</u>.
- 16 **Landscape sensitivity** is a measure of the ability of a landscape to accommodate change arising from specified types of development or land management. It combines judgements of the susceptibility of the landscape to change and the values attached to the landscape.

Landscape sensitivity assessment provides an indication of this in a manner which is rigorous, robust, repeatable and capable of standing up to scrutiny. The findings are strategic and indicative in contrast to site- and project-specific Landscape and Visual Impact Assessment (LVIA). See Figure 1.

Landscape susceptibility can be defined as "the degree to which a defined landscape including its character and associated visual resources might respond to specified development types or land management changes without undue negative consequences" (Landscape Institute and Institute of Environmental Management & Assessment (2013) Guidelines for Landscape and Visual Impact Assessment 3rd Ed. Routledge, London).

Landscape value is the relative value attached to different landscapes by society. They may be valued by a variety of stakeholders for a range-of reasons such as recreation or historic interest.

17 The principles of landscape sensitivity assessment can be applied to coastal landscapes. For these purposes, Coastal Character Assessment would be used as an additional information source to terrestrial Landscape Character Assessment.



Figure 1 Flowchart - Process of Landscape Sensitivity Assessment (Adapted from Natural England's "An approach to landscape sensitivity assessment" June 2019)

Relationship with Landscape and Visual Impact Assessment

18 Landscape Sensitivity Assessment is not used to assess the likely landscape and visual effects of individual development proposals - LVIA must be used for this. Sensitivity assessments can, however, provide useful context, background or baseline information to LVIAs. Some may provide useful pointers on scale, siting and design of development. The differences in the use of these tools in development planning and management are shown in Figure 2 below.



Figure 2 General relationship of landscape sensitivity assessments and LVIA. From NRW guidance

Main Principles of Landscape Sensitivity Assessment

As straightforward as possible

19 Assessments need to be clear, concise, proportionate, and transparent. The correct use of appropriate terminology is critical. Judgements, conclusions and the reasoning behind the findings must be easily understood by anyone, including non-specialists. Overly complex methodologies and those based solely on Geographical Information System (GIS) analysis have less clarity and should not be used. GIS can play a useful role though in mapping information to inform desk and field work.

A flexible approach

20 The sensitivity assessment methodology is flexible, and can be applied to various sizes of study area. The appropriate scale will at least partly depend on the type of landscape change being considered.

Focussed on specific type(s) of landscape change

- A sensitivity study considers the likely levels of sensitivity to specified types of development or land use. Subjects for sensitivity assessments in Scotland have included aquaculture; housing and other built development such as employment land; forestry and woodland; mineral extraction; and renewable energy (principally wind farms / turbines). Elsewhere, studies have also been undertaken for camping and caravan sites and for telecommunications masts.
- 22 Identifying the relevant development scenarios, and expressing them clearly, is vitally important. They are the description of the type of development which is the focus for the assessment. Those descriptions need to be up to date, reflecting current technology or policy and, where possible, anticipating future technology changes.

Undertaking a Landscape Sensitivity Assessment

Figure 3 Summary of the key stages of landscape sensitivity assessment

Landscape sensitivity	assessment – overview of process	
Stage 1 – Define purpose and	scope	
1A.Agree purpose,	Agree purpose of study	
requirements, outputs	P Define study area	
•	Identify development or land use scenarios	
	Agree baseline data to be used.	
	Specify study outputs and audience	
	Agree budget timescale and resources	
	Decide on project management structure including stakeholder engagement and Steering	
	Group membership, as well as likely consultation required.	
1B.Write project brief	Draft and agree project brief	
Stage 2 – Establish assessmen	t parameters	
2A.Describe development	Describe the scenarios. A critical review of other relevant studies may be useful	
or land use change	Identify the main attributes of the development type or land use likely to affect sensitivity	
scenarios	e.g. height, massing, movement, scale, lighting, land cover etc.	
2B.Identify and describe	Base Assessment Units on Landscape Character Assessment	
Assessment Units	Subdivide or combine LCTs and provide more detail if required	S
•	Identify key landscape and visual characteristics with potential sensitivity to the scenarios	suc
•	Identify known values for landscape and visual resource for each Assessment Unit	ult
•	Use an understanding of the scenarios to focus on appropriate scale and level of detail	≦.
•	Write brief description of each Assessment Unit	÷
2C.Identify Assessment	Draft assessment criteria - likely to be for landscape & visual susceptibility and value	Ste
Criteria	For each criterion, set out the factors to be considered in assessing sensitivity	ëri
	P Test sample criteria	ing
	Agree final criteria list with whole team including Steering Group	ភ្ន
2D.Identify Levels of	For each criterion, set out a range of effects that would determine levels of higher or lower	0 L
Relative Sensitivity	sensitivity to change to the scenario(s), within an agreed scale	pa
	For each level of sensitivity, draft a brief description of the potential effects of the	nd
	scenario on the criterion. This forms the initial basis for the fieldwork and judgements	sta
Stage 3 – Sensitivity assessme	nt	ske
3A.Assess sensitivity	Test the criteria in at least two Assessment Units, and undertake benchmarking	ho
•	Carry out field work at an appropriate scale, assessing scenarios against each criterion in each	lde
	Assessment Unit	S
3B.Overall sensitivity	Collate assessment findings in a judgement of overall sensitivity for each Assessment Unit for	
assessment/	each scenario	
Collate findings	Map, review and cross-check the results	
•	Include a short, well-reasoned narrative to explain and support each sensitivity judgement	
	Where relevant, note beneficial effects too	
	This section should be all that most readers require to understand if, how and why the Unit is	
	sensitive	
3C.Siting and design	Identify siting and design guidelines for each Unit or part of Unit if required by the brief and	
guidance	feasible (depending on available information and policy), including opportunities for landscape	
	enhancement	
Stage 4 – Reporting and publis	hing	
4A.A detailed record with	 Using descriptive text, maps, photos etc., outline what the findings mean for 	
an easy-read summary	the study area	
•	Include design guidance , if required	
•	Include the scope, method, findings, maps, photographs, source references and links	
•	Provide the Steering Group the opportunity to comment on draft final report	
	Highlight key messages for, and make accessible to, a wider audience	
Stage 5 - Monitoring / updatin	g	
5A.Monitoring/updating	Review at suitable intervals – can coincide with development plan cycle	

Stage 1 Define purpose and scope

This stage covers the purpose, study area, timescales and baseline data. It also includes aspects of project management such as the Steering Group and stakeholder consultation.

Companion guidance on commissioning a sensitivity assessment is available. This document summarises some of the main points, but the commissioning guidance provides more detail.

1A. Agree purpose, requirements and outputs

Define Purpose

- 1.1 Before commissioning a sensitivity assessment it is essential to define the main purpose and scope of the project. The purpose of the landscape sensitivity study can vary. It can be proactive in guiding development in the future and / or be in response to development pressures (which can themselves be driven by policy or other considerations such as the climate emergency) and/or be more proactive in guiding development in the future, including the following:
 - informing development plans;
 - informing Land Use Strategies, both regional and local;
 - informing responses to individual or multiple planning applications; and
 - informing understanding of cumulative effects of development.
- 1.2 To help further refine the scope of the study it is useful to identify planning policy and development management needs. For example, consider how the assessment might:
 - respond to specific local planning needs identified by the planning authority, such as the consideration of potential housing allocations;
 - inform the spatial expression of development plan policies this usually requires 'lines on maps';
 - provide design guidance for how the specified development type can best fit in with the landscape; and
 - provide the basis for Supplementary Guidance to the Development Plan (while Supplementary Guidance remains part of the Local Development Planning system: changes made to local development planning by the Planning (Scotland) Act 2019 mean that Supplementary Guidance will cease to be part of the statutory development plan, after transitional arrangements lapse.)

Example 1 – Purpose of Study

"This landscape sensitivity assessment is intended to provide context for policies and proposals within the emerging Local Plan, in particular in relation to built development (both housing and commercial). It is at a landscape character area scale and therefore is intended to provide a general overview of comparative landscape sensitivity around the key settlements based on landscape character. The information within each assessment can be used to identify key sensitivities in each assessment area, and to achieve best integration of built development in each area. It is too broad a scale to make judgements on the appropriateness of specific development on individual sites (and does not consider specific development proposals where these might exist), but can provide the context for more detailed studies of individual sites."

Housing and commercial land - Hinckley and Bosworth Borough Council – Sensitivity of areas of pressure to development (Sept 2017 LUC)

Study area

- 1.3 The extent of the study area is an essential early consideration, as it affects both the geographical spread of the assessment and the potential number (and perhaps the range) of stakeholders who should be represented on the Steering Group. The study area may be close to or cross into other local authority areas, which would require cross-boundary working, ensuring that broader or regional landscape considerations are addressed by the study.
- 1.4 The study area must be defined depending on the purpose and scale of the project. Study areas could be a part of or whole local authority area, or combination of adjacent local authorities (most likely for large developments such as wind farms), especially where there is development pressure at the boundaries. It could be groups of landscape character types or areas, or search areas for a development type e.g. housing or employment land. Sieving-out areas which are not feasible for the development type can focus the study area and help to reduce costs. The rationale for the study area should be clearly stated.

Scope

1.5 Scoping includes broadly defining what categories of development, and what development scenarios, are likely to be used in the study. Look at the past changes/trends of development and the current pattern. To ensure longevity of the assessment, anticipating future development scenarios should also be explored: this is particularly pertinent for wind turbines where turbine heights have been increasing rapidly over recent years. The more scenarios and/or categories that are considered, the more complex a study can become, so it is important to be clear at the start about what the key requirements are and what the study can and cannot do. Once the landscape consultant and Steering Group are in place it may be useful to refine the scenarios.

During scoping it is important to consider the resources available for the assessment, including budget if the work is to be commissioned from consultants. Bear in mind that the study may extend over more than one financial year.

Example 2 – Scoping of existing development baseline

"2.13 Baseline operational and consented wind farms and turbines The following operational and consented wind farm developments set out in Table 5 have formed the baseline for the assessments set out in this study with a cut-off date of the end of July 2016 being set."

Dumfries and Galloway Wind Farm Land Capacity (May 2017, Carol Anderson and Associates) https://www.dumgal.gov.uk/media/18596/Dumfries-and-Galloway-Wind-Farm-Land-Capacity-Study-Appendix-C/pdf/Wind Energy Appendix C Landscape June 2017.pdf

Timescales

1.6 The timescale for the assessment should be considered from the outset. It is usually necessary to fix a 'snapshot in time', so that the project includes all of the development type which has been consented and/or constructed by a certain date. Some flexibility in this may be required if significant changes arise before it is finalised. The timing of the contract is also an important consideration. This will be influenced by such aspects as:

- the time it takes to prepare and set up the project,
- the size of the study area,
- the time of year fieldwork, which is an essential constituent of landscape sensitivity assessment, is more difficult in winter months
- the need for and timing of stakeholder engagement including public consultation,
- the opportunity to align the timescale with the Local Development Plan process,
- the availability of the Steering Group to comment on drafts, and
- the availability of potential consultants, and any possible conflicts of interest.

Baseline data

- 1.7 Landscape Character Assessment will form the basis of the discrete "units" of landscape used for the sensitivity assessment, and the <u>national suite of Landscape Character Types</u> should be the starting point. Urban areas are not covered by the national LCA dataset so further study may be needed; other information such as Historic Landuse Assessment could be useful. If the existing Landscape Character Assessment is not at the desired level of scale and detail, it may be necessary to include production of additional Landscape Character Assessment work in the main sensitivity assessment contract, or for time to be allowed before the sensitivity assessment starts to produce this. See paragraph 2.6 for more information. For coastal areas a similar approach may be required for Coastal Character Assessment. There is not complete coverage of coastal character Assessment, is available on our <u>website</u>.
- 1.8 Before commissioning a Landscape Sensitivity Assessment, other available information or data which is readily available should be identified. This could include previous studies or digital mapping layers of designations, land use, ecosystem services, natural capital, historic aspects, etc. Information on development and land use patterns and pressures, planning permissions and planning applications will also be relevant. For some wind farm sensitivity studies this may include consideration of offshore turbines.

Study audience and outputs

1.9 How the study will be used, and by whom, will determine the format of the final assessment outputs. Consideration of these factors at the outset can help save time and effort further into the assessment. This can affect project timescales if digital applications need to be developed for online presentation, or if design and printing are required. It is likely that the primary function of the report will be to inform strategic planning by contributing to the identification of opportunities and constraints, or other considerations, which then go on to inform policy objectives and guidance. It may also contribute to landscape management objectives. It will be a reference document typically for use by a limited technical audience, primarily of planners and landscape architects. However, local authorities may wish to publish the findings for wider use, for example by decision-makers or stakeholders or developed to inform Supplementary Guidance. It is often helpful to provide a summary of the full findings and a glossary is usually required to explain technical terms regardless of audience.

1.10 The outputs may, in some cases and for some forms of development, form the basis for further study. Sensitivity studies can also inform, at a more detailed scale, for example design and development briefs.

Project Management

- 1.11 It is good practice to identify the critical stages at which client approval or Steering Group involvement will be necessary, either to allow the assessment to progress smoothly, or to release funding for payment of the consultant carrying out the study. This can affect timings and budget.
- 1.12 Once the scope and purpose of the landscape sensitivity assessment have been established there are important governance, administrative and procurement aspects which need to be addressed. These include establishing a project Steering Group, and appointing a suitable consultant if one is to be used. Sensitivity assessments should be undertaken by suitably qualified and experienced chartered landscape professionals. Assessors should have adequate knowledge and experience of the technology or development type under assessment.
- 1.13 A Steering Group is usually needed; the role of this group will be to:
 - help refine and further develop the scope and purpose of the assessment,
 - inform the project brief,
 - identify project team members to undertake the work, which may include approving the procurement of a consultant,
 - steer the project through its various stages to conclusion, including agreeing stakeholder engagement / consultation, commenting on drafts and agreeing findings during the process,
 - agree clear and realistic timescales for the study, taking in to account any specific links with other plans and strategies, and
 - provide appropriate technical expertise for the duration of the project.
- 1.14 Terms of reference for the Steering Group are essential to clarify the roles and responsibilities of the group, especially around the sign off of the study and appointment of contractors.

Consultation

1.15 In addition to the Steering group, wider stakeholder consultation can be useful. Consider how this should be handled and who will lead, incorporating enough time. For example, this might involve a workshop event to bring in valuable local knowledge, and/or on-line consultation of draft sensitivity assessment findings. Consultation will involve work such as preparing materials, attending managed stakeholder meetings, and collating and incorporating consultation findings.

1B. Write project brief

1.16 A project brief or Statement of Requirements needs to be prepared to enable the appointment of a landscape consultant. This should take into account the issues raised above, as aspects such as

consultation can be lengthy, which may affect timescales. Further detail on how to do this are included in our Commissioning Guidance.

Stage 2 Establish assessment parameters

This stage includes specifying the development scenarios, so the assessors understand their key aspects. It also involves identifying Assessment Units at an appropriate scale; and establishing the assessment criteria for susceptibility and value, and levels of sensitivity.

2A. Describe development or land use scenarios

- 2.1 Clarity is needed on the types of development or land use to be considered by the study, as this determines what will be assessed. To do this, a small number of scenarios will be worked-up and agreed. The assumptions made about the development type need to be clear. The scenarios should be realistic, and as part of this it may be helpful to analyse how the existing development type, and / or pattern, interacts with the landscape.
- 2.2 The scenarios should be based on a few key attributes that define the development type or land use. An appropriate level of detail is required for the assessors to envisage the development type or land use change during fieldwork and should be agreed with the Steering Group but this needs to be balanced with the ability to update the assessment to reflect potential changes in the nature of development. These may include:
 - For housing number of storeys, number of houses, indicative density per hectare, assumptions on use of best practice (e.g. on colours, materials, structure planting). lighting;
 - For business or industrial uses size and format of unit, number of units and/or size of area envisaged, ancillary infrastructure, lighting, assumptions on use of best practice (e.g. design including colour, structure planting).
 - For woodland creation predominant species and relative scale (small, medium, large defined by general bands of hectares);
 - For fin-fish farms cage diameter, numbers, layouts, feed-barge design, colours, lighting; and storage facilities, whether buildings on land or on pontoons offshore.
 - For shell fish farms format (trestles, buoy lines), colour, size, orientation, any lighting;
 - For wind farms height of turbine (often the crucial defining factor), design of turbine, indicative size of wind farm (likely to be a range), any visible aviation lighting.

This is not an exhaustive list of development types nor are all relevant parameters provided. It provides a starting point for studies to consider.

2.3 To future-proof the study as far as possible they may also need to consider what technology changes can reasonably be expected and/or what is being supported under current policy. Some research may be needed, perhaps including discussion with the relevant development sector, to understand potential future scenarios. The Steering Group may also provide advice. Be clear from the outset what the key issues are going to be. Limiting the number or range of development scenarios, e.g. by focussing on those which are immediate priorities, can help to keep costs down. It also makes it simpler for the assessor and easier for the user to understand. A balance may need to be struck between focussing on immediate priorities and future-proofing the assessment.

Examples 3 and 4 – Scenarios for a Landscape Sensitivity Study

Example 3 - Housing and employment land

"The parameters for the two types of development are:

- 2-3 storey properties (<0.5ha) and
- small-scale commercial development (office, warehouse / light industrial) around 14m tall and >1ha."

Shropshire Landscape and Visual Sensitivity Assessment - New housing and employment land (Gillespies, November 2019)

Example 4 - Forestry and woodland

"The aim of this study was to consider opportunities for new woodlands to be accommodated in two pilot areas within the Scottish Borders as part of the Regional Strategic Woodland Creation Project.

The following woodland types were considered in the sensitivity assessment:

- Small to medium-sized predominantly broadleaved woodlands up to around 300ha
- Small to medium-sized predominantly coniferous woodlands up to around 300ha
- Large-sized predominantly coniferous woodlands upwards of 300ha."

Regional Strategic Woodland Creation Project Landscape Capacity Study - Scottish Borders Pilot Areas 1 & 2 (Carol Anderson Landscape Associates, October 2019)

2.4 It can often be useful to divide the scenarios into size bands, sometimes labelled as "typologies". For housing or forestry, the size of the areas considered can be set. For wind farm sensitivity studies an agreed range of turbine heights, and perhaps also wind farm sizes, is considered. There should be no gaps or overlaps between the heights or sizes when size bands are used.

2B. Identify and describe Assessment Units

- 2.5 The study area needs to be divided into units to enable the assessment of the development scenarios (see section 2A) against the criteria (see section 2C). The relevant Landscape Character Assessment will form the basis for the Assessment Units (see paragraphs 2.6 and 2.7 below). This term is recommended to avoid confusion with Landscape Character Types or Areas. Fieldwork is required at this stage to ensure the Assessment Units are appropriate. Draft field sheets, with relevant criteria and information that will be filled-in during site work, will be drawn up at this stage.
- 2.6 The scale required by the sensitivity assessment will dictate the level of Landscape Character Assessment which should be used. At the broader scale, we have produced a national map of Landscape Character Types (LCTs) with supporting descriptions. If a finer grain is required many Local Authorities have mapped and described more detailed Landscape Character Areas which largely nest with the national LCTs. If a finer-grained LCA has not been developed for an area being considered for landscape sensitivity assessment it may be necessary to develop or commission an LCA at Landscape

Character Area level for that area. This should correspond with NatureScot's national LCT <u>map</u>.

- 2.7 In some instances it may be necessary to sub-divide or merge LCTs or Landscape Character Areas for the landscape sensitivity assessment. Sub-division may be needed, for example, where the area being assessed is very broad and / or quite varied at the level of detail of the assessment. Any sub-division or merging must be fully and clearly explained and justified in supporting text and maps.
- 2.8 In addition to landscape character information, identification of Assessment Units may also need to consider views and/or skylines. This should also be explained and justified in supporting text and maps.
- 2.9 It is helpful to consider the number of Units in the study area and their size, both individually and relatively. Too many Units can make comparison between units and across the study area difficult. Over-large Units can also be unwieldy and difficult to deal with. The key aspect is to ensure that the Unit is based on relevant landscape and visual characteristics. The size of Units is likely to be partly dictated by the scenarios: for example, Assessment Units for housing will probably be much smaller than those for wind farm studies.
- 2.10 Ordnance Survey base maps at an appropriate scale will be used for working-up the Units. The scale should be appropriate to the type of development. For example: 1:50,000 is likely to be practical for a local authority wide strategic study for wind energy development, whereas, 1:25,000 or 1:10,000 are more likely for smaller study areas looking at housing around a settlement. The boundary lines of Assessment Units indicate zones of transition they rarely represent a sudden change in character. Initial thoughts on the location of assessment viewpoints for each Unit can be discussed at this stage for agreement with the Steering Group.
- 2.11 During the desk study work for this stage, designations and other recognised landscape values such as Wild Land Areas can be noted and mapped. They are an easily identified indicator of valued landscapes. Studies that support or underpin these areas can also provide useful detail. Information for related interests, such as bio- and geodiversity and recreation, can also be sourced at this stage. GLVIA3 paragraphs 5.19-5.31 provide further advice; as does the Landscape Institute TGN on assessing landscape value outside national designations.
- 2.12 A brief description of each Assessment Unit needs to be provided. It should include the relevant aspects as outlined above.

2C. Identify Assessment Criteria

2.13 Once the development scenarios have been agreed, the criteria against which they will be assessed need to be drafted, agreed, tested and applied. Assessment criteria are arrived at by considering how the key landscape characteristics and visual resources would be sensitive to the development scenarios. Both susceptibility and value need to be considered.

- 2.14 Assessment criteria are required for a range of reasons. They explain how development scenarios would interact with the landscape, including how it is experienced, and which landscape characteristics influence this. They also help to make the assessment task more manageable and reports more streamlined.
- 2.15 Experience of developing assessment criteria is now extensive and it can be useful to study similar reports, as well as the lists below of frequently used assessment criteria topic areas (Figures 4 and 5), when drafting them. Examples are also available on our <u>website</u>. Whilst it can be tempting to adopt a ready-made criteria list from elsewhere, it may not be appropriate in a different landscape and / or context.
- 2.16 Assessment criteria need to be directly relevant to the development scenario and the landscape which is being assessed. They also need to be understandable and practical it is helpful if they relate specifically to the likely effects that the development scenarios could have on the landscape and visual amenity. Studies which show how the individual criterion would be affected by the development scenarios are more likely to be understood. While developing the criteria, wording them as questions can be useful e.g. "how would the scenario affect this aspect of the landscape / visual resource / experience"? Criteria also need to be expressed consistently so they can be easily compared both during the assessment process itself and in the subsequent report. It is hard to avoid overlap between criteria but this can be minimised by careful definition of each criterion and explanation in the sensitivity assessment.
- 2.17 It is important to include relevant aspects of the landscape that would be affected by the development scenarios. For example, settlement pattern is crucial when considering sensitivity to new housing. Perceptual aspects should be included in the susceptibility criteria to ensure that all relevant aspects are considered.
- 2.18 An assessment of both landscape susceptibility and visual susceptibility will be needed. These may be better analysed as separate, complementary topics even if their conclusions are subsequently combined to inform findings for Assessment Units. Studies should make it clear exactly how these two broad aspects have influenced the study findings.

Susceptibility criteria are generally more straightforward to identify and define. Value criteria can be harder to pin-down, so more information on these is provided below. Experience suggests that the division between the number of susceptibility and value criteria is not 50-50, but that aspects of landscape value should generally comprise a single criterion (see paragraph 3.8). For example, if there were seven landscape susceptibility criteria and one value criterion, the latter would form an eighth of the overall sensitivity rating. See Example 5.

The assessment criteria selected for the sensitivity assessment will vary according to the type of development or land use change being considered. It is important to explain clearly the reasons for selecting each criterion, and to set out how these are likely to be

affected by the scenarios. These factors, which will be considered in the assessment, should be listed or described more fully. See Example 5.

The whole Steering Group needs to agree on the criteria, making sure that they are relevant to the landscape of the area. It is good practice to test the criteria in a couple of contrasting sensitivity units before finalising them, and to ensure that they make sense in the field.

Figures 4 and 5 provide examples of potential assessment criteria for susceptibility and value respectively. They are not exhaustive lists nor is every listed criterion required for all studies. They provide a basis for individual studies to define and refine their criteria. Table 1 in the Landscape Institute's Technical Guidance Note (02/21) "Assessing landscape value outside national designations" provides useful additional information.

Landscape Value Criteria

- 2.19 The desk study will have established designations and other recognised values. Designation boundaries are unlikely to coincide with those of Landscape Character Types, Assessment Units, or across local authority boundaries. The presence of a designation would increase the value rating, depending on the nature of the designation and how it interacts with the Assessment Unit (see Stage 3). Designations are likely to have information, or citations, on their special qualities which will be helpful in defining criteria. Where these are not present, some additional work may be needed to define the qualities of the designation's likely to be relevant to the study area.
- 2.20 Non-designated values also need to be considered. Those listed in figure 5 are a starting point and GLVIA3 (pages 80-85) and the Landscape Institute <u>Technical Guidance Note</u> may also be helpful. Value should be included as a criterion or criteria in the overall list, with indications of how this is expressed in the study area. The ways in which this is done need to have an evidence-base and also be proportionate. For example, the presence of:
 - Core Paths or other promoted routes or activities may suggest a higher value for recreation;
 - Nature conservation designations may suggest a higher value for natural landscape features.

There should not be any need to undertake further work such as a recreational use survey. Existing sources of information should suffice.

Figure 4 – Examples of susceptibility assessment criteria topic areas

Landscape characteristics (physical and perceptual). These are likely to include:

Landform

Land-cover / land use

Settlement / built development; can include:

- o Historic / cultural components / features
- o Settlement patterns
- o Settlement boundaries

Experiential/perceptual / associations; can include:

- o Tranquillity / busyness
- o Cultural associations

<u>Landscape role</u>. This is often important for more detailed studies such as housing. It can include:

- o Separation function e.g. between settlements
- o Gateway
- Context of setting of settlement
- o Landmark features

Visual aspects. These can include:

- Views general, in relation to landscape character; and / or more focussed, e.g. local authority identified / OS marked viewpoints
- o Gateways
- Visibility / visual prominence
- o Skylines (including what can be seen from within settlements)
- o Views to landmarks

Figure 5 – Examples of value assessment criteria topic areas

Designations – landscape and landscape-related

- International (World Heritage Sites)
- National (National Scenic Areas, National Parks)
- Scheduled Monuments, Listed Buildings (A), Inventory Gardens & Designed Landscapes, Battlefields, Sites of Special Scientific Interest
- Local (Local Landscape Areas, Listed Buildings (B, C), Conservation Areas, Country Parks, Regional Parks)

Other recognised landscape values – e.g.

- Wild Land Areas
- Dark Sky Parks
- UNESCO Biosphere Reserves

Recognised related interests:

- Recreation Paths and trails with some sort of recognition (on water as well as on land), including core paths, rights of way, long distance routes (Including Scotland's Great Trails), upland paths, national cycle routes and local path networks; Munros / other hills; locations of other recreational activities; quieter rural roads which provide recreational routes for cycling as well as car-based leisure trips
- Tourism visitor attractions, OS marked / promoted or valued viewpoints, scenic routes (e.g. North Coast 500), 'visitor hotspots'
- Habitats and earth science e.g. Sites of Special Scientific Interest (SSSI); Geological Conservation Review (GCR) sites; ancient semi-natural woodlands.

Assessment Criteria	Factors considered in the assessment
Scale	Consideration of the scale of the landscape based on the degree of topographical relief, openness and enclosure and the presence of smaller scale features. In general, larger scale landscapes are likely to be less susceptible to larger wind turbines.
Landform	Consideration of the degree of complexity of landform including identification of any distinct topographical features. Assessment of how development, including ancillary works such as access tracks and energy storage infrastructure, could impact on or relate to landform. Simpler and more gently graded landform would generally be less susceptible while more complex, steeper and distinctive landform would be more susceptible.
Land cover	Consideration of the degree of complexity and diversity of land cover including field enclosure pattern, woodlands, water courses and lochs but also distinctive land-cover features. More diverse and intricate land-cover pattern would be more susceptible to development in general with broader, simpler land-cover pattern being less susceptible. Effects include loss of the feature and diminishment of the integrity if removed to accommodate turbines or a detractive effect if turbine were located nearby.
Built environment	Consideration of the pattern, density and character of settlement and other built features, including prominent cultural heritage features, their relationship to topography or other natural features and their setting. Assessment of how development might impinge on these features and where there may be scope to attain some visual separation to minimise effects. Where larger scale buildings and built structures such as pylons, masts and operational/consented wind farms are present, the relationship of additional turbine development to these is assessed which includes consideration of cumulative effects.
Landscape Context	The role of adjacent LCTs in contributing to the setting and character of the LCT being assessed and vice versa. The degree of inter-visibility and effects on key characteristics are assessed. Smaller LCTs that are more closely juxtaposed and contrast strongly with surrounding landscapes are likely to be of increased susceptibility while LCTs which are large in extent, or which have a similarly large scale and simple land-cover pattern to neighbouring landscapes, may be less susceptible.
Perceptual Aspects	Consideration of the degree of modification by human intervention and how development could affect perceptions of naturalness and remoteness and the sense of space and openness. Identification of landscape where the number and distinctiveness of archaeological or historic features, and scarcity of modern built features, can give a strong sense of history or 'timelessness'. In general, landscapes which are more modified and developed are likely to be less susceptible while landscapes with a distinct sense of wildness or timelessness will be more susceptible.
Visual amenity	The extent of relative visibility of the landscape (including considerations of whether it is well- settled and easily accessible) and key views to and from the landscape. The degree of openness or enclosure which influences visibility, including the amount of screening created by topography and woodland. The type of views, including elevated, extensive views which are sustained or more intermittent views where woodland or landform provides some screening. Appraisal of the significance of skylines and key vistas including the presence of landmark features. More densely settled and open landscapes would generally be of increased susceptibility although the presence of key visitor attractions and routes (including areas popular for recreation) can increase susceptibility in more sparsely settled landscapes. Susceptibility is also generally reduced if landform and woodland have the potential to provide screening. Prominent skylines and views to landmark natural or built features are of increased susceptibility.
Landscape Value	Presence of designated landscapes and similarly valued landscapes, which in the study area comprise Special Landscape Areas (SLAs), Conservation Areas and Inventory listed Gardens and Designed Landscapes (GDL). The presence of indicators of related interests such as promoted viewpoints and recreational/tourist routes will also be considered. Designations or values that reinforce landscape features, for example Sites of Special Scientific Interest (SSSI) for landform or land-cover features are also taken into account. Judgements are made on the contribution to landscape value considering the nature, importance, extent and number of designations and recognised interests. Valued landscapes which are close to the study area, including SLAs in Moray and Highland, Wild Land Areas (WLA) and the Cairngorms National Park, are additionally considered. Where citations exist for designated and other formally valued landscapes, the effect of development on identified key characteristics and qualities of these areas is appraised.

Example 5 - Criteria Extract from a wind farm sensitivity study

Dava Moor, Nairn and Monadhliath Wind Energy Sensitivity Study – Draft Final Report (September 2021, Carol Anderson Landscape Associates).

2.D Identify levels of relative sensitivity

- 2.21 For the sensitivity assessment, levels of sensitivity for all the criteria need to be identified. This is usually best using a five point scale, e.g.
 - Very High > High > Medium > Low > Very Low; or
 - High > High-Medium > Medium > Medium-Low > Low.

More than five levels can become too complex. The words used can vary, and should be agreed with the Steering Group and explained clearly in the text. The word 'moderate' should be avoided because it is associated with judgements of significance in LVIA.

2.22 For each criterion and the factors considered, set out what would trigger higher or lower sensitivity to change. It can be helpful if a more detailed description is provided of how the scenario could affect the landscape.

Stage 3 Sensitivity Assessment

This stage requires field work to test and then undertake the sensitivity assessment. Judgements on sensitivity ratings are arrived at and need to be explained clearly. Findings should be cross-checked across the study area to ensure that they make sense. This is also the stage when siting and design guidance, if required, is worked-up.

The purpose of the sensitivity assessment is to carry out an analysis which identifies how each of the landscape susceptibility and value criteria would be affected by the specified development scenarios in each of the Assessment Units. This requires field work and involves professional judgement.

3A. Assess sensitivity

Piloting and Benchmarking

- 3.1 The criteria should be tested to ensure Assessment Units, criteria and scenarios are reasonable and sensible. The testing should cover at least two different Assessment Units and involve the whole project team. This also enables benchmarking amongst the team to ensure similar rankings are assigned to similar interactions between scenarios and locations. Ideally, some of this testing would be with Steering Group members in the field too.
- 3.2 There should be Steering Group feedback and agreement on all of the assessment parameters before the field sheets and criteria are finalised and applied to the whole study area. The Steering Group members are probably more familiar with the areas and issues than external consultants and their practical input, including that of non-landscape specialists, is often invaluable. It is also beneficial for them to understand the assessment methodology more thoroughly. This part of the process can also serve as the benchmarking exercise.

Assessment

3.3 Once the Assessment Units, criteria and scenarios have been tested and agreed, the full assessment of the whole study area can be undertaken. This involves the appraisal in the field of the sensitivity of each of the Assessment Units to the effects which each scenario could have on each of the criteria. The assessment should consider the features or characteristics that are sensitive to the development type. The use of consistent wording for the same levels of sensitivity throughout the assessment is required to enable comparison between Assessment Units. Providing informed reasoning for the assessment is the key point.

Field work

3.4 Field study is undertaken at an appropriately detailed scale, ideally with at least two assessors. This enables them to discuss and agree findings together. Field sheets, tailored to the study, are needed to record the site work. These should record the landscape and visual aspects which have been identified as being those most likely to be affected by the scenarios, e.g. settlement pattern for built development sensitivity

studies. Each Assessment Unit should be covered as comprehensively as possible; in most cases this is likely to involve at least two viewpoints, which should be agreed with the Steering Group

3.5 Field work can focus on what is important for landscape character and visual amenity, at a more detailed level than the broad-brush Landscape Character Type. This can be useful when considering design guidance (see section 3C, paragraphs 3.13-3.15). Analysis and advice are required along with the sensitivity ratings and their explanation.

Field work records

3.6 As well as written notes, a series of photographs per Assessment Unit should also be taken. For large units in particular, it is helpful to identify representative photographs if they differ from those taken at the assessment viewpoints. The field sheets, photographs and annotated maps are useful for benchmarking and cross-checking when all units have been assessed. Field sheets should be kept during the working phase to ensure the train of thought is clear. A summary of the process should be provided in the final report.

3B. Overall sensitivity assessment and collating findings

Judgements and combining sensitivity ratings

- 3.7 When combining the judgements for the criteria, simple approaches are best. They are judgements using clear reasoning rather than a calculation. Accordingly, avoid "weighting" or complex scoring systems or adding scores through a series of stages, because aggregate scores make it difficult to understand the underlying judgement. There is a risk of accumulated assumptions being built into the process and it not being easily understood.
- 3.8 Generally, it is more straightforward to assess susceptibility criteria and these make up the majority of assessment. However, value criteria are also needed to ensure an appropriate range of landscape attributes is considered. The associated judgements for these criteria need to be explained as clearly as possible.
- 3.9 A clear rationale for the overall sensitivity rating for the development scenario in the Assessment Unit and how it is reached is essential. If the sensitivity assessment for each individual criterion in each Assessment Unit is noted separately it can be easier to follow the assessor's train of thought. For example, three or more 'High' scores could result in a high sensitivity and similarly for a High-medium score other methodologies could be used, as long as the method is clearly explained. The relationship between analysis and any recommendations should be easily understood. All relevant information needs to be presented in an accessible form crucially, there should be no 'leaps of faith'. The reader needs to understand exactly how the sensitivity rating has been arrived at, and why.
- 3.10 The level of sensitivity should be backed up with a short analysis of the issues identified for each Assessment Unit, which is as important as the rating itself. It helps explain the rationale for the sensitivity rating and can also aid design guidance preparation, when required. Consequently, it is important for this to capture the key issues effectively. It

should also note any variations in sensitivity across a unit, or between different units of the same character type, as units are rarely homogenous.

Sensitivity rating	Definition
High	Key characteristics and qualities of the landscape are highly sensitive to change from the development type. Development would significantly conflict with several of the assessment criteria with severe adverse impacts likely to arise.
High-medium	Key characteristics and qualities of the landscape are sensitive to change from the development type. Development would conflict with some of the landscape and visual criteria but may be able to be accommodated in very small parts of some Assessment Units.
Medium	Some of the key landscape characteristics or qualities of the landscape are sensitive to change from the development type. There is some ability to accommodate development in some situations without widespread or severe changes to the landscape; the development type relates to some aspects of landscape character.
Medium-low	Fewer of the key characteristics and qualities of the landscape are sensitive to change from the development type. There are opportunities to accommodate the development type in most locations without widespread or severe effects on the assessment criteria; the development type relates to many aspects of landscape character.
Low	Key characteristics and qualities of the landscape are unlikely to be adversely affected by the introduction of the development type. The development type relates well to the assessment criteria and change may be accommodated without widespread significant adverse impacts on the landscape.

Example 6 – Overall Sensitivity Ratings

Dava Moor, Nairn and Monadhliath Wind Energy Sensitivity Study – Final Report (December 2021, Carol Anderson Landscape Associates)

Mapping, review and cross-checking

3.11 It is helpful to illustrate the eventual sensitivity ratings on a base map of the Assessment Units, e.g. with a colour allocated to each rating. This makes it easier to note the distribution of relative sensitivity across the study area, and to interrogate particular areas or assessments if required.

It is valuable at the draft report stage to check that the initial assessment makes sense to the assessors, Steering Group and any other reviewers. Maps usefully show relative sensitivity across the study area but they are only indicative and should not be read in isolation.

3.12 When the whole study area has been assessed, a comparison between the Assessment Units is needed to cross-check for consistency and logic. Are similar sensitivities rated similarly throughout or do any apparent anomalies need to be explained? This is a key stage and one where Steering Group input can be essential because everyone needs to agree with and understand the findings. A range of methods – text, maps, photographs, can be used to outline what the findings mean for the study area as a whole.

3C. Siting and design guidance

- 3.13 Broad-brush guidance on design or enhancement usefully complements the main recommendations of the study. For example from an Orkney housing study: "the sequence of steadings and intervening spaces is important; any new dwellings should be attached, or immediately adjacent, to the existing building groups and close to the road" (David Tyldesley and Associates (2001) "Landscape Studies of the Heart of Neolithic Orkney World Heritage Site". Scottish Natural Heritage Commissioned Report NoFO0LA01A p.46). They need to be caveated because they cannot be site- or development-specific that is the role of LVIA. They also cannot be expected to take into account practicalities such as land ownership or go into too much detail. But they can help explain how the development scenarios could best be accommodated.
- 3.14 The guidance needs to be clearly based on the analysis of the Assessment Units and development scenario. It shouldn't, for example, simply advocate screening by trees in open landscapes; it should guide development to sympathetic locations and describe how and why this would work.
- 3.15 Design suggestions need to be explained and applicable at an appropriate scale. Some may be relevant for the whole study area, others may be more focussed on a single Assessment Unit. The more focussed descriptions of the Assessment Units can themselves be helpful. These may also last beyond the timescale of the project.

Stage 4 Reporting

4A. A detailed record with an easy-to-read summary

- 4.1 The report should provide an easily understood record of the assessment. The presentation format should be agreed by the Steering Group; draft reports can help confirm the preferred requirements. Findings should be presented as clearly as possible and written in plain English: diagrams, flowcharts and tables can help. Reports should include tables, flowcharts, diagrams, maps, photographs and sketches as appropriate. Provide links to relevant documents if it is part of a wider planning exercise.
- 4.2 The report should be well-structured and easy to follow and navigate. This is important as sometimes a reader may read the whole report initially, but thereafter only want to access sections relevant to a certain situation. A format which has worked well for previous assessments presents an introduction/context, explanation of the methodology, followed by the outputs, findings and recommendations. A glossary should be provided for explanation of technical terms. Consider including a non-technical summary if the intended audience includes non-professionals.
- 4.3 Each Assessment Unit will be described, based on the relevant landscape character assessment and focusing on the key characteristics. It is also helpful to indicate the location and brief landscape context of each Assessment Unit. A tabular format to show the findings for each Assessment Unit often works well (see Example 7).
- 4.4 The final report should include all information required to understand judgements without need for field survey sheets (which may not always be legible). A selected digest of photographs will be useful to include. Field notes, unused photographs and other 'workings' should be archived in an orderly way for a reasonable period in case they are needed to help resolve any errors or omissions.
- 4.5 Clear explanation of the analysis carried out is critical, to make it obvious how field observations led to the findings. This will help to avoid users overlooking less sensitive landscapes as places where there are no issues to consider, for example. A well explained and presented methodology section is important should updating or further work be necessary, making it easier to replicate in the future.
- 4.6 If the text is to be available online consider making it available in pdf format, as well as web text. An accessible pdf can be clearer than undated web-page text, is easier to download and print, and can be used offline. Depending on file size, which may need to be large to ensure adequate resolution for maps to be legible, the pdf may need to be split by chapter or Assessment Unit to make downloading manageable. The individual sections need to be clearly named and dated to avoid confusion. Regardless of presentation format, stating the assessment date or other publication reference is an important element of version control. Think about how text and spatial data would be viewed online so that relevant pieces of information are not separated from each other. Consider also the risk of the study information being lost if web sites or web pages change. Landscape sensitivity may be available as a layer, but the full document, including photographs, still needs to be accessible.

Example 7 – Landscape Sensitivity Assessment findings in tabular format

Summary description	Assessment of turbines >150m	Assessment of turbines 100-149.9m
Scale This landscape generally comprises a broad, gently undulating upland plateau rising to between 190-372m but with pockets of more complex landform and intricate patterns of woodland/open space creating a smaller scale in places.	While larger scale gently undulating landform would have a reduced susceptibility this size of turbine would dominate the relief of even the higher hills in key views from the south-east (from the A939 for example). This is also not an extensive AU (within the study area) which would limit scope for multiple and/or large wind farm developments. Smaller scale areas of settled farmland are of increased susceptibility although the dense forest cover of this landscape may limit visibility of turbines from these areas. <i>High</i>	Larger scale gently undulating landform would have a reduced susceptibility although this is not an extensive AU (within the study area) which would limit scope for multiple and/or large wind farm developments. Smaller scale areas of settled farmland are of increased susceptibility although the dense forest cover of this AU may limit visibility of turbines from these areas. Turbines towards the lower height band of this turbine type would have less of an effect on scale. <i>High-medium</i>
Landform An undulating plateau with broad, gentle slopes and rounded summits although landform is more complex and rolling in the Belivat and Balmore areas and within the narrow valleys cut by many water courses. Landcover There is very little open moorland in this AU. Denser and more uniform coniferous forestry is present on the higher hill of Carn na Caillich although generally woodland is diverse and naturalistic and includes extensive stands of bisch	This turbine type could relate to the predominantly simple landform of this gently undulating plateau although susceptibility is increased for areas with more complex smaller landform features. <i>Medium</i> Susceptibility is increased particularly to multiple turbines of this size as they would diminish the integrity of diverse woodland cover which is a key feature of much of this landscape. <i>High-medium</i>	This turbine type could relate to the predominantly simple landform of this gently undulating plateau although susceptibility is increased for areas with more complex smaller landform features. <i>Medium</i> Susceptibility is increased particularly to multiple turbines of this size as they would diminish the integrity of woodland cover which is a key feature of much of this landscape. <i>High-medium</i>
Built environment This is a sparsely settled landscape. There are no operational wind farms or turbines located in this landscape. Visibility of wind farms located in surrounding landscapes is restricted by extensive woodland although there is potential for cumulative effects to arise with the consented Cairn Duhie wind farm on the Findhorn valley (this is addressed under the criterion of 'Landscape context'). Landscape context	The relatively sparse settlement and very limited visibility of existing wind farm development reduces susceptibility. <i>Low</i>	The relatively sparse settlement and very limited visibility of existing wind farm development reduces susceptibility. <i>Low</i>
This landscape forms a relatively low backdrop of extensively forested slopes and rounded hills to the more	Coastal Farmland and would be particularly prominent from the more open upper slopes of the Findhorn if	the Coastal Farmland and would be particularly prominent from the more open upper slopes of the

Upland Moorland and Forestry – Detailed sensitivity assessment

Summary description	Assessment of turbines >150m	Assessment of turbines 100-149.9m
richly patterned and smaller scale hill fringes of the <i>Rolling Farmland and Forest</i> and, more distantly, from the <i>Coastal Farmland</i> . The higher hills lying close to the south-eastern boundary of this AU are visible from open parts of the <i>Narrow Wooded Valley</i> (and <i>Open Upland Glen</i>) of the upper Findhorn valley. The consented Caim Duhie wind farm located in the <i>Open Rolling Uplands</i> would be visible in close proximity from parts of the Findhorn valley.	located on the higher ground of this AU. Cumulative effects could occur with wind turbines located in this AU with the consented Cairn Duhie wind farm particularly affecting the appreciation of the Findhorn valley. <i>High</i>	Findhorn if located on the higher ground of this AU. Cumulative effects could occur with wind turbines located in this AU and the consented Cairn Duhie wind farm particularly affecting the appreciation of the Findhorn valley. <i>High</i>
Perceptual aspects This landscape has a secretive, hidden quality experienced when travelling on winding narrow roads. The extent of diverse (mixed age and species) woodland in this landscape is an unusual feature.	Susceptibility would be increased to this size of turbine and in relation to lighting given the sparsely settled nature and dark skies of this landscape. Removal of diverse woodland would diminish the integrity and sense of naturalness associated with this key characteristic. <i>High</i>	Removal of diverse woodland would diminish the integrity and sense of naturalness associated with this key characteristic. <i>High-medium</i>
Visual amenity This upland landscape is sparsely settled. Dense forest cover limits views from within the AU. The gently rising slopes of this AU means that it is generally seen as a narrow band of forest in long views from the coastal plain and Moray Firth. The higher hills of this AU are seen across the open upper slopes of the Findhorn and from the A939 (although regenerating forest may screen views from this route in time).	The sparsely settled nature and limited views from within this densely wooded AU reduces susceptibility in terms of close views. Turbines of this size would however be likely to be prominent even in more distant views from surrounding more open landscapes including the coastal plain, the upper slopes of the Findhorn valley and from the A939, increasing susceptibility. Lighting would increase the duration of visual effects. <i>High</i>	The sparsely settled nature and limited views from within this AU reduces susceptibility although turbines could still be prominent if located close to the Findhorn valley and/or on higher hills. <i>High-medium</i>
Landscape value This AU lies close to the <i>Drynachan, Lochindorb and</i> <i>Dava Moors</i> SLA. Key qualities of this SLA include the impression of wildness, open horizons and broad panoramas from the high open moorlands and the intimate scale of the Findhorn valley. Sensitivity assessment: • Turbines >150m: High sensitivity • Turbines 100-150m: High-medium sensitivity	Very large turbines could conflict with the intimate scale of the Findhorn valley if sited nearby. The qualities of wildness and open horizons/broad panoramas associated with the open moorlands within the SLA could be affected by turbines and aviation lighting. <i>Medium</i>	Large turbines could have indirect effects on the SLA especially if located close to the Findhorn valley where they could conflict with its intimate scale. The qualities of wildness and openness associated with this SLA could also be affected. <i>Medium</i>

Dava Moor, Nairn and Monadhliath Wind Energy Sensitivity Study – Final Report (December 2021, Carol Anderson Landscape Associates)

Stage 5 Monitoring and updating

5A. Monitoring, reviewing and updating

- 5.1 Studies need to be reviewed periodically to ensure that they remain fit for purpose. This will entail considering what might have changed since the previous study, for example;
 - technologies and drivers affecting the nature of development (e.g. bigger turbines, different housing types and changes in materials);
 - the use of the landscape may have altered, e.g. new development, increased recreation or new travel routes etc.; and
 - there may be new or different landscape designations or values.
- 5.2 The frequency of review will vary with the development type and amount of development pressure. It may also be affected by changes in land use, in technology, or wider development patterns which could be in neighbouring areas. The development plan review cycle may also influence when studies are reviewed.
- 5.3 It can be useful, over time, to compare the study recommendations to development patterns and decisions taken through the planning process. This would include the location of development and also any design guidance that was suggested.
- 5.5 The scale and scope of the revision task should be reviewed by a relevant group of people. This should include users of the assessment who may be able to confirm what is useful and works well, or suggest improvements to, or problems with using, the existing study. It is important that more than one person is involved in considering if it is just certain parts of the study, e.g. topic, scenarios or geographical area, that need to be revisited; or whether a more wholesale revision is needed. Depending on the outcome of this review, writing a brief to revise part or all of the study may be needed.

Appendix 1 Glossary

Term	Meaning (source noted in brackets)
Assessment	The individual landscape and visual factors against which relative landscape
Criteria	sensitivity is judged. They are selected to be relevant to the development
	type and study area. (NatureScot amended from NRW (2022))
Assessment	The individual areas into which the study area is divided for the purposes of
Unit	landscape sensitivity assessment. Each Unit should be based on Landscape Character
	Types but may be adapted according to the scale and purpose of the assessment.
	(NatureScot)
Coastal	The process of identifying, describing and mapping coastal character. Based on
Character	Landscape Character Assessment, it considers additional characteristics associated
Assessment	especially with the coast, such as maritime influences and the character of the
	coastal edge and its immediate hinterland. (<u>https://www.nature.scot/professional-</u>
	advice/landscape/coastal-character-assessment)
convicos	include provisioning services such as feed and raw materials; regulating services such
Services	as climate regulation and water filtration; and cultural services for our health and
	well-being such as recreation and identity. (NatureScot)
Кеу	Those combinations of elements which are particularly important to the current
characteristics	character of the landscape and help to give an area its particularly distinctive sense
	of place. (GLVIA3)
Landscape	An area, as perceived by people, the character of which is the result of the action and
	interaction of natural and/or human factors. (ELC, Council of Europe)
Landscape	A tool used to identify and assess the likely significance of the effects of change
and Visual	resulting from development both on the landscape as an environmental resource in
Impact	its own right and on people's views and visual amenity. (GLVIA3)
Assessment	
Landscape	The amount of specified development or change which a particular landscape and
capacity	offects on its character and qualities (NE 2010). The more focused concept of
	Landscape Sensitivity is now preferred, as specifying an amount of change would
	depend on so many other factors. (NE 2019 and NRW 2022)
Landscape	Single, unique areas which are the discrete geographical areas of a particular
Character	landscape type. (GLVIA3)
Areas	
Landscape	The process of identifying and describing variation in the character of the landscape.
Character	(GLVIA3)
Assessment	
Landscape	Distinct types of landscape which are relatively homogenous in character. They are
Character	generic in nature in that they may occur in different areas in different parts of the
Types	country, but wherever they occur they share broadly similar combinations of
	settlement natterns, and percentual and aesthetic attributes (CLV(A2)
Landssans	Characteristics or features of a landscape that are valued. (UTCN 02/21)
Qualities	Characteristics of leatures of a lanuscape that are valued. (LFIGN 02/21)
Landscape	Landscape sensitivity is a measure of the ability of a landscape to accommodate
sensitivity	change arising from specified types of development or land management. It
	combines judgements of the susceptibility of the landscape to change and the values

	attached to the landscape. (Natural Resources Wales and NatureScot, 2021, based
	on Natural England 2019 definitions and GLVIA3)
	(NatureScot adapted from NE 2019 and NRW 2022)
Landscape	Landscape sensitivity assessment provides an indication of this sensitivity. It does so
Sensitivity	in a manner which is robust, repeatable and capable of standing up to scrutiny. The
Assessment	findings are strategic and indicative, in contrast to site- and project-specific
	Landscape and Visual Impact Assessment. (NatureScot 2020)
Landscape	The degree to which a defined landscape, including its character and associated
susceptibility	visual resources, might respond to specified development types or land management
	changes without undue negative consequences. (Natural Resources Wales and
	NatureScot, 2021, based on Natural England 2019 definitions and GLVIA3).
Landscape	The relative value or importance attached to different landscapes by society on
value	account of their landscape qualities. Landscape qualities = characteristics / features
	of a landscape that are valued. (LI TGN 02/21)
Natural	A term for the habitats and ecosystems that provide social, environmental and
Capital	economic benefits to humans. (NatureScot)
Overall	A term applied to confirm when landscape sensitivity reporting is generalised across
Sensitivity	the whole Assessment Unit. In reality, sensitivity can vary within the Assessment
	Unit (NRW 2022)
Special	The characteristics that, individually or combined, give rise to an area's outstanding
Qualities	scenery. (NatureScot) For National Scenic Areas, these have been identified in work
	by NatureScot and Historic Environment Scotland.