



**Landscape
Sensitivity
Assessment
– Onshore
Wind Energy
Development in
Aberdeenshire**
Planning advice
PA2023-03

September 2023

Purpose of this Planning Advice

Policy implementation

This Planning Advice provides guidance to support Policy C2 Renewable Energy (paragraph C2.2) and Policy E2 Landscape of the Aberdeenshire Local Development Plan 2023 (LDP). It is not a statement of Policy and is for advisory purposes only. Whilst Policy C2 supports renewable energy developments which are appropriately sited and designed, the National Planning Framework 4 (NPF4) has added significant weight in addressing the climate emergency and meeting targets on reducing emissions. LDPs are to maximise their area's potential from renewable energy sources (NPF4 Policy 11 Energy), but at the same time NPF4 maintains the importance of protecting natural assets against unacceptable impacts (NPF4, Policy 4 Natural Places).

The main purpose of this Planning Advice is to steer planning applicants towards the most appropriate locations for siting onshore wind energy development in relation to landscape sensitivity. It provides a strategic appraisal of the relative sensitivity of the Aberdeenshire landscape to wind energy development and identifies where the main opportunities and constraints lie. This will help inform a proposal's Landscape and Visual Impact Assessments (LVIA) and/or Environmental Impact Assessments for individual site-specific development proposals. This Planning Advice also sits alongside other national guidance such as provided by NatureScot, and should be read in conjunction with the LDP 2023 Planning Advice PA2023-21 Assessing Wind Energy Developments.

Landscape Sensitivity Assessment

This Planning Advice supersedes the Strategic Landscape Capacity Assessment for Wind Energy in Aberdeenshire, as originally produced by Ironside Farrar in 2014. This was published by Aberdeenshire Council as Planning Advice 1/2014 Strategic Landscape Capacity for windfarms¹. That guidance is now considered out of date but remains publicly available as archived material for reference purposes. This updated Planning Advice reflects the shift in thinking and in

¹ [Planning Advice 1/2014 Strategic Landscape Capacity for windfarms](#)

practice from ‘landscape capacity’ to the more contemporary concept of ‘landscape sensitivity’, as defined in guidance produced by NatureScot (2022)².

Overview

This Planning Advice is structured as follows:

- An Executive Summary provides an overview of the study findings.
- Section 1 sets out: the policy context; study aims and objectives; key principles of what is involved in a landscape sensitivity assessment and definitions; scope of the study; and the processes and methodology followed.
- Section 2 describes the study area, sets out the landscape baseline in terms of landscape context, geographical extent and the landscape character types covering Aberdeenshire; this section also outlines the landscape-related designations taken into account in the study.
- Section 3 defines the wind turbine height categories and landscape assessment criteria used, and the sensitivity ratings system applied.
- Section 4 presents a summary of the sensitivity assessment undertaken for each assessment unit i.e. Landscape Character Types. This section contains key findings drawn from the sensitivity assessment and identifies known cumulative issues.
- Section 5 summarises the existing pattern of onshore wind energy development, considers trends and issues, and draws conclusions about the relative landscape sensitivities to different category sizes of wind turbine, and where key opportunities and constraints for wind energy development lie in Aberdeenshire.
- Four appendices provide supporting information, including maps and tables.

² <https://www.nature.scot/doc/landscape-sensitivity-assessment-guidance-methodology>

How to use this document

This study provides broad scale strategic information only on landscape and visual sensitivities. A Landscape and Visual Impact Assessment (LVIA) provided by wind energy developers for specific project proposals will provide a more detailed assessment for particular wind energy developments at a more site-specific level.

The Landscape Sensitivity Assessment undertaken is based on the framework of NatureScot's Landscape Character Type (LCT) information that covers Aberdeenshire, which describes the features of the Aberdeenshire landscape that makes it unique to the north east of Scotland area.

This sensitivity study is applicable to development that falls within the categories of wind turbine height assessed in this study. Whilst there is no direct transferability of this assessment to other development types not assessed in this study, the document may provide some indication of landscape sensitivity to a similar scale and function of other types of proposed development for the Aberdeenshire landscape.

Limitations of this Landscape Sensitivity Assessment:

1. This study does not provide a replacement for detailed studies for specific siting and design. **All wind energy developments will need to be assessed and decisions made on their own individual merits according to the characteristics of the site and its context.**
2. In using this study, the significant weight that National Planning Framework 4 has given to addressing the climate crisis (policies 1, 2 and 11) must be recognised in full. This study can help inform the general scale of impact and inform the elements of project design, and indicate how a range of impacts could be mitigated.
3. This study should not be read as a definitive statement on acceptability. It is not the purpose of sensitivity judgements to say that development should be supported or not. 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 potential for development. The quality of layout design and specification of wind turbines will affect underlying landscape sensitivity and therefore a site's ability to accommodate a proposed wind energy development.
4. The study is intended to provide a broad strategic and comparative basis for informing a detailed Landscape and Visual Impact Assessment (LVIA), and as such it assists assessment and is not a position statement itself.
5. The assessment has followed national good practice guidance.
6. **This study and its findings should not be interpreted as the policy position of Aberdeenshire Council. Nor should the study be considered a definitive statement on the unsuitability of a certain site, location or area for a particular development.**

Table of Contents

Executive Summary	7
1. Introduction.....	9
2. Landscape baseline.....	15
3. Assessment categories of turbine height and criteria	24
4. The sensitivity assessment.....	31
(1) Cliffs and Rocky Coast - Aberdeenshire (LCT 10).....	33
(2) Fragmented Rocky Coast (LCT 11).....	36
(3) Beaches, Dunes and Links - Aberdeenshire (LCT 12).....	39
(4) Raised Beach Coast - Aberdeenshire (LCT 13).....	42
(5) Gently Undulating Coastal Farmland (LCT 14).....	45
(6) Broad Ridges and Valleys (LCT 15)	48
(7) Coastal Farmland with Ridges and Valleys (LCT 16)	51
(8) Coastal Agricultural Plain - Aberdeenshire (LCT 17)	54
(9) Low Hills and Basins (LCT 18).....	57
(10) Farmed Rolling Ridges and Hills (LCT 19)	60
(11) Undulating Agricultural Heartland (LCT 20)	63
(12) Farmland and Wooded Policies (LCT 21).....	66
(13) Broad Valley Lowlands - Aberdeenshire (LCT 22).....	69
(14) Farmed Basin - Aberdeenshire (LCT 23).....	72
(15) Coastal Farmed Ridges and Hills - Aberdeenshire (LCT 24).....	75
(16) Farmed Strath - Aberdeenshire (LCT 25)	78
(17) Wooded Estates - Aberdeenshire (LCT 26).....	81
(18) Farmed Moorland Edge - Aberdeenshire (LCT 27).....	84
(19) Outlying Hills & Ridges (LCT 28)	87
(20) Summits and Plateaux – Aberdeenshire (LCT 29).....	90
(21) Narrow Winding Farmed Valley (LCT 30)	93

(22) Broad Wooded and Farmed Valley (LCT 31).....	96
(23) Farmed and Wooded River Valleys (LCT 32)	99
(24) Broad Wooded Valley with Estates (LCT 33).....	102
5. Summary findings	105
Appendix 1: Sensitivity assessment tables.....	112
Appendix 2: Maps.....	114
Figure 1– Study Area.....	114
Figure 2 – Study Assessment Units.....	114
Figure 3 – Landscape related designations and Landscape Character Types (LCT)	114
Figure 4 series – Landscape Sensitivity ratings for each of the LCTs:	114
Figure 5 – Consented wind turbine applications in the study area.....	114
Appendix 3: Glossary	115
Appendix 4: Resources	117

Executive Summary

The information provided in this Planning Advice should assist in guiding development towards least sensitive locations for wind turbines in the interests of maintaining the integrity of Aberdeenshire's distinctive landscape.

This Planning Advice provides a strategic appraisal of the relative sensitivity of the Aberdeenshire landscape (outwith the Cairngorms National Park) to onshore wind energy development. Landscape Character Types (LCTs) covering Aberdeenshire as identified by the NatureScot Landscape Character Assessment (2019), provided 24 landscape 'units' for assessment. The sensitivity of each of these 24 LCTs was assessed for its relative sensitivity to specified wind turbine heights to blade tip, within categories ranging from small/medium (over 30m), to very large (200m+ high). The findings summarise where the Aberdeenshire landscape is likely to be most and least able to accommodate change through the introduction of wind turbine development without causing undue negative effects on its landscape character and qualities, relative to turbine height. These findings are captured graphically in a series of landscape sensitivity maps provided in Appendix 2.

For readers/wind energy project developers that wish an immediate indication of relative landscape sensitivity to wind turbine development within a certain location, the maps provided in Figure 4 of Appendix 2 should be consulted for the wind turbine height category of interest. However, it is recommended that readers familiarise themselves with this whole Planning Advice document to gain a fuller understanding of landscape sensitivity issues for commercial scale wind energy proposals.

This strategic appraisal establishes a benchmark for landscape sensitivity to wind energy development in Aberdeenshire in the interests of preventing erosion of the combination of elements and features that make one landscape distinct from one another. A Landscape Sensitivity Assessment was used as a tool to appraise the underlying or base landscape character (i.e. not taking account of current wind energy development) and this was used as the baseline for the study. The study does not provide detailed assessment of cumulative impacts from wind energy

development, nor does the study carry out any detailed and speculative analysis on potential future cumulative effects.

This appraisal is intended to help inform applicants, but it is the responsibility for each applicant to establish their own baseline for assessment of a particular site, and submit an assessment of the cumulative landscape and visual effects through the Landscape and Visual Impact Assessment (LVIA) process.

The study concludes that the main potential for wind energy development lies within some of the larger scale more extensive lowland Landscape Character Types which are more likely to be able to accommodate larger turbine sizes. As such, the areas most able to accommodate change from wind turbines without undue negative effects on underlying landscape character, are LCTs falling within coastal farmland, with some potential in the agricultural heartland of Aberdeenshire.

Generally, locations with most sensitivity to erosion of landscape character from the introduction of wind turbines are identified as those falling within Landscape Character Types (LCT's) identified as having importance to the identity of the Aberdeenshire landscape, with high visual prominence, high relative remoteness, and/or recreational value.

1. Introduction

1.1 Policy context

National Planning Framework 4

National Planning Framework 4 (NPF4) sets out a clear policy intention to encourage, promote and facilitate all forms of renewable energy development. NPF4 Policy 11 Energy states that wind farms including repowering, extending, expanding and extensions are supported outwith National Parks and National Scenic Areas. In considering landscape and visual impacts, NPF4 places significant weight on the contribution of proposals to maximising potential for renewable energy generation and meeting targets on reducing greenhouse gas emissions. Project design and mitigation is expected to address significant landscape and visual impacts.

The interlinked NPF4 Policy 4 Natural Places sets out the importance of safeguarding natural assets. The policy states that a development proposal which by virtue of type, location or scale having an unacceptable impact on the natural environment will not be supported. For proposals affecting landscape designations identified in the LDP, Policy 4 states that development will not have significant adverse effects on the integrity of the designation or the qualities for which it has been identified.

Aberdeenshire Local Development Plan (LDP) 2023

Policy C2 Renewable Energy (LDP 2023) supports wind energy developments in appropriate locations. The former spatial framework guiding wind energy as referred to in LDP 2023 is now superseded by the policy considerations set out in NPF4, as summarized above. To further update LDP 2023, this Planning Advice replaces the former Strategic Landscape Capacity Assessment for Wind Energy in Aberdeenshire, as originally produced by Ironside Farrar in 2014 (“the 2014 Capacity Study”).

Policy E2 Landscape (LDP 2023) seeks to prevent unacceptable effects on the key characteristics, elements features and qualities of the landscape, as defined by the Landscape Character Assessment produced by NatureScot (2019).

Policy E2 also protects the qualifying interests and character of the Special Landscape Areas as identified in Appendix 13 of the LDP 2023.

The NatureScot Landscape Character Assessment (2019) is the nationally recognized tool and basis for assessing the impact of a development proposal on the landscape, whether alone or cumulatively with other recent developments, and is the starting point for a landscape sensitivity assessment.

1.2 Study aims and objectives

Since publication of the 2014 Capacity Study, three key changes require to be addressed to provide guidance with more contemporary relevance: (1) the need to bring existing guidance on landscape ‘capacity’ in line with the shift on thinking and practice which is now in terms of ‘sensitivity’ to specified types of development in the landscape, in line with NatureScot’s 2022 guidance³; (2) publication of the NatureScot’s 2019 Landscape Character Assessment which identifies Landscape Character Type information to replace the Landscape Character Area classifications produced in the 1990s; and (3) to factor in the increasing scale of proposed onshore wind energy development, with a category of large size wind turbines not directly addressed in the 2014 Capacity Study.

1.3 Landscape Sensitivity Assessments

Landscape Sensitivity Assessments are an important tool for steering development towards appropriate locations. It is defined by NatureScot in their 2022 guidance as a measure of the ability of a landscape to accommodate change arising from specified development types (in this case, wind turbines). It combines judgements on the susceptibility of the landscape to change, and the values attached to the landscape.

A Landscape Sensitivity Assessment is a strategic appraisal of the relative sensitivity of landscapes to specified development types or land use changes. NatureScot’s published guidance on Landscape Sensitivity Assessments sets out the principles and method stages to follow for conducting a landscape sensitivity assessment which this Planning Advice has broadly followed. This updated

³ <https://www.nature.scot/doc/landscape-sensitivity-assessment-guidance-methodology>

approach recognises that the concept of landscape ‘capacity’ (i.e. how much development can be accommodated) is too simplistic when it comes to making complex planning decisions.

A Landscape Sensitivity Assessment should never be used in isolation to determine the acceptability of a development in landscape terms. The study findings presented in this Planning Advice are strategic and indicative only, and should not be read as a definitive statement as to what may be deemed acceptable or not in terms of wind energy development. This guidance sits alongside, and does not replace the need for, individual Landscape and Visual Impact Assessments (LVIA) and/or Environmental Impact Assessments for site specific wind energy planning applications. This Planning Advice also sits alongside national guidance as provided by NatureScot (previously SNH) on Spatial Planning for Onshore wind farms. Furthermore, landscape and visual sensitivity comprises one part of a wide range of issues that needs to be considered in assessing wind energy developments that could not in a practical sense be addressed through a landscape sensitivity assessment process.

1.4 Key principles and definitions

There are some fundamental principles and definitions applicable to this study, outlined as follows.

Landscape baseline - the Landscape Sensitivity Assessment has been undertaken on the underlying landscape character (i.e. prior to any wind energy development), using this as its baseline for the study. Whilst it is recognized that attitudes to, and perceptions of, the landscape are subject to change over time, it is a key precept of this study that the fundamental characteristics and qualities that distinguish one landscape from another have underlying endurance.

Landscape sensitivity is a measure of the ability of a landscape to accommodate change arising from specified development types (or land management) without undue negative effects on landscapes and their value (NatureScot 2022). It combines professional judgements of the susceptibility of the landscape to change, and the values attached to the landscape.

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...without undue negative consequences” (NatureScot 2022).

Landscape value is the relative value attached to different landscapes by society/the community for a range of reasons, such as recreation or historic interest.

Landscape character assessment is the starting point for landscape sensitivity work. The Landscape Character Assessment (2019) provides baseline information, including a shared written understanding of the key characteristics of a landscape. 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, whereas Landscape Character Areas are place specific. The description of distinctive characteristics often includes how the landscape is perceived and experienced by people. The Landscape Character Assessment analyses in detail the three main physical landscape components of landform, land cover and settlement, together with other elements such as scale and cultural associations, and how they combine to form the landscapes we see and experience.

Wind energy development

This guidance is for wind turbine and wind farm developments that fall within the height to blade tip categories defined in Section 3. For the purposes of this study, it is assumed that larger turbines are more likely to form part of a more extensive, commercial ‘wind farm’.

1.5 Scope of study

The focus of the current study is to update and replace the 2014 Capacity Study (Aberdeenshire Council Planning Advice) with information that is relevant, easily understood, and that will not become quickly outdated. It provides a general guide for directing development towards the most suitable locations, in relation to

where the landscape is most or least sensitive to change from wind turbine development.

The scope of the landscape sensitivity assessment undertaken has been to consider the landscape and visual aspects of change that could result from a specified development typology, i.e. by turbine height. This advice does not extend to providing detailed, localised guidance.

Landscape Sensitivity Assessment is used as the tool for drawing conclusions about where the Aberdeenshire landscape is most or least sensitive to change from wind energy development. The study does not provide detailed assessment of cumulative impacts from wind energy development, nor does the study carry out any detailed and speculative analysis on potential future cumulative effects.

Offshore wind farms have not been wholly considered as a cumulative issue in this strategic study. However, where relevant, their potential visual influence is referenced throughout section 4. Offshore wind farms may be a necessary consideration for individual proposals, and reflected in their detailed assessments.

1.6 General principle

All site-specific proposals for commercial scale wind energy development should include a Landscape and Visual Impact Assessment (LVIA). This should therefore contribute to the decision making process underpinning development site selection process, the final development layout and the final specification of the wind turbines. It should be noted that it is the case that well located and specified wind energy proposals may have less adverse impact on the landscape sensitivities of a site than a poorly designed and specified scheme. As such, the LVIA process is a key tool for site selection, layout design and wind turbine specification.

1.7 Study approach

Table 1 provides an outline of the main method stages and key tasks undertaken in the study.

Table 1: Overview of study approach

Method stage	Key tasks
(A) Landscape baseline update	
Establish and define the landscape baseline	<ul style="list-style-type: none"> • Define scope of study • Define study area • Describe landscape context in Aberdeenshire • Identify baseline landscape character • Describe the landscape assessment 'units' (based on Landscape Character Assessment) • Identify landscape related designations
Establish assessment parameters	<ul style="list-style-type: none"> • Determine wind energy development types (or typologies) under assessment • Identify landscape sensitivity assessment criteria
Conduct Landscape Sensitivity Assessment	<ul style="list-style-type: none"> • Field work - assess the development types against the assessment criteria • Include a narrative to explain the reasoning behind each sensitivity judgement made • Collate assessment findings to provide a judgement of overall sensitivity per assessment unit • Map, review and cross check the results
(B) Cumulative context – update baseline information	
Identify wind turbines in the study area	<ul style="list-style-type: none"> • Map all approved/under construction/built wind turbine development in the study area
(C) Summarise findings on landscape sensitivities and cumulative issues	
Summarise key findings for each of the landscape assessment units	<ul style="list-style-type: none"> • Summarise landscape sensitivities in relation to each of the turbine height typologies • Summarise any known cumulative issues for each landscape unit assessed
(D) Identify constraints and opportunities	
Summarise findings overall and draw conclusions	<ul style="list-style-type: none"> • Overview the current issues and current/emerging trends • Summarise key constraints and opportunities across the Aberdeenshire landscape • Identify areas with most and least ability to accommodate wind energy development without undue negative effects • Map landscape sensitivity across Aberdeenshire

2. Landscape baseline

The following describes the study area, including the geographical extent and the landscape character of Aberdeenshire and its surroundings. It also reviews other relevant information including landscape-related designations, natural heritage and cultural heritage constraints. In the latter case it is the extent to which they may have a bearing on landscape character and value that is the primary consideration in this study.

2.1 Study area

The study focuses on the local authority area of Aberdeenshire, excluding the area covered by the Cairngorms National Park (see Figure 1). There are a number of existing, consented and proposed wind farms and turbines in neighbouring local authority areas that can be seen from receptors (settlements, routes or viewpoints) in Aberdeenshire. Broad consideration has been given to these, due to the extensive visual influence exerted by most commercial scale wind turbines. The study area therefore includes a 30km buffer around its landward boundary, but excludes the area of the North Sea since this study relates to onshore wind energy development, and off shore projects are not factored into the sensitivity assessment.

2.2 Baseline Landscape Character Assessment

2.2.1 Landscape context

The landscape of Aberdeenshire is located on the junction between three distinct types of landscape: the Grampian/Highland Mountains, the more low lying and undulating north-east coastlands of Banff and Buchan and the wide valley area of Strathmore. This transition results in a great diversity of landscapes character types, from the high granite plateaux of the Grampian mountains in the west, which project out into the more low lying, gently rolling agricultural lowlands before progressing eastwards down to the lower, more undulating coastal farmland and then onto the coastal landscapes.

The coast shows a wide variety in landform from rocky cliffs and sheltered coves to the broad dynamic duneland that runs along sections of the eastern shore.

Along the southern edge of the Grampians runs the Highland Boundary Fault where the mountains meet the lower and flatter farmland of the Mearns.

The bulk of the Aberdeenshire population lives in small towns and villages in the lowland area, through which the main transport routes pass. These trunk routes radiate out from Aberdeen City which is the largest settlement of the north-east of Scotland.

2.2.2 Landscape Character Types - Aberdeenshire

The landscape of Aberdeenshire is described in detail by the Landscape Character Types within the NatureScot Landscape Character Assessment (2019). There are a total of 24 Landscape Character Types (LCT) covering Aberdeenshire, as illustrated on the map shown in Figure 2 (Appendix 2).

These comprise the assessment 'units' for the current study. These are listed below in table 2 which cross references the NatureScot national dataset number referencing system.

Table 2: Landscape Character Types (2019)

Assessment Unit number (as itemised in section 4)	NatureScot 2019 national dataset reference number	Name of Landscape Character Type⁴
(1)	10	Cliffs and Rocky Coast – Aberdeenshire
(2)	11	Fragmented Rocky Coast
(3)	12	Beaches, Dunes and Links – Aberdeenshire
(4)	13	Raised Beach Coast – Aberdeenshire
(5)	14	Gently Undulating Coastal Farmland
(6)	15	Broad Ridges and Valleys

⁴ Hyperlinked to the NatureScot summary pdf's for each LCT at: [Scottish Landscape Character Types Map and Descriptions | NatureScot](#).

Assessment Unit number (as itemised in section 4)	NatureScot 2019 national dataset reference number	Name of Landscape Character Type⁴
(7)	16	<u>Coastal Farmland with Ridges and Valleys</u>
(8)	17	<u>Coastal Agricultural Plain – Aberdeenshire</u>
(9)	18	<u>Low Hills and Basins</u>
(10)	19	<u>Farmed Rolling Ridges and Hills</u>
(11)	20	<u>Undulating Agricultural Heartland</u>
(12)	21	<u>Farmland and Wooded Policies</u>
(13)	22	<u>Broad Valley Lowlands – Aberdeenshire</u>
(14)	23	<u>Farmed Basin – Aberdeenshire</u>
(15)	24	<u>Coastal Farmed Ridges and Hills – Aberdeenshire</u>
(16)	25	<u>Farmed Strath – Aberdeenshire</u>
(17)	26	<u>Wooded Estates – Aberdeenshire</u>
(18)	27	<u>Farmed Moorland Edge – Aberdeenshire</u>
(19)	28	<u>Outlying Hills & Ridges</u>
(20)	29	<u>Summits and Plateaux – Aberdeenshire</u>
(21)	30	<u>Narrow Winding Farmed Valley</u>
(22)	31	<u>Broad Wooded and Farmed Valley</u>
(23)	32	<u>Farmed and Wooded River Valleys</u>

Assessment Unit number (as itemised in section 4)	NatureScot 2019 national dataset reference number	Name of Landscape Character Type ⁴
(24)	33	Broad Wooded Valley with Estates

Lowlands comprise the majority of Aberdeenshire’s landscapes, this covering approximately 80% of the land, with approximately 20% of the total area being upland in character. The coastal area, although important to the character of Aberdeenshire, covers little of its surface area of less than 5% of the lowlands, and this being a predominantly narrow strip. This is in contrast the agricultural related Landscape Character Types which comprise 50% of the Aberdeenshire landscape, providing the vast bulk of productive farmland that the wealth of the county has been traditionally based on.

Coast

There are four landscape character types associated with the coast (LCT 10, 11, 12, 13). The divisions in the landscape character types reflect the distinct geological differences in character between rocky cliffs and coves, and the sections of coast with broad, lower dune systems, and the less typical raised beaches to the south.

Coastal Farmland

Four Landscape Character Types are identified as being coastal farmland (LCT 14, 16, 17, 24). They occupy the hinterland behind the thin coastal LCTs and are distinct from the more interior agricultural heartlands. They have a gently undulating landform and the influence of the sea is evidenced in their character.

Due to the low undulating landforms across much of these LCTs any hills or low prominences become significant features and distinctive landmarks integral to the landscape identity of Aberdeenshire. Durn Hill (Portsoy), Hill of Culbirnie (Banff and Buchan) and Mormond Hill are examples of this.

The *Coastal Agricultural Plain* (LCT 17) is a particularly extensive Landscape Character Type, with large arable fields and few boundaries in an overall simple landform which is sparsely wooded and settled.

Agricultural Heartland

The agricultural related LCTs including the vast *Undulating Agricultural Heartland* (LCT 20), together with other predominantly farmed landscapes (LCT 18, 19, 21, 23, 25, 26 and 27) combine to be the largest type of landscape in extent at a regional level (covering 50% of Aberdeenshire approximately). These are mainly lowland LCTs within Aberdeenshire comprising the rolling farmland that surrounds Aberdeen and slopes down from the higher ground in the west where farmland lies at the edge of the moorlands, and down towards the coastal strip.

Tree cover varies, with scattered broadleaved shelterbelts running along hill ridges and around farms. Some LCTs have a large number of old estate policy woodlands (LCT 19, 21).

Upland

There are two upland character types in Aberdeenshire, *Outlying Hills and Ridges* (LCT 28), and *Summits and Plateaux* (LCT 29). These make up the high ground in the western part of the study area and are the transitional landscapes between the much higher Grampian Mountains massif, within the Cairngorms National Park, and the undulating lowland agricultural landscapes of *Agricultural Heartlands*.

The *Outlying Hills and Ridges* forms the distinctive, upland backdrop to much of Aberdeenshire and comprises unique ridges and high points that project out into the lower surrounding farmlands. They have simple, open, moorland tops with distinctive rocky outcrops such as Mither Tap and Tap O'Noth, some of which have hillfort remains. These areas have some qualities of wilderness, forming islands of 'wild land' (refer 2.9 below). These contrast strongly with the more managed agricultural landscapes that surrounds them on lower ground. Often extensive conifer plantations clothe the slopes of LCT 28 & 29, and steadings are often located at the base of hills where there is a transition to predominately farmland.

The landscape merges into the surrounding typically agricultural land of Aberdeenshire, whilst to the west, the *Summits and Plateaux* (LCT 29) continue as far as Perth & Kinross merging with other upland character types of neighbouring authority areas.

River valley

There are distinctive valley landforms shaped by the rivers whose source is the high moorland and Grampian Mountains in the west. Six LCTs are characterised as having both river and valley landscape characteristics (LCTs 15, 22, 30, 31, 32 and 33). These range from medium to small in scale and enclosed, to valley landscapes that widely broaden out, notably the Dee valley which provides an access corridor into the heart of the Grampian Mountains.

2.3 Landscape designations

Landscape designations are an indication of landscape or scenic value recognised at national, regional or local levels. Landscape designations form part of the baseline for the assessment of landscape sensitivity and analysis of associated wind energy development. Designations within the study area are described below, with some of the key landscape related designations mapped in Figure 3 (Appendix 2). Full and detailed information on landscape, historic, cultural and nature conservation designations would be identified and assessed as part of the overall environmental assessment process for individual applications.

2.4 National landscape designations

The Cairngorms National Park includes the hills and upper glens in the west of Aberdeenshire. This area is not included in the core study area although part of it lies within the 30km buffer. The Cairngorms National Park is a landscape-related national designation.

There are two areas of national landscape designation within west Aberdeenshire (out with the Study Area), one is the Deeside and Lochnagar National Scenic Area (NSA) and the other is The Cairngorm Mountains NSA both of which lie in the Cairngorms National Park (CNP) area. These are seen as nationally important owing to their unsurpassed scenery.

As stipulated by NPF4 and by CNP policy, wind farm developments will not be supported within the National Park. Whilst buffer areas are not encouraged by policy, the potential cumulative effects of wind farms on the National Park would be a key consideration.

Other national designations within Aberdeenshire are primarily related to sites of natural or cultural heritage value (e.g. Special Protection Areas (SPA), Special Areas of Conservation (SAC), National Nature Reserves (NNR), Sites of Special Scientific Interest (SSSI) and Scheduled Monuments (SM)). These are taken into consideration in the Landscape Sensitivity Assessment insofar as they contribute to landscape value.

2.5 Local Landscape Designations

There are ten Special Landscape Areas (SLAs)⁵ across Aberdeenshire which comprise a local landscape designation, representing approximately 27% of the Study Area. SLAs complement the National Scenic Area designations with a primary purpose of safeguarding and enhancing the character and quality of landscapes which are important and particularly valued by local communities.

2.6 Other landscape related designations

There are thirty-four inventory Historic Gardens and Designed Landscapes (HGDLs) within Aberdeenshire, thirty within the Aberdeenshire study area. Some such as at Haddo House are large and the extensive policies continue to make a major contribution to the scenic quality of the local area. They are all located within lowland areas. Whilst this is not a statutory designation it is a landscape factor that contributes to the assessment of landscape character and value. These are taken into account in the assessment.

There are also four country parks in the area, one at Balmedie, another at Haddo House, one at Alford-Haughton and one at Mintlaw-Aden.

There are a number of other designations that, whilst not solely landscape related, clearly indicate landscape value and inform the assessment process.

⁵ See [Appendix 13](#) of the Aberdeenshire Local Development Plan 2023

These would be identified through the LVIA / Environmental Impact Assessment process for individual applications.

2.7 Historic and cultural designations

Scheduled Monuments (SMs) and Inventory Battlefields (Alford, Harlaw, Fyvie, and Barra) are primarily historic or archaeological designations. However they can be of landscape significance in their own right and contribute to the character and value of a landscape. Furthermore, effects on their setting can be a consideration for neighbouring development proposals.

There are extensive SMs throughout Aberdeenshire including hillforts, many of which form distinctive landmarks in the landscape such as Tap O'Noth and Dunnideer. There are a large number of ruined castles such as at Slains, Dunnottar, Huntly, Kildrummy and Pitsligo. Recumbent Stone Circles are also often designated, and views from them to the wider landscape are considered important in understanding them as monuments.

Conservation Areas are primarily an urban designation. Nevertheless the appearance of a settlement can be a key feature contributing to the surrounding rural landscape and equally the setting of a Conservation Area can be affected by developments in the surrounding countryside.

There are currently approximately 40 Conservation Area designations. The largest includes whole sections of the coast surrounding the villages of Catterline and Muchalls. Other areas of note include the coastal fishing villages of Pennan, Banff and Portsoy together with the inland historic villages of Old Deer and Aberchirder. There are also estates such as at Crimonmogate included.

Listed Buildings feature throughout the urban and rural areas. Listed buildings contribute to landscape character and value and their setting is a consideration for neighbouring development proposals such as wind energy development proposals.

2.8 Nature conservation designations

Areas designated for their nature conservation interest and importance include SPAs, SACs, SPA, SSSIs, National Nature Reserves (NNRs). All are national or

international designations. Whilst these constraints primarily relate to nature conservation interests, the designated area often contributes to the character and value of a landscape through its relatively undisturbed natural features and potential visitor interest.

In the Aberdeenshire study area the most extensive areas are SPA / SSSI / NNR sites located along the coast: including *Loch of Strathbeg*, *Ythan Estuary*, *Buchan Ness*, *Fowlsheugh* and *St Cyrus*. Inland a number of Mosses, including the *Tore of Troup* and lochs are SSSI's and part of the Cairngorm SPA extends into the high ground around the Mounth.

Several extensive SPAs/SSSI's lie outside the study area within the 30km buffer within the Cairngorms National Park.

Ancient woodland inventory sites are distributed across Aberdeenshire, most being located in the lowland areas and river valleys. The most significant areas are on the slopes of Bennachie, Deeside, Haddo, The Bins (above Huntly) and the old policy woodlands in the *Central Wooded Estates* LCA between Aberdeen and rising ground of Bennachie.

There are also 113 Local Nature Conservation Sites (LNCS) in Aberdeenshire (refer LDP 2023, Appendix 12).

2.9 Wild land areas

Wild Land Areas (WLAs) are identified as being nationally important areas but do not form a statutory designation. As defined by NPF4, these are “the most extensive areas of land with qualities of high wildness and are identified in the NatureScot Wild Land Areas map”.

Whilst there are no WLAs within the study area, some qualities of wildness and remoteness are experienced to the west of Aberdeenshire, in particular the high ground of the *Summits and Plateaux* (LCT 29), and even more so the *Outlying Hills and Ridges* (LCT 28), with its strong wild character and close proximity to the Cairngorms National Park.

2.10 Other Relevant Matters

Other areas of interest which contribute to landscape value include recreation routes such as the Deeside and Formartine & Buchan Ways and Aberdeenshire Core Paths, North Sea Cycle Route (NCN1), brown signed tourist routes (such as the Castle Trail), viewpoints, golf courses and access land.

3. Assessment categories of turbine height and criteria

3.1 Wind turbine development categories

In line with recent NatureScot guidance, a landscape sensitivity assessment exercise should identify the specific categories of development types being assessed. For the purposes of this assessment, the study has focused on wind turbine height as being the key consideration. Whilst it is acknowledged that the design of an individual wind turbine and size of a wind farm are also key considerations, these should form part of a detailed assessment for each individual application through the LVIA process. The LVIA is the key tool to inform the location choice, layout design and specification of a new development as well as assess its potential landscape and visual effects.

For the purpose of the current study smaller, domestic size turbines under 30m are scoped out of the study. It is assumed these are more likely to comprise single and small groups of turbines typically dealt with through householder applications, whereas larger turbines are more likely to form part of a more extensive, commercial 'wind farm' which forms a main focus for this study.

This study assesses susceptibility of the landscape against each of the wind height categories shown in Table 3. These broadly reflect the 2014 assessment categories used, but have been updated with the addition of the taller category of the 200m 'very large' turbines. At the lower end of the scale, turbines below 30m to blade tip have been scoped out of the study. This is on the basis that development over 30m is generally considered the height at which a turbine can start to become a dominant feature in the landscape.

Table 3 Wind turbine height typologies

Category	Size (height to blade tip)	Short-hand	Description
Very large	200m+	VL	The height from foundation to tip of the wind turbine is 200 metres or more.
Large/very large	125-<200m	L/VL	The height from foundation to tip of the wind turbine is 125 metres or more.
Large	80-<125m	L	The height from foundation to tip is 80 metres or more.
Medium/Large	50-<80m	M/L	The height from foundation to tip is between 50 and 80 metres.
Small/Medium	30-<50m	S/M	The height from foundation to tip is between 30 and 50 metres.

3.2 Landscape Sensitivity Assessment criteria

NatureScot guidance highlights that existing assessments provide a set of useful and informative evidence that is likely to remain relevant as a basis for updating an assessment. Accordingly, the sensitivity assessment criteria used from the 2014 Capacity Study provided the initial basis for review, with some updating. The overall considerations that guided the assessment process are set out below in Table 4.

A detailed set of criteria relevant to each of the 24 LCTs were identified for assessing the sensitivity of landscape character, visual amenity and landscape value for each LCT. These are incorporated into the sensitivity tables provided in Appendix 1.

At the taller end of the height scale, it is acknowledged that all onshore wind turbines 150m high and over to blade tip require visible red aviation warning lighting under Civil Aviation Authority (CAA) rules. It is not practical for the current study to assess in detail the potential landscape and visual effects of this. Rather, this is factored in as a general consideration in the overall assessment of internal and external visibility of larger turbines (see Table 4) and should be fully

addressed in the individual LVIA's supplied by applicants for specific wind energy development proposals. There are a range of mitigation options that can be considered on a case by case basis. Early consultation with CAA on this matter is recommended. Also, effects on 'dark skies' characteristics are not explicitly a subject of assessment in this study, but it is noted that dark skies are a special quality of the Cairngorms National Park.

Table 4 Factors considered for assessing landscape and visual susceptibility, and value

Assessment criteria	Factors considered
Landscape character	
Scale (primarily in character but also in terms of geographical size)	<ul style="list-style-type: none"> • Consideration of horizontal and vertical scale in terms of topographical relief and openness. • Larger scale, open landscapes are generally likely to be less susceptible to larger, commercial wind turbines, although a smaller size of turbine may reduce impacts. • A perceived larger physical area would be less susceptible to development impact depending on other aspects determining sensitivity e.g. turbines could be appropriate in open landscapes where there are few existing landscape features offering scale comparisons.
Landform	<ul style="list-style-type: none"> • Consideration of the relationship between wind turbines and landform, the degree of complexity, and interrelatedness with scale. • Simple landforms that are flat, undulating or gently rolling, are generally less susceptible, while complex, more intricate landforms more sensitive, especially if smaller scale, steeper, or with a distinctive topography. • Landforms of sufficient scale may provide opportunities for screening or backgrounding turbines, reducing their visual sensitivity. • Consideration of impact from ancillary works and related infrastructure e.g. access tracks, borrow pits/areas and battery facilities, etc.
Land cover – pattern, elements and features	<ul style="list-style-type: none"> • Consideration of the elements that make up a landscape, and the degree of complexity and

	<p>diversity. Elements such as woodlands, fields/boundaries, hedges, buildings and landform create its pattern but add to its distinctive composition and character.</p> <ul style="list-style-type: none"> • Consideration of degree of strength, regularity, fragmentation. • Minimal, broader, simpler land cover pattern is generally less sensitive to wind energy development. A more diverse and intricate land cover pattern would be generally more susceptible to change from the development. The relationship to scale is important. • Prominent or distinctive focal features such as steep hills, towers, lochs add further distinctiveness. The relationship of wind turbines to these affects overall sensitivity. Turbines may have a detractive effect and so diminish integrity. • Susceptibility to change is increased if effects include loss of the landcover feature and diminishment of integrity if removed to accommodate turbines, or a detractive effect if turbines were located nearby.
<p>Development</p>	<ul style="list-style-type: none"> • Consideration of built development or infrastructure in relation to pattern, density, and character of settlement, setting and topography. • Also consideration of built, cultural and natural features in relationship to topography and setting. • There may be scope for visual separation to minimise effects. • The presence of larger scale buildings and built structures such as pylons and masts may lessen landscape sensitivity to development such as wind energy. However, all parties to a wind energy proposed development should take into account the original or underlying landscape sensitivity of the LCT that a proposed wind energy development is located in. • Areas with small scale residential development would potentially be more sensitive.

	<p>Undeveloped areas in terms of landscape and visual qualities with more rural characteristics would also be generally more sensitive to wind energy development.</p>
Quality	<ul style="list-style-type: none"> • Consideration of the condition and integrity of the landscape fabric and character. • A landscape in good condition with a high degree of integrity is more likely to be sensitive to development. • A landscape of poor quality may represent an opportunity to compensate for impacts of development.
Landscape Context	<ul style="list-style-type: none"> • Consideration of the role of adjacent LCTs in contributing to the setting and character of LCT being assessed and vice versa. • The characteristics of surrounding landscape areas provide a context that affects perception of a landscape and may affect how wind turbine developments are perceived. • Consideration of the degree of inter-visibility and effects on key characteristics. Landscapes acting as a backdrop or foreground are particularly sensitive. • 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 similar land-cover pattern to neighbouring landscapes, may be less susceptible
Visual Amenity	
Settlements, routes and viewpoints ('receptors')	<ul style="list-style-type: none"> • A greater number of potential receptors including higher population densities, areas popular for recreation, or the presence of busy transport routes will lead to a higher visual susceptibility. • The sensitivity and expectations of the receptors is also a contributory factor.

<p>Internal Visibility</p>	<ul style="list-style-type: none"> • Views within a landscape area may be open, intermittent or restricted by landform, vegetation or buildings. • The greater the degree of openness and intervisibility the greater the sensitivity. • Susceptibility is generally reduced if landform and woodland have the potential to provide screening.
<p>External Visibility</p>	<ul style="list-style-type: none"> • A landscape area that is visible from surrounding areas by virtue of its prominence or being overlooked is more visually sensitive than an area that is seldom seen. • Susceptibility is generally reduced if landform and woodland have the potential to provide screening. • Elevated, extensive views which are sustained are of increased susceptibility.
<p>LANDSCAPE VALUE</p>	
<p>Designations, community, cultural and perceptual value</p>	<ul style="list-style-type: none"> • Presence of international, national, regional or local designations, those relating to landscape in particular. Special Landscape Areas (SLAs) and effect on their qualifying characteristics and interests, indicate a highly valued landscape. • Ecological designations also contribute to the landscape value of an area, and landscapes close to the study area have an influence. • An undesignated area may be particularly valued by a community of interest: local, or activity-based. • Valued landscapes will have distinctive historic associations, be rich in historic features and buildings and/or have cultural associations e.g. literary, artistic. Landscapes regarded as particularly scenic would also be more sensitive. • In general, landscapes which are more modified and developed are likely to be less susceptible while landscapes with a distinct sense of remoteness or strong landscape, historical,

	cultural, community or recreational associations will be more susceptible.
--	--

3.3 Landscape sensitivity ratings

All 24 Landscape Character Types (LCTs) were assessed in the field by two landscape qualified professionals. Professional judgement between the two assessors was used to identify a sensitivity rating identified against each of the criteria and wind turbine height typologies assessed, ranging from ratings of ‘high’ to ‘low’ as explained in Table 5. The sensitivity assessments are captured in the sensitivity analysis tables provided in Appendix 1.

An overall combined landscape sensitivity rating was identified for each wind turbine height category for all 24 LCTs. The overall ratings were arrived at through an in-the-field assessment for each LCT. Typically, three or more similar ratings against each of the individual assessment criteria would determine the overall sensitivity rating concluded. However, overall this was an agreed professional judgement based on the field experience, and these judgements form the basis of the findings for this assessment.

The overall ratings are identified within the sensitivity assessment tables provided in Appendix 1, whilst Table 5 explains what the ratings mean.

Table 5: Overall sensitivity ratings explained

Overall sensitivity rating(■)	Definition
High	Most or all of the key landscape characteristics of the LCT such as scale, landform, visual amenity, qualities arising from landscape designations, are highly sensitive to change from the development category. Severe and widespread adverse impacts are likely to arise.
High-medium	Key characteristics and qualities of the landscape are vulnerable to change from this development category. 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	There is some conflict with the landscape criteria. Key landscape characteristics or qualities of the landscape are vulnerable to change from the development category but there is some potential to accommodate development in some situations without widespread or severe changes to the landscape character. The wind turbine type has some potential to relate to some aspects of landscape character.
Medium-low	Fewer of the key landscape characteristics are sensitive to change from the development type. There may be opportunities to accommodate change in many locations without widespread or severe effects on the assessment criteria.
Low	Key landscape characteristics are unlikely to be adversely affected by the development type which may be accommodated without widespread or severe adverse impacts on the landscape.

(■) **Note:** 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 potential for development. This information is broadly indicative only: a sensitivity study is information that sits alongside a detailed assessment for each individual application through the LVIA process.

4. The sensitivity assessment

4.1 Cumulative context

In order to take account of the changed cumulative context since the 2014 Capacity Study, all consented/under construction/constructed development applications to date (to a cut off point at 30 September 2022) for wind turbine applications within Aberdeenshire over 30m height to tip are plotted in the map provided in Figure 5, Appendix 2.

Known and/or relevant cumulative issues relating to each of the 24 LCTs are identified in the summaries provided below. It is the responsibility of each applicant to establish the baseline for, and submit, an assessment of the cumulative landscape and visual effects relating to their proposal through the

LVIA process, in accordance with current NatureScot guidance⁶. Furthermore, when assessing the acceptability of proposals, any impacts on neighbouring sensitive landscapes should also be taken into account.

Since the beginning of commercial scale wind energy development, how such wind energy projects have related to one another has been an increasingly important aspect of the LVIA process. Projects such as Hillhead of Auquhirie and Clochnahill wind farms (near Stonehaven), and in the north of Aberdeenshire, the visual relationship between the Boyndie wind turbines and those situated immediately to their south highlighted this issue for example.

4.2 Summaries

The following sections provide summaries for each of the landscape units under assessment i.e. the Landscape Character Types, providing:

- a summary description of the LCT and its key landscape characteristics with photo illustrations;
- an overview of the key landscape sensitivities identified in relation to each of the turbine height categories assessed (with background supporting information provided by the tables in Appendix 1);
- an indication of known and relevant cumulative issues; and
- conclusions drawn as to the overall sensitivity of each LCT to landscape change from wind turbine developments.

⁶ <https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments>

(1) Cliffs and Rocky Coast - Aberdeenshire (LCT 10)

Landscape character description

This Landscape Character Type is defined by its distinctive rocky cliffs, numerous inlets and arches created from jagged and fractured rock.

The entire Banff and Buchan coastline is dominated by these rocky cliff-edged headlands, which include some raised beaches and occasional hugging sheltered sandy bays. Troup Head, between Macduff and Rosehearty, forms a dramatic and high cliff feature.



Despite the narrow nature of this rocky coastline, the overall impression is of an open, large-scale landscape, with wide expanses of sea and sky, and a distinctive wild character.

Key sensitivities for consideration

This Landscape Character Type is highly susceptible to impact from development of tall artificial structures on account of the sensitivities of its dramatic rocky coastline. It is a landscape of complex features such as rocky promontories, knolls, cliffs and the coastal edge, and lacks tree cover. Its character is susceptible to change from development in all the turbine height categories. The unique qualifying attributes of the North Aberdeenshire Coast Special Landscape Area (SLA) designation covering this LCT are a key consideration. Turbines of all scales could intrude in this open landscape and its coastal character, particularly on or near its distinctively long stretch of coastal cliffs and headlands, detracting from long views along the coast. Turbines in the larger height categories in particular could affect views from and to the SLA.



The landscape's distinctive coastal character and strong sense of naturalness is sensitive to intrusion from wind turbines.



Farmland commonly extends close to the cliff edge, and there are few trees in this open and windswept landscape.

Very large turbines (200m+) – High sensitivity

Development at this scale could excessively dominate and intrude on this highly natural and coastal edge, and disrupt the integrity of this distinctive coastal character with its unique elements and features.

Large/very large turbines (125-<200m) – High sensitivity

The development type could excessively dominate the landscape and disrupt the integrity of the distinctive coastal character with its unique elements and features.

Large turbines (80-<125m) – High sensitivity

The development type could severely diminish and disrupt the integrity of the distinctive coastal character with its unique elements and features.

Medium/large turbines (50-<80m) – High-medium sensitivity

The landscape is highly susceptible to change from the development type which could have an adverse impact.

Small/medium turbines (30-<50m) – Medium-low sensitivity

The landscape is susceptible to change from the development type which could have an adverse impact.

Cumulative issues

Current development is limited, and generally comprises smaller turbines located close to farms and farm buildings.

Conclusions

- A high quality, high value, complex landscape along a relatively narrow band close to the coast with steep rugged slopes and cliffs in a predominantly tree-less landscape, makes this sensitive to change from wind energy development.
- The landscape is highly sensitive to intrusion from turbines, including those in adjacent LCTs, which would have a strong visual influence on the coast.
- There may be some limited potential in small parts to accommodate turbines, particularly in a lower height category.

(2) Fragmented Rocky Coast (LCT 11)

Landscape character description

Two coastlines characterise this Landscape Character Type. They extend from the rocky headland of Peterhead to south of Cruden Bay, and the coast from Aberdeen to Kinneff, share the distinguishing characteristics of steep rugged slopes, fractured cliffs, narrow inlets and jagged reefs. To the south, the landscape becomes gentler, and raised beach platforms feature towards Kinneff.



From the top of the cliffs there is a gradual transition inland from gently undulating pastureland and often rough grassland, towards coastal farmland areas. Cliff top sea views provide an immense sense of scale. A sense of naturalness is evident, with strong elemental qualities due to exposure from the North Sea. Proximity of Stonehaven, Aberdeen, Peterhead and its power station, and major roads can however lessen the sense of wildness and remoteness.

Key sensitivities for consideration

This is a high quality, high value landscape. The complex features including rocky promontories, knolls, cliffs and the coastal edge itself, the distinctive raised beaches to the south, together with the lack of tree cover and associated general visibility make this LCT highly sensitive to intrusion from tall artificial structures of a variety of heights. The potential effects on adjacent coastal/farmed landscapes and small traditional settlements increase sensitivity to intrusion from turbines.

Turbines in the larger height categories in particular could affect views to and from the landscape which is predominantly covered by Special Landscape Area (SLA) designations. The Northeast Aberdeenshire Coast, and Southeast Aberdeenshire Coast SLAs highlight the wild and rugged qualities of these coastlines with their enhanced sensitivity due to presence of significant historic features such as the iconic Dunnottar Castle and Slains Castle.

Where there is a gently undulating landform, the LCT could potentially have some ability to accommodate turbines in a lower height category. The steep, weathered rugged slopes and cliffs with dramatic stacks and arches to the north, and the contrasting, distinctive raised beaches to the south, are sensitive to intrusion from turbines of all heights.



Rocky headlands with steep rugged slopes, fractured cliffs, narrow inlets and jagged reefs.



To the south, the landscape becomes gentler, and raised beach platforms feature towards Kinneff.

Very large turbines (200m+) – High sensitivity

This development type is likely to dominate this landscape which forms a narrow strip along the coast with steep rugged slopes and cliffs.

Large/very large turbines (125-<200m) – High sensitivity

This development type is likely to dominate this landscape which forms a narrow strip along the coast with steep rugged slopes and cliffs.

Large turbines (80-<125m) – High sensitivity

This development type is likely to diminish the integrity of the distinctive coastal character of this LCT with its unique character and features.

Medium/large turbines (50-<80m) – High-medium sensitivity

The development type could dominate the scale of this narrow strip of land close to the coast with steep rugged slopes and cliffs, and is likely to disrupt the integrity of the coastal character.

Small/medium turbines (30-<50m) – *Medium sensitivity*

This landscape may have some limited potential to accommodate this development type without impacting on the sensitive coastal parts and features of this landscape.

Cumulative issues

There are a number of operational commercial scale wind turbines nearby and in the adjacent *Coastal Farmed Ridges and Hills – Aberdeenshire* LCT with a visual influence on the *Fragmented Rocky Coast* LCT. Commercial scale wind energy development is starting to visually influence this LCT with the St John's Hill Wind Farm close to Roadside of Kinneff, south of Stonehaven. There are also a number of other commercial scale wind energy developments that can be seen from the southern stretch of the LCT.

Whilst this Landscape Sensitivity Assessment does not directly address the issue of offshore wind turbines, the 11 Aberdeen offshore wind turbines have a visual influence on this LCT as well as other landscapes in visual proximity, notably LCTs 12, 17, and 26.

Conclusions

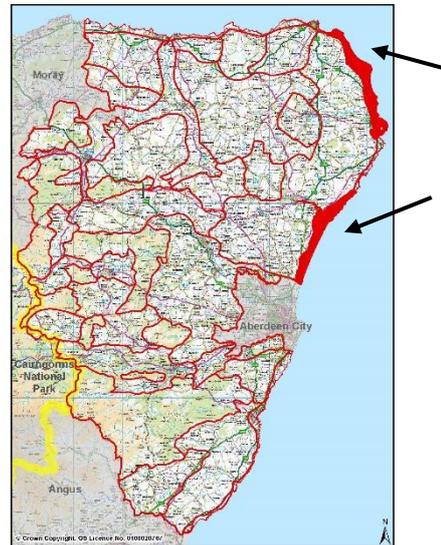
- A high quality, high value, complex relatively narrow coastal landscape featuring steep rugged slopes and cliffs. A predominantly tree-less landscape, with raised beach features, makes this LCT highly sensitive to change from wind energy development.
- The landscape is highly sensitive to visual intrusion from turbines, including from adjacent LCTs, which would have a strong visual influence on the coast.
- There may be some potential to accommodate turbines in this LCT in small parts of the landscape, within a lower wind turbine height category.

(3) Beaches, Dunes and Links - Aberdeenshire (LCT 12)

Landscape character description

The two coastlines from Fraserburgh to Peterhead, and from Collieston to Aberdeen, share the distinguishing characteristics of long, broad sandy beaches backed by extensive dunes.

There is a very wide, subtle, gradual transition between this low-lying Landscape Character Type and the adjacent, gently undulating and open *Coastal Agricultural Plain* Landscape Character Type, which features largely uninterrupted views from the plains out to sea.



Key sensitivities for consideration

This LCT is largely covered by the Northeast Aberdeenshire Coast Special Landscape Area (SLA) designation which recognises the strong sense of place associated with this landscape, its scenic qualities, and uninterrupted views of the sea. Remoteness and naturalness are key qualities.

This low-lying exposed landscape with few trees, complex form of dune systems and dune-related features (most notably the Loch of Strathbeg) are sensitive to intrusion from wind turbines of most sizes. In this open landscape the skyline has an uninterrupted character. Narrowness of the LCT increases sensitivity in terms of effects on and from adjoining landscapes.



A gradual transition inland between coast and adjacent *Coastal Agricultural Plain* of flat / very gently undulating pastures.



Largely uninterrupted long views to the west.

Very large turbines (200m+) – High sensitivity

Built infrastructure of this scale could significantly impact on the intricate dune landscape. Very tall wind turbines could be highly prominent and dominate the scale of the dunes in this low lying landscape, and introduce a highly intrusive and artificial vertical structure to this LCT.

Large/very large turbines (125-<200m) – High sensitivity

Turbines in this height category could significantly impact on this intricate dune and low-lying landscape. This development type could be prominent, dominate the landscape, and introduce a highly intrusive and artificial vertical structure. Small settlements and dispersed houses/farms set back from the coast would potentially be dwarfed.

Large turbines (80-<125m) – High sensitivity

This wind turbine typology could be prominent and dominate the scale of landscape character type, as well as small settlements and dispersed houses/farms set back from the coast, which are a key characteristic of this landscape. Small settlements and dispersed houses/farms set back from the coast could potentially be dominated by this category of wind turbine size.

Medium/large turbines (50-<80m) – High sensitivity

This typology could dominate the scale of the low-lying landscape including its small settlements and dispersed houses/farms set back from the coast.

Small/medium turbines (30-<50m) – *High-medium sensitivity*

This category of wind turbine development could be prominent within the LCT on account of its general openness.

Cumulative issues

There are several operational turbines close to St Fergus Moss which influence the character of this part of the coast.

Whilst this Landscape Sensitivity Assessment does not directly address the issue of offshore wind turbines, the 11 Aberdeen offshore wind turbines have a visual influence on this LCT as well as other landscapes in visual proximity, notably LCTs 11, 17, and 26.

Conclusions

- Scale, visibility and high landscape value are key sensitivities in this LCT.
- This LCT is highly sensitive to intrusion from wind turbines, including from adjacent LCTs, which would have a visual influence generally on the coast.

(4) Raised Beach Coast - Aberdeenshire (LCT 13)

Landscape character description

The stretch of coast extending southwards from Inverbervie to St Cyrus and the Angus border and is strongly characterised by its raised beaches. These widen to create a more gentle and open linking area between land and sea, creating a sense of openness and large scale. This wide coastal fringe is the most distinctive element of this Landscape Character Type. South of St Cyrus the fringe forms an enclosed platform backed by a prominent cliff line, with farmland, saltmarsh and dunes.



Key sensitivities for consideration

This is a highly valued, high quality coastal landscape with limited tree cover, strongly characterised by its unison of land and sea. Its distinctive character is sensitive to visual intrusion from wind turbine development of most scales. Introduction of tall vertical structures would detract from long views across this open apron of land, and interrupt the simple, horizontal skyline.

The LCT is covered by the extents of the Southeast Aberdeenshire Coast Special Landscape Area (SLA) designation. The designation recognises the atypical raised beach features which form an important scenic setting for the numerous coastal settlements.



The raised beach landform widens to create a gentle link area between land and sea.



Traditional fishing villages are a feature.

Very large turbines (200m+) – High sensitivity

This LCT is likely to be dominated by this scale of wind turbine development given its a relatively narrow strip of landscape close to the coast with extensive visibility. This development type could severely diminish the integrity of the landscape, and significantly detract from its distinctive coastal character.

Large/very large turbines (125-<200m) – High sensitivity

The typology is unlikely to relate positively to this landscape which is susceptible to change from built infrastructure of this scale on account of its topography and openness.

Large turbines (80-<125m) – High sensitivity

This typology is unlikely to relate well to this landscape which is susceptible to change from built infrastructure of this scale, on account of its topography and openness.

Medium/large turbines (50-<80m) – High sensitivity

This landscape character type is sensitive to this scale of development. However there may be some potential to locate turbines of this height in the less sensitive parts of this LCT.

Small/medium turbines (30-<50m) – High-medium sensitivity

This LCT is susceptible to this scale of wind turbine on account of its openness, but turbines of this height may be less prominent in some locations.

Cumulative issues

Operational turbines built at the eastern/southern edge of the adjoining *Coastal Farmed Ridges and Hills – Aberdeenshire* LCT, such as those already seen in the Hill of Garvock area have a strong visual influence on parts of this coast, in particular between Johnshaven and St Cyrus and west of Gourdon.

Conclusions

- This landscape is sensitive to intrusion from wind turbines, including from adjacent LCTs, which could have a strong visual influence on the coast.
- Due to the limited extent (regionally) of this LCT, its scale, visibility and value, it is likely there will be limited potential for accommodating wind turbines in this landscape without adverse impacts.

(5) Gently Undulating Coastal Farmland (LCT 14)

Landscape character description

The land lying either side of the Deveron Valley is characterised by its expansive windswept low-lying, undulating landscape, with a strong sense of openness and proximity to the coast.

This Gently Undulating Coastal Farmland Landscape Character Type is slightly undulating with infrequent low, rounded hills. Where the landscape borders Moray to the west, it is largely separated by a wooded ridgeline. To the east, the landscape is defined by the distinctive outcrop of Old Red Sandstone forming the higher ridges south of Troup Head. The character of this landscape gradually transitions into *Undulating Agricultural Heartland* LCT to the south.



Key sensitivities for consideration

Landscape sensitivity to wind turbine development varies due to scale, landform intervisibility, land cover pattern, openness of character, and proximity to neighbouring sensitive landscapes. The LCT overlaps with two Special Landscape Areas (SLAs) – the Aberdeenshire Coast SLA and Deveron Valley SLA. There are also long views to the landmark hills of Bin of Cullen and Knock Hill, as well south across the low agricultural hinterland to Bennachie, the Buck, Tap o’Noth and Ben Rinnes.

Within the LCT, Durn Hill forms a distinctive landmark within this low lying open landscape which turbines could visually conflict with. Generally susceptibility to adverse effects on landscape character within this LCT is decreased with a lower turbine height.



Long views to landmark hills in this open, low-lying landscape.



The strong sense of expansiveness and lightness in this LCT is accentuated by proximity to the sea, and the typically paler shades of field crops.

Very large turbines (200m+) – High sensitivity

Very large turbines have the potential to visually and physically (in terms of turbine size and related infrastructure) dominate the scale of this LCT and its land cover features. Their known possible visual influence carries the potential to have a visual impact.

Large/very large turbines (125-<200m) – High sensitivity

Turbines within this size category have the potential to visually and physically dominate the scale of this LCT and its land cover features. Their known possible visual effect, carries the potential to have a visual impact.

Large turbines (80-<125m) – High sensitivity

This LCT is sensitive to intrusion from turbines of this scale. Turbines within this height category, by their known possible visual influence, carry the potential to have some visual and physical effect on the landscape and local settlements.

Medium/large turbines (50-<80m) – High-medium sensitivity

Turbines within this height category, by their known possible visual influence, carry the potential to have some visual impact on existing infrastructure and local settlements.

Small/medium turbines (30-<50m) – Medium-low sensitivity

Small/medium turbines have the potential to have some visual effects and impact on landform related sensitivities. Sensitivity is reduced where the backdrop of the land can be seen to be taller than the development to lessen visual impacts.

Cumulative issues

The wind turbines at Boyndie are a prominent visual feature along large stretches of this coastline and are visible from well inland. There are also visual effects from turbines at nearby hills, notably Hill of Tipperty, Hill of Culburnie, and to some degree from turbines located in the adjoining *Low Hills and Basins* LCT to the south west, and within the *Undulating Agricultural Heartland* LCT to the south east. It is also possible to see commercial scale wind energy development in Moray from parts of this LCT.

To the west the landscape extends into Moray as the *Coastal Farmlands – Moray & Nairn* LCT and *Low Forested Hills* LCT. There are potential cumulative visual effects where multiple wind farms and large turbines sited in both Moray and Aberdeenshire could be seen in close proximity.

Conclusions

- The potential for the landscape to accommodate wind turbines varies within the LCT due to scale, landform, open character and simple pattern of large geometric fields.
- There are cumulative issues associated with this LCT primarily from the Boyndie site but also from a number of other turbines in this LCT and adjacent LCTs, and also in the Moray area.
- Proximity to neighbouring sensitive LCTs is a key issue.

(6) Broad Ridges and Valleys (LCT 15)

Landscape character description

This Landscape Character Type is higher and hillier than the plains of the surrounding landscapes. It comprises broad ridges, hilltops and enclosed valleys. The land falls gradually to the south, merging with the *Undulating Agricultural Heartlands* Landscape Character Type.

To the south of the promontory of Troup, where an outcrop of Old Red Sandstone protrudes north-eastwards to the coast, this striking and exposed feature provides a backdrop to the surrounding lowland and coastal stretches LCTs.



Key sensitivities for consideration

As a visually prominent backdrop to adjacent lowland and coastal areas, and a high value landscape designated for its natural heritage and archaeology, this landscape is sensitive to adverse impacts from wind turbine development. The North Aberdeenshire Coast Special Landscape Area (SLA) overlaps this LCT. The designation recognises the high scenic value of the area and strong coastal relationship. Views inland can be extensive, including to Bennachie and the Tap o'Noth.

This landscape is largely bare and exposed, with a strongly moulded landform and oversized valleys in relation to its watercourses, as seen with the Tore of Troup. This LCT provides a locally unusual example of moorland landscape close to the coast, with associated sense of remoteness. The addition of tall vertical structures in the landscape could introduce visual clutter, diminishing the simplicity of the moorland, and compromising the overall scenic composition of high moorland and wooded valleys.



A strongly moulded landform of curving ridges and interlocking hills. Lower hill slopes feature arable fields patterned with conifer shelterbelts, whilst higher land is more strongly of a moorland character.



The long distances of views increases the experience of scale and openness. Views inland can be extensive, and to landmark hills such as Bennachie and Tap o'Noth.

Very large turbines (200m+) – High sensitivity

This scale of development could impact the local landscape character and dominate the distinctive hills and ridges. This development type could impact on this LCT's cultural value and contribution to nature conservation, introducing visual clutter, and diminish the high scenic value associated with this landscape.

Large/very large turbines (125-<200m) – High sensitivity

All turbines in this height category could impact the landscape character and dominate its distinctive hills and ridges. There could be an impact on its cultural value and contribution to nature conservation, introducing visual clutter, and diminish the high scenic value associated with this landscape.

Large turbines (80-<125m) – High sensitivity

Turbines within this height category could dominate the landscape through most parts, and introduce visual clutter. This development type is likely to impact the high scenic value associated with this landscape, and its cultural and natural heritage contributions.

Medium/large turbines (50-<80m) – High-medium sensitivity

This development type could diminish the landscape experience and scenic value of this LCT. Turbines could add visual clutter, and impact on the cultural and natural heritage contribution of this landscape.

Small/medium turbines (30-<50m) – *Medium sensitivity*

The LCT is sensitive to impact from visual clutter from this development type, which could impact on the landscape experience, diminish its scenic and cultural value, and natural heritage contribution.

Cumulative issues

Operational turbines at Little Byth, Hill of Fishrie, Windyheads Hill and Hill of Overbrae have introduced identified visual clutter to the landscape affecting the perceived character of this LCT with its moorland qualities and associated sense of remoteness.

Conclusions

- This LCT is sensitive to change from wind energy development on account of its locally distinctive features, visual prominence, and landscape related designations of significance.
- Whilst there may potentially be some ability for the LCT to accommodate turbines of a lower height category, they could introduce further visual clutter and diminish the simplicity of the moorland and the scenic composition of high moorland and wooded valleys.

(7) Coastal Farmland with Ridges and Valleys (LCT 16)

Landscape character description

From the northeast coast near Fraserburgh down to the village of New Pitsligo this Landscape Character Type forms a transition between the dramatic sculpted sandstone ridges to the west, and the flatter, lower eastern coastal plain.

This character landscape is low lying and undulating, with subtle ridges and broad shallow valleys. There is a strong sense of proximity to the coast.



Key sensitivities for consideration

Inland where the landscape is of a larger scale, with a simple pattern and generally open character of the landscape, there may be some potential to accommodate wind energy development in this LCT. However the key defining characteristics of this LCT are its subtle ridges and broad shallow valleys, together with small areas of more complex rolling landform, where turbines would require careful siting and design to avoid visual conflict.

For all wind turbine heights, sensitivity within the LCT is increased with close proximity to, or lack of screening from, settlements and Mormond Hill which could be visually compromised by prominently sited turbines seen on the skyline.



A landscape with an open character. Has occasional shelterbelts and woodland, with a scarcity of woodland overall.



Low-lying landscape with proximity of the coast perceived in the strong sense of openness, lightness and space.

Very large turbines (200m+) – High sensitivity

The typology could significantly dominate the landscape with its subtle ridges and broad shallow valleys, and detract from the small areas of more complex rolling landform. Other sensitivities include proximity to Mormond Hill and impact on the wider landscape towards the coast to which it is widely exposed.

Large/very large turbines (125-<200m) – High sensitivity

The typology could significantly dominate the landscape with its subtle ridges and broad shallow valleys, and detract from the small areas of more complex rolling landform. Other sensitivities include proximity to Mormond Hill and impact on the wider landscape towards the coast to which it is widely exposed.

Large turbines (80-<125m) – High sensitivity

The generally simple, gently undulating landform of this LCT reduces susceptibility, although the development type could detract from its subtle ridges and broad shallow valleys if sited on or near them. Sensitivity is increased with close proximity to, or lack of screening from, settlements and Mormond Hill.

Medium/large turbines (50-<80m) – High-medium sensitivity

Susceptibility is decreased with turbine size and the landscape may present opportunities to accommodate change from this category of wind turbine where the field pattern is large and uniform and where turbines can be located to minimise visual intrusion.

Small/medium turbines (30-<50m) – *Medium-low sensitivity*

Susceptibility is decreased with turbine size, and this large scale landscape could potentially accommodate the development type where sited to minimise visual clutter.

Cumulative issues

The introduction of large turbines could accentuate cumulative effects due to inter-visibility with existing tall masts and other communications infrastructure, as well as wind turbines operating at the south western boundary of the LCT with wind energy developments seen around Mormond Hill.

Conclusions

- Due to scale, landform, simple pattern of large geometric fields, and generally open character, the landscape could potentially accommodate wind energy development. However there are a number of constraints:
- Sensitivity is increased with proximity to Mormond Hill.
- Cumulative effects from existing commercial scale turbine developments together with other communications infrastructure in the area are likely to constrain potential future wind energy projects in the area.

(8) Coastal Agricultural Plain - Aberdeenshire (LCT 17)

Landscape character description

This Landscape Character Type is an extensive, low-lying, and often very open sweep of exposed farmland where the influence of the sea is strong. It has a gently undulating landform with relatively large scale and extensive moorlands. The character of this landscape is influenced by development including transmission masts, electricity transmission lines, major roads, and the gas terminal at St Fergus.



The transition from this agricultural hinterland towards the adjacent *Beaches Dunes and Links* and the *Fragmented Rocky Coast* Landscape Character Types is very gradual.

Key sensitivities for consideration

Due to the scale, landform, broad extent, simple pattern, and open character of the landscape, there may be some potential to accommodate wind energy development in this LCT. A larger turbine size could potentially relate to the large scale of landscape where there is a flatter landform, and the extensiveness of the landscape can lessen impact within the LCT as well as on adjacent LCTs.

For all wind turbine heights, sensitivity within the LCT is increased with close proximity to, or lack of screening from, settlements and Mormond Hill which could be visually compromised by prominently sited turbines seen on the skyline. Sensitivity increases towards the east where there is more inter-visibility with the coast which is covered by the Northeast Aberdeenshire Coast Special Landscape Area (SLA) designation. The designation recognises the strong sense of place associated with the coastal landscape and its scenic qualities.



A low-lying and very gently undulating landform, with large open fields and limited tree cover overall.



There is a strong sense of coastal context in this landscape, enhanced by its openness.

Very large turbines (200m+) – High Sensitivity

The development category could significantly dominate and be highly intrusive in this gently rolling landform with its subtle ridges and broad shallow valleys. Other sensitivities include proximity to Mormond Hill and impact on the wider landscape towards the coast to which it is widely exposed.

Large/very large turbines (125-<200m) – High Sensitivity

This category of development could dominate the landscape with its subtle ridges and broad shallow valleys, and detract from the small areas of more complex rolling landform. Other sensitivities include proximity to Mormond Hill and impact on the wider landscape towards the coast to which it is widely exposed.

Large turbines (80-<125m) – High Sensitivity

The generally simple, gently undulating landform of this character type reduces susceptibility, although the development type could detract from its subtle ridges and broad shallow valleys if sited on or near them. Sensitivity is increased with close proximity to, or lack of screening from, settlements and Mormond Hill.

Medium/large turbines (50-<80m) – High-medium Sensitivity

Susceptibility is decreased with turbine size and the landscape may present opportunities to accommodate this category of wind turbine where the field

pattern is large and uniform, where turbines could potentially be located to minimise visual intrusion.

Small/medium turbines (30-<50m) – *Medium Sensitivity*

Susceptibility is decreased with turbine size category, and the large scale landscape could potentially accommodate this development type where sited to minimise visual clutter and avoid dominating the setting of small settlements and individual properties.

Cumulative issues

Wind turbines are a regular feature on farmland, and some can appear prominent. The landscape is sensitive to overall cumulative effects from high inter-visibility with existing tall masts and other communications as well as commercial wind energy infrastructure in this open, low lying landscape causing visual effects, notably at the boundaries of this LCT around Mormond Hill and St Fergus Moss.

Whilst this Landscape Sensitivity Assessment does not directly address the issue of offshore wind turbines, the 11 Aberdeen offshore wind turbines have a notable visual influence on this LCT as well as other landscapes in visual proximity, namely LCTs 11, 12 and 26.

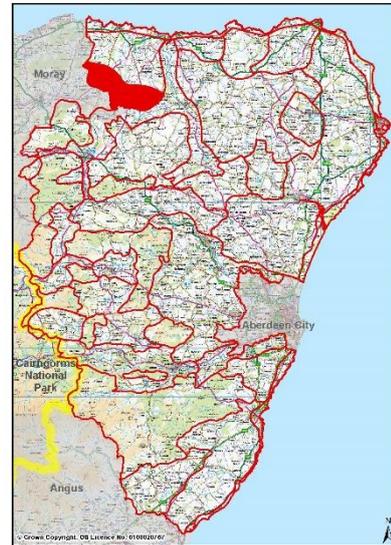
Conclusions

- This large scale landscape, its landform, large scale simple pattern of very large geometric fields and generally open character has underlying potential to accommodate wind turbine development.
- Sensitivity varies, generally according to proximity to the coast.
- Cumulative effects are a key consideration where operational, commercial scale turbine developments are already located in the landscape and cause visual effects, including developments at the boundaries of this LCT around Mormond Hill.

(9) Low Hills and Basins (LCT 18)

Landscape character description

The landform extending from the western boundary of Banff and Buchan towards Aberchirder in the east is characterised by its relatively raised elevation with related land cover of mosses, coniferous woodland and grazing land. The less intensively farmed land of the LCT with its diverse vegetation adds to a sense of naturalness. There is also a sense of seclusion with views from within the lower valleys enclosed by the smoothly undulating landform. Knock Hill is a widely visible and dominating feature to the west of the LCT.



This *Low Hills and Basins* Landscape Character Type merges gradually with the lower, flatter *Gently Undulating Coastal Farmland* Landscape Character Type to the north.

Key sensitivities for consideration

Due to a landform of low rolling hills and long ridges creating a smooth undulating landform with an open character, there may be some potential for this LCT to accommodate wind energy development. However, turbines are less likely to relate well to the higher and more tightly rolling hills in the south with their characteristics of naturalness.

Knock Hill is a distinctive local landmark seen from the surrounding flatter farmland which is sensitive to visual impact from development of all wind turbine height typologies. The LCT is overlapped by the Deveron Valley Special Landscape Area (SLA) which recognises the scenic quality of this valley.



A landscape of rolling hills and ridges creating a smooth undulating landform. Knock Hill is widely visible and ever present to the west.



The less intensively farmed character of this landscape, and often diverse vegetation cover, contribute to a sense of naturalness.

Very large turbines (200m+) – High sensitivity

This category of wind energy development could have an overbearing effect on landform, and diminish the quality of the landscape and the setting it provides for the valley of the Deveron and backdrop to settlements.

Large/very large turbines (125-<200m) – High sensitivity

This category of wind energy development could have an overbearing effect on landform, and diminish the quality of the landscape and the setting it provides for the valley of the Deveron and backdrop to settlements.

Large turbines (80-<125m) – High sensitivity

Turbine development of this scale could potentially cause visual intrusion.

Medium/large turbines (50-<80m) – Medium sensitivity

Turbine development of this scale could potentially cause visual intrusion.

Small/medium turbines (30-<50m) – Medium-low sensitivity

There may be some potential to establish this scale of wind turbine in the landscape without having a significant effect.

Cumulative issues

Wind turbines are located in farmland within this LCT and in the adjacent *Gently Undulating Coastal Farmland* LCT to the north. To the west, the landscape extends into Moray as the *Upland Farmland* LCT. There are potential cumulative visual effects into Moray where a number of operational wind farms and small groups of tall turbines are sited. The area of Aberchirder features a number of commercial scale wind energy developments including Deuchries and Auchterderanan, all with the potential to visually affect the *Low Hills and Basins* LCT.

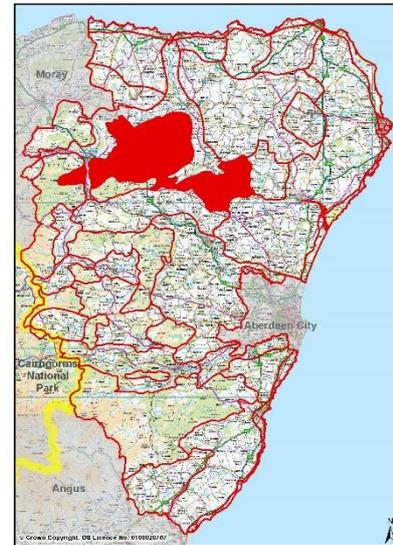
Conclusions

- The sense of naturalness in this LCT with its less intensively farmed landscape and presence of Knock Hill heightens its sensitivity to impact from development of all wind turbine height categories.
- Whilst landscape sensitivity is heightened from taller turbines, there may be some potential for this LCT to accommodate lower wind turbine height categories due to landform, open character and lower value.
- Cumulative effects are a key consideration, taking into account operational wind turbines within this landscape and adjacent LCTs.

(10) Farmed Rolling Ridges and Hills (LCT 19)

Landscape character description

The broad swathe of gently rolling farmland to the south of the Deveron Valley has a vast open character. The sense of vast openness associated with this *Farmed Rolling Ridges and Hills* Landscape Character Type is accentuated by the adjacent and extensive *Undulating Agricultural Heartland* lying beyond the Ythan river valley to the east.



The *Farmed Rolling Ridges and Hills* LCT has a simple landscape pattern, with large, rounded rolling hills, which tend to draw the eye across the landscape into the distance.

Key sensitivities for consideration

On account of its scale, landform, simple pattern, open character and relatively low value, this LCT could potentially accommodate wind turbine development. Sensitivity is increased where there is potential for visual interruption of the smooth rolling hills and ridges which are seen as successive undulating layers in the skyline. Sensitivity is also increased where turbines of a taller height are within closer proximity to and/or could visually intrude adjacent sensitive LCTs.

The *Outlying Hills and Ridges* LCT further to the south west adds a moorland backdrop and visual containment of views. The prominent profiles of Bennachie and Tap o'Noth rise in the distance. To the north lies the Deveron Valley Special Landscape Area (SLA) which recognises the high scenic value of the river valley landscape bounded by rolling wooded hills.



A landform of smoothly rounded ridges forming rolling topography with sweeping curves that draw the eye across the terrain. Shelterbelts on ridge tops.



Long views from elevated roads are seen across successive undulating layers of this landscape type. The uplands appear as raised horizons.

Very large turbines (200m+) – High sensitivity

The very tall turbines of this typology could be visually obtrusive, and diminish landscape quality.

Large/very large turbines (125-<200m) – High sensitivity

This scale of turbine could be visually obtrusive, and diminish landscape quality.

Large turbines (80-<125m) – High-medium sensitivity

Whilst susceptibility is reduced with turbine height, this typology could be visually obtrusive, and diminish landscape quality.

Medium/large turbines (50-<80m) – Medium sensitivity

This wind turbine category could potentially relate positively to the simple land cover pattern of this LCT.

Small/medium turbines (30-<50m) – Medium-low sensitivity

There is potential for this category of wind energy development in this simple, undulating landform.

Cumulative issues

Small groups of tall wind turbines are a recurring feature, sited on ridges and higher hills with the Glens of Foudland and Dummuies wind farms being a visual

feature to the south of this LCT. It is also worth noting that the wind turbines on the Hill of Tillymorgan visually influence the surrounding area.

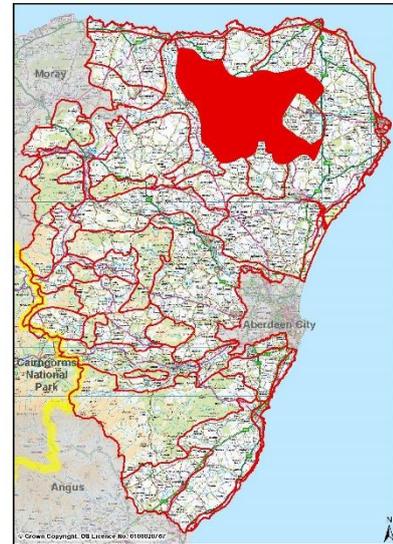
Conclusions

- Whilst cumulative issues are a key consideration for wind energy development within this LCT, the landscape could potentially accommodate wind turbines due to scale, landform, simple pattern, open character and relatively low value. The issue of cumulative assessment will need to be addressed in detail in the LVIA information provided for individual wind energy proposals located in this LCT.
- Susceptibility is decreased with turbine height.
- Susceptibility is heightened with proximity to adjacent sensitive LCTs.

(11) Undulating Agricultural Heartland (LCT 20)

Landscape Character description

The *Undulating Agricultural Heartland* Assessment Unit stretches from Maud in the east, to Turriff in the west. This LCT is generally open and expansive with a gently rolling landform, but with steeper ground in some places mainly along river valleys, forming a broad plain with open views. It has large arable fields, with post and wire fences and scattered broadleaved shelterbelts running along ridges and around farms. Moorland occurs in pockets around New Pitsligo and large conifer plantations in the north of the area. There are a number of smaller settlements such as New Deer, Cuminestown and Strichen.



Due to the overall limited relief and open character of the *Undulating Agricultural Heartland* Landscape Character Type overall, there are long views to its surroundings. Views are possible to landmark hills including Bennachie, Tap o'Noth, Knock Hill, Mormond Hill and Ben Rinnes.

Key sensitivities for consideration

Due to the scale, landform, simple pattern, open character of the landscape, and because it has fewer landscape related designations, there may be some potential to accommodate wind energy development in this LCT.

The open expansiveness of this landscape with long views to the surrounding landscape are a key characteristic. For all wind turbine height categories, sensitivity within the LCT is increased with close proximity to, or lack of screening from, settlements and Mormond Hill which could be visually compromised by prominently sited turbines seen on the skyline.



A vast rolling plain of large fields with limited relief and an open, expansive character.

Very large turbines (200m+) – High sensitivity

This category of wind turbine size has the potential to significantly dominate and be highly intrusive in this gently rolling landform with its broad open plain and long views.

Large/very large turbines (125-<200m) – High sensitivity

Turbines over this height category could be intrusive in the landscape, and dominate the relief of low hills and slopes.

Large turbines (80-<125m) – High-medium sensitivity

The generally simple, gently undulating landform of this LCT reduces susceptibility, although the development type could detract from its subtle ridges and broad shallow valleys if sited on or near them. Sensitivity is increased with close proximity to, or lack of screening from, settlements and Mormond Hill.

Medium/large turbines (50-<80m) – Medium sensitivity

Susceptibility decreases with reduced turbine size and the landscape may have the potential to accommodate change from this wind turbine size category where the field pattern is large and uniform, where turbines can be located away from small scale hills and slopes.

Small/medium turbines (30-<50m) – Medium-low sensitivity

Susceptibility to landscape and visual impact is decreased with this category of turbine size, and this large scale landscape could potentially accommodate this development type where sited to minimise visual clutter and where small settlements would not be visually dominated by the turbines.

Cumulative issues

The introduction of large turbines could accentuate cumulative effects. There is inter-visibility with existing tall masts and other communications infrastructure, as well as wind turbines operating at the north eastern boundary of the LCT with developments typically around Mormond Hill. Commercial scale turbines are infrequently located on low ridges and local hills. Small single turbines are associated with many farms.

Conclusions

- Due to scale, landform, simple pattern of large geometric fields, and generally open character, the landscape could potentially accommodate wind energy development.
- Overall, the scale, landform, pattern, open character and low value of the LCT reduces sensitivity to adverse impact from wind turbine developments.
- Landscape sensitivity is increased with proximity to Mormond Hill. Operational commercial scale turbine development can already be seen in the landscape with developments around Mormond Hill and the Braes of Gight area.
- Cumulative effects from existing commercial scale turbine developments together with other communications infrastructure in the area are a key consideration.

(12) Farmland and Wooded Policies (LCT 21)

Landscape character description

From Mintlaw in the east to Maud in the west, the landscape is characterised by its dominance of woodland cover. This is an unusual feature in northeast Aberdeenshire, and adds an enclosed, sheltered character.

The gently rolling landform of this *Farmed and Wooded Policies* Landscape Character Type is richly scenic with its diverse woodland combined with well managed farmland and many historic features. The landscape stands out above the lower lying adjacent *Undulating Agricultural Heartland*, and *Coastal Agricultural Plain* Landscape Character Types which lie either side of the character landscape.



Key sensitivities for consideration

A dominance of woodland is unusual in the north-east of Aberdeenshire, and creates the enclosed, sheltered character of this LCT. The inter-relatedness of its soft rolling landform with its landcover creates an attractive mix of policy woodlands/estates and farmland.

This is a pastoral landscape centred around the river valley of South Ugie Water. It is a well settled and well managed landscape with a unique mix of planned settlements, farmsteads, and more prosperous residences and farmhouses. The old estate woodlands are of high quality and integrity. The area also has a high value associated with its old estates, with Aden Country Park and Pitfour Estate as key features. Potential visual intrusion from turbines of all heights is a key consideration.



Policy plantings trace ridge lines and curve around valley sides. On lower slopes mixed farmland of fields are enclosed by hedgerows, punctuated by mature beech trees. Farms are compact.



The rolling nature of this landscape and extent of woodland cover creates an enclosed, sheltered character.

Very large turbines (200m+) – *High sensitivity*

Very tall turbines could dominate the generally small scale, contained nature of this character type.

Large/very large turbines (125-<200m) – *High sensitivity*

This wind turbine category could dominate the generally small scale, contained nature of this character type.

Large turbines (80-<125m) – *High sensitivity*

This wind turbine category could dominate the generally small scale, contained nature of this character type.

Medium/large turbines (50-<80m) – *High-medium sensitivity*

Wind turbines in this size category could have significant visual effect and erode the quality of the landscape and the setting it provides for its planned villages, farmsteads and manses.

Small/medium turbines (30-<50m) – *Medium sensitivity*

Turbines in this height category could cause visual intrusion and erode the quality of the landscape and the setting it provides in its locale.

Cumulative issues

A single commercial size wind turbine near Fetterangus appears inappropriately large against the scale of planted policy features near Drinnies Wood. However, in general this landscape is little affected by large built infrastructure.

Conclusions

- This high quality, high value landscape is sensitive to change from wind energy development.
- The landscape is sensitive to visual effects from turbines of all scales, although sensitivity is decreased somewhat with a lower turbine height.

(13) Broad Valley Lowlands - Aberdeenshire (LCT 22)

Landscape character description

This Landscape Character Type is characterised as a broad and gently undulating strath, with a distinctive patchwork of large open fields, crops and woodlands. The landscape provides a striking contrast with the backdrop of the rugged steep scarp of the Mounth uplands which rise to the northwest.

The upper steep moorland slopes mark the line of the Highland Boundary Fault and contain the broad valley lowlands. The lower, rounded ridge of Garvock Hill to the south provides a lesser degree of containment.



The open, low-lying colourful landscape of the Howe of the Mearns has a large patchwork of fields of red soil and bright green pastures or cereal crops, while at other times fields of rape and daffodils. Agricultural wealth from the most fertile soils in Scotland has nurtured the growth of villages, farms, estates and many historic buildings.

Key sensitivities for consideration

The striking juxtaposition of the flat, broad valley landform of the Howe of the Mearns and the backdrop of the steep flank of the Highland Boundary Fault line gives this landscape its distinct identity. Its special qualities are recognized by The Braes of the Mearns Special Landscape Area (SLA) which overlaps the LCT to the north.

Whilst the broad scale, flat landform and simple field pattern could potentially accommodate larger turbines, landscape sensitivity is increased by presence of the distinctive and visible dramatic backdrop of the rugged upland scarp and the setting it provides. The landscape is sensitive to development that could erode the clarity of expression of the Highland Boundary Fault, and the distinctive transition of character from upland to lowland. As such the open character and

visual sensitivity of the LCT is likely to significantly reduce the size and number of turbines that could be accommodated. Proximity to adjacent high value landscapes, notably the *Summits and Plateaux – Aberdeenshire* presents a key sensitivity.



The open, low-lying landscape of the Howe of the Mearns forms this LCT. Its large colourful patchwork of fields is in striking contrast to the rugged backdrop of the upland scarp of the Mounth.



The extremely broad and gently undulating strath of the Howe of the Mearns lies adjacent to the Highland Boundary Fault.

Very large turbines (200m+) – High sensitivity

The development type could erode key defining characteristics of the landscape. The landscape is sensitive to significant visual intrusion from very tall turbines of this category. There could be negative impacts on the indivisible relationship the farmed open landscape has with the Mounth upland backdrop, and its role as setting for local settlements.

Large/very large turbines (125-<200m) – High sensitivity

The development type could erode key defining characteristics of the landscape. The landscape is sensitive to potentially significant visual intrusion from this category of turbine. There could be undue negative impacts on the indivisible relationship the farmed open landscape has with the Mounth upland backdrop, and its role as setting for local settlements.

Large turbines (80-<125m) – High sensitivity

The key defining characteristics of the landscape are sensitive to visual intrusion and impact on the indivisible relationship the farmed open landscape has with the Mounth upland backdrop, and its role as setting for local settlements.

Medium/large turbines (50-<80m) – *High-medium sensitivity*

There may be some limited opportunities to accommodate this development category depending on location as this LCT has high levels of visibility across an extensive area and changes are likely to be widely seen.

Small/medium turbines (30-<50m) – *Medium sensitivity*

The landscape may be able to accommodate this category of wind turbine where the development can be sited to avoid visual intrusion.

Cumulative issues

There are several wind energy developments across the Howe of the Mearns. These are visible when viewed from the A90 and eastern areas. There is also inter-visibility with the adjacent *Coastal Farmed Ridges and Hills – Aberdeenshire* LCT where there are a number of commercial scale wind farms.

Wind farms at Tullo Hill at Hill of Garvock and Cloch-na Hill exert a visible influence, although located on separate landforms from the Mearns. The Midhill, Hillhead of Auquhirie, Clochnahill and St John's Hill wind energy developments all potentially visually affect this LCT and will need to be taken into consideration in the cumulative assessment of any future commercial scale wind energy project proposed for this LCT.

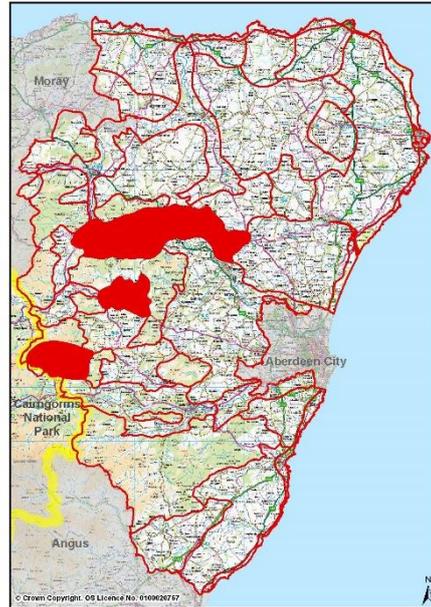
Conclusions

- Operational commercial scale turbine development already encroaches the landscape, and there are significant visual effects from wind energy developments in neighbouring LCTs.
- This LCT is of enhanced sensitivity on account of its open character, visual sensitivity and proximity to high value landscapes.

(14) Farmed Basin - Aberdeenshire (LCT 23)

Landscape character description

This Landscape Character Type is typified by its flat to gently undulating broad basins. The richly patterned farmed and settled character of the basin landscape strongly contrasts with the surrounding heather-capped and forested ridges and hills of the *Outlying Hills and Ridges*. These provide a scenic backdrop for three distinct basins lying in the centre of Aberdeenshire that collectively define this Landscape Character Type. The Insch Basin lies to the north, with Howe of Alford and Howe of Cromar further south and these collectively comprise the *Farmed Basin – Aberdeenshire* Landscape Character Type.



Key sensitivities for consideration

Overall this is a LCT of relatively high value, popular for recreation. The LCT is in close proximity to the Cairngorms National Park and is overlapped by three Aberdeenshire Special Landscape Areas (SLA), namely Bennachie, Upper Don Valley, and Howe of Cromar SLAs. These designations recognise the scenic qualities of the wider landscape and its importance to Aberdeenshire's landscape identity.

Sensitivity to wind turbine development is significantly greater in some parts than others, particularly where the surrounding uplands are higher and feature more pronounced peaks. In parts, landscape scale, flat landform and simple pattern reduces sensitivity. However its open character, value and visual sensitivity is likely to significantly limit the scale of wind turbines that could be accommodated. The scenic composition is sensitive to imposition by tall vertical man-made structures. As such, encroachment by turbines, particularly along basin sides could erode the integrity of the basin landforms, and how these are contained in the landscape by the higher upland areas.



A simple, flat to gently undulating broad valley floor contained by undulating slopes.



The 'Queens View': the richly patterned farmed and settled basins contrast strongly with the heather-capped and forested ridges and hills of the sensitive *Outlying Hills and Ridges* LCT.

Very large turbines (200m+) – High sensitivity

Very tall turbines could excessively dominate the broad valley basin floors. There could be significant adverse impact on the large scale, open character of this landscape.

Large/very large turbines (125-<200m) – High sensitivity

This development type could dominate the broad valley basin floors. There could be significant adverse impact on the large scale, open character of this landscape.

Large turbines (80-<125m) – High sensitivity

The development type could compromise the rural character of the landscape and dominate the broad valley basin floors.

Medium/large turbines (50-<80m) – High-medium sensitivity

This LCT may have some potential to accommodate turbines of this scale. However the landscape is sensitive to erosion of character, and this development

category could diminish the pastoral quality of the landscape and cause visual intrusion.

Small/medium turbines (30-<50m) – *Medium sensitivity*

This LCT may potentially accommodate small to medium size wind turbines often associated with farm steadings etc. However the landscape is sensitive to erosion of character, and the development type could diminish the pastoral quality of the landscape and cause visual effects.

Cumulative issues

Numerous small/medium size turbines relate to farm steadings as can be seen in the Inch Basin, with a number of larger turbines to the north in adjoining LCTs. The landscape is susceptible to cumulative impacts from wind energy development eroding the character of the richly patterned farmed and settled basins that comprise this LCT.

Conclusions

- Sensitivity is varied and largely depends on visibility with, and proximity to, surrounding uplands.
- Erosion of landscape character and loss of integrity of the basin landscape strongly contrasting with the surrounding uplands, is a key sensitivity.
- Much of this LCT is a high quality, high value landscape, and is part of the setting of the Cairngorms National Park.
- Landscape scale, flat landform and simple pattern reduces sensitivity in parts, however overall its open character, value and visual sensitivity may limit the scale of wind turbines that could be accommodated.

(15) Coastal Farmed Ridges and Hills - Aberdeenshire (LCT 24)

Landscape character description

The landscape to the southwest of Stonehaven is characterised by its extensive farmed, sweeping, rolling low hills. This large scale and open landscape falls gently to the coast where it is cut in by a series of narrow gorse-lined ravines.

Large fields of arable land and pasture with red-pink soils present a strong patchwork pattern influenced by different crops and ploughed fields.



The long-rounded Hill of Garvock and farmland around Glenbervie at the edge of the Highland Boundary Fault are integral features of the *Coastal Farmed Ridges and Hills – Aberdeenshire* Landscape Character Type.

Key sensitivities for consideration

Due to the landform, simple pattern, and generally large-scale open character of the landscape, the LCT could potentially accommodate wind energy development. However, for all wind turbine height categories, sensitivity is increased with close proximity to neighbouring sensitive LCTs and Special Landscape Area designations (SLAs). To the west lie the high hills of the *Summits and Plateaux – Aberdeenshire* LCT lying at the edge of the Cairngorms National Park.

This LCT is inextricably linked with the coast. The Southeast Aberdeenshire Coast SLA designation immediately to the east recognises its scenic qualities. The designation recognises the importance of views to and from the SLA, and for providing a wider setting for the numerous coastal villages and towns.

Westwards from the LCT lies the Braes of the Mearns SLA which recognises the special qualities of the strongly contrasting lowland and highly visible ridge

backdrop as viewed from the south east, and commanding views from its summits.



To the west, the lowland of the Mearns strongly contrasts with the high hills of the *Summits and Plateaux – Aberdeenshire LCT* located at the boundary of the Cairngorms National Park.



Eastwards, the landscape is strongly influenced by the coast.

Very large turbines (200m+) – High sensitivity

Very large turbines could dominate the landscape and cause significant visual intrusion.

Large/very large turbines (125-<200m) +) – High sensitivity

This category of wind turbine could dominate the landscape and cause significant visual intrusion.

Large turbines (80-<125m) +) – High sensitivity

This category of wind turbine could cause significant visual impact in the landscape and erode the distinctive coastal farmland character.

Medium/large turbines (50-<80m) +) – High-medium sensitivity

This category of wind turbine could impact the integrity of the landscape and erode its distinctive coastal farmland character. However, the landscape may

potentially accommodate this development category in some parts without causing significant visual intrusion.

Small/medium turbines (30-<50m) +) – *Medium sensitivity*

The landscape may present opportunities to accommodate change from this category of wind turbine. Turbines of this scale could potentially relate to the large and uniform field pattern and sited where visual impacts can be minimised.

Cumulative issues

Cumulative visual effects are a key sensitivity taking into account operational wind energy developments within this LCT. There are commercial size turbines and masts sited on ridges and on Garvock Hill. There are potential cross boundary cumulative effects with Angus at the southern boundary of the LCT.

Conclusions

- Landform, land pattern, and the open character of the LCT reduces sensitivity to some degree, and turbines could potentially be accommodated depending on height in some locations where visual impacts can be minimized.
- Sensitivity is heightened with proximity to adjacent sensitive landscapes.
- Cumulative effects are a key consideration with operational commercial scale turbine development already encroaching the landscape, notably with developments at Garvock Hill, and south west of Stonehaven.

(16) Farmed Strath - Aberdeenshire (LCT 25)

Landscape character description

This Landscape Character Type is defined by a lowland, undulating landform centred around the shallow valley of the Ythan River. The character landscape itself comprises the Ythan Valley and an associated area of stony farmland.

This farmed landscape has a small-scale pattern defined by dry stone dykes and patches of birch scrub. This contrasts with the more intensively surrounding farmed landscapes.



Key sensitivities for consideration

A landscape with qualities of a traditional upland farmed landscape with some areas of naturalness, and the attractive policies around Haddo House – this being the largest HGDL in the inventory, and is also a high value landscape being a Country Park. The integrity of this high quality landscape with its distinctive smaller scale patterned landscape is highly sensitive to disruption from wind energy development.



Primarily a lowland area of undulating landform centred around the shallow strath of the Ythan River.

Diverse structure and vegetation with open hills, sheltered hollows interspersed with more intensively farmed pockets. Dense policy woodlands differ in character to small blocks of conifers that fit well in the landscape.

Very large turbines (200m+) – *High sensitivity*

This wind turbine category could be out of scale in much of this landscape with its elements which contain and reduce scale such as more complex landform, and distinctive small scale field pattern.

Large/very large turbines (125-<200m) – *High sensitivity*

The complex landforms associated with this LCT are highly susceptible to change from this category of wind turbine development. This category of wind turbine could disrupt and detract from the integrity of the landform.

Large turbines (80-<125m) – *High sensitivity*

Wind turbines of this height could detract from the diverse, distinctive and more traditional farmland pattern.

Medium/large turbines (50-<80m) – *High-medium sensitivity*

This distinctive small scale patterned landscape presents a landscape highly sensitive to adverse impact from commercial scale wind energy development.

Small/medium turbines (30-<50m) – *Medium-low sensitivity*

Susceptibility decreases with a lower turbine height and there is likely to be more scope for the landscape to accommodate this height of turbine if they are not visually prominent.

Cumulative issues

Turbines at Hill of Skelmonae in the northern extent of this LCT are prominent in the landscape. Turbines in adjacent LCTs also have a visual influence.

Conclusions

- The distinctive smaller scale patterned landscape of this LCT and complex landforms associated with it are highly sensitive to visual impact from wind energy development.
- Susceptibility is decreased with a lower turbine height and there is likely to be more scope for the landscape to accommodate a smaller turbine if not visually prominent.

(17) Wooded Estates - Aberdeenshire (LCT 26)

Landscape character description

This Landscape Character Type lying between the Rivers Don and Dee Valleys, is a substantial undulating area of low hills, wide valleys, with dense woodland appearing as a consistent feature. The strong woodland structure is largely associated with numerous policy grounds. There is also mixed farmland with varying size and pattern of fields.



Long views across open farmland into the distance contrast with sudden enclosure by woodland which create a more intimate landscape experience. The prominent *Outlying Hills and Ridges* Landscape Character Type provides a backdrop to the west, with moorland spurs forming dark ridges across the skyline contrasting with the green lowlands.

Key sensitivities for consideration

This is a high value landscape with numerous historic and landscape related designations, and is well used by the local population and visitors for recreation. The overall landscape pattern, with its strong woodland structure and long views to prominent hills and ridges in the background which form a focus in these views is sensitive to visual intrusion from wind energy development.

The LCT is adjacent to sensitive landscapes of high scenic value which provide a backdrop. The Bennachie Special Landscape Area (SLA) designation lies to the north west, and the Dee Valley SLA is to the south. The designations emphasise the significance the wider area to Aberdeenshire's landscape identity.



Long views across open farmland into the distance contrast with sudden enclosure by woodland creates a more intimate landscape experience.



The prominent Grampian *Outlying Hills and Ridges* often form a focus in views, and Bennachie Special Landscape Area lies to the north west.

Very large turbines (200m+) – High sensitivity

Turbines of this size could dominate the landscape, interrupt long distant views, and cause visual conflict with the more intimate scale of the numerous enclosed pockets of woodland that characterise this LCT.

Large/very large turbines (125-<200m) – High sensitivity

Turbines of this size could dominate the landscape, interrupt long distant views, and cause visual conflict with the more intimate scale of the numerous enclosed pockets of woodland that characterise this LCT.

Large turbines (80-<125m) – High sensitivity

Turbines of this size may not be compatible with the landscape pattern of fields and dense woodland estates which are closely tied with the land relief, causing visual conflict and loss of integrity.

Medium/large turbines (50-<80m) – High-medium sensitivity

Introduction of turbines within this height category could significantly erode the integrity of this well managed landscape.

Small/medium turbines (30-<50m) – Medium sensitivity

Introduction of turbines of this scale could introduce visual clutter, and erode the quality of the landscape setting.

Cumulative issues

Wind energy development is limited within this LCT. There is some visual encroachment from wind turbine developments in LCTs north of the Wooded Estates. Wind turbines such as these seen at Hill of Tillymorgan, have the potential to be seen in combination with future wind energy projects in the area.

Whilst this Landscape Sensitivity Assessment does not directly address the issue of offshore wind turbines, the 11 Aberdeen offshore wind turbines have an extensive visual influence, including to some degree on this LCT.

Conclusions

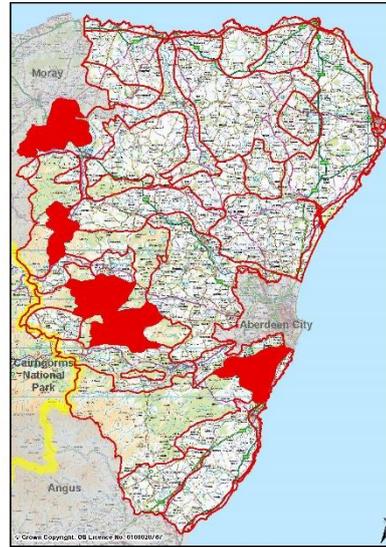
- Wind turbine development in this LCT may be limited by landscape pattern with its strong, consistent woodland structure, sensitive views, and high quality, high value landscape.
- Visual encroachment especially from operational commercial scale turbine development to the north of LCT26 brings cumulative pressure that needs to be fully addressed in the LVIA for any proposed wind energy development in the Wooded Estates.
- Sensitivity is heightened with proximity to *Outlying Hills and Ridges* LCT to the west.

(18) Farmed Moorland Edge - Aberdeenshire (LCT 27)

Landscape character description

This Landscape Character Type provides a transitional buffer between the higher moorland summits and plateaux and the lowland agricultural heartlands, sharing characteristics of both. An area immediately south of Aberdeen also demonstrates these landscape qualities.

This LCT has high scenic quality and a rich and diverse character, although it is predominantly agricultural. The dark heather and forest of the uplands contrast markedly with the smooth pastures of the lower lying land. The hills that lie within the surrounding summits such as Tap o'North and The Buck provide a scenic backdrop.



Key sensitivities for consideration

Due to the large scale, flat to undulating landform, with a generally simple pattern and open character, there may be some potential to accommodate wind energy development in this LCT. Sensitivity to wind energy development varies throughout, but for all wind turbine height categories, sensitivity is increased with close proximity to neighbouring sensitive LCTs and upland areas, as well as for contributing to the setting of Aberdeen to the south where the LCT partially lies within greenbelt.

This LCT comprises fringing areas of landscape with qualities of remote moorland, but within an essentially agricultural landscape. Views focus on pronounced hills of the surrounding uplands which backdrop the LCT. The transitional nature of the LCT heightens sensitivity to intrusion from wind turbines. Careful siting and design would be required to maintain the integrity of the 'interface' between upland and lowland, to maintain a distinction between the lowlands and the surrounding higher moorland of the summits and plateaux. The presence of four Special Landscape Area (SLA) designations in close proximity

emphasise landscape qualities of high scenic value, strong landscape identity, sense of place, and naturalness.



The *Farmed Moorland Edge* LCT forms a transition between upland areas and the lowland agricultural heartlands of Aberdeenshire, sharing many characteristics of both.



Essentially an agricultural landscape - small fields enclosed by dry stone dykes predominate, with some dereliction evident.

Very large turbines (200m+) – High sensitivity

Very tall turbines could dominate and disrupt the rich diverse nature of this landscape. The landscape pattern of small fields and drystone dykes make up large parts of this LCT and are highly susceptible to erosion of character from tall turbines.

Large/very large turbines (125-<200m) – High sensitivity

This development size category could dominate and disrupt the rich diverse nature of this landscape. The landscape pattern of small fields and drystone dykes make up large parts of the LCT are highly susceptible to erosion of character from tall turbines.

Large turbines (80-<125m) – High sensitivity

Turbines in this height category could visually intrude and disrupt the rich diverse nature of this landscape.

Medium/large turbines (50-<80m) – *Medium sensitivity*

Susceptibility is reduced with turbine size. However much of this LCT is sensitive due to its complex pattern and high value.

Small/medium turbines (30-<50m) – *Medium sensitivity*

Susceptibility is reduced with turbine size. There may be opportunities to accommodate the development type in less prominent areas to avoid visual intrusion.

Cumulative issues

Cumulative visual effects are a key sensitivity. To the south, this LCT is visually influenced by the wind farm at Meikle Carewe which is on higher ground in the adjacent Summits and Plateaux – Aberdeenshire LCT, as well as other commercial scale wind turbines in the general area of LCT 27, in the Rhynie area, and also adjacent to the Moray boundary, to the north, feature commercial scale wind turbines which will need to be taken into consideration in future cumulative assessments for proposed wind energy projects in these LCT areas. To the north lies the Clashindarroch development in the *Outlying Hills and Ridges* LCT. There are also potential cumulative effects with wind farms located in the Moray uplands.

Conclusions

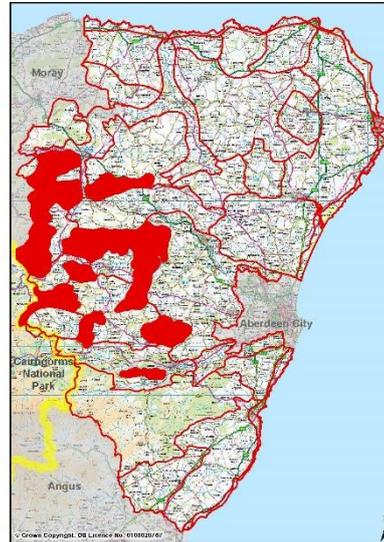
- This larger scale, flatter and undulating landform with simple pattern and generally open character could potentially accommodate wind energy development in less prominent areas.
- With proximity to neighbouring sensitive LCTs and upland areas, and as part of the setting for the City of Aberdeen, sensitivity is enhanced.
- Cumulative visual effects are a key sensitivity, and existing operational wind farms in adjacent LCTs have a visual influence.

(19) Outlying Hills & Ridges (LCT 28)

Landscape character description

These moorland spurs extending from the high mountains of the Cairngorms to the lower farmed coastal landscapes of the northeast are distinctive. Collectively these provide a large-scale transitional landscape character type.

Whilst each spur has its own character, overall the *Outlying Hills and Ridges* Landscape Character Type exhibits almost uniform landcover of heather moor and forest. When viewed from the lower lying farmland, they appear to coalesce into an almost continuous dark backdrop.



The interrelated system of highland ridges and peaks are integral to Aberdeenshire's landscape identity e.g. Bennachie and Tap o'Noth.

Key sensitivities for consideration

This is a high value landscape with high visual sensitivity. There are five Special Landscape Areas (SLA) in proximity to much of this LCT. Deveron Valley SLA lies to the north, with Bennachie, Upper Don Valley, and Howe of Cromar SLAs to the west, with Dee Valley SLA to the south. These designations reflect recreational value and emphasise landscape qualities that provide high scenic value and qualities integral to the landscape identity of Aberdeenshire.

The distinctive landform of dramatic outcrops provide recognisable local landmarks and focal points highly visible and ever present across a wide expanse of Aberdeenshire. This landscape provides a backdrop that is integral to the character of other adjacent sensitive LCTs and of surrounding lowlands, is a foreground to the Cairngorm massif and National Park, and has qualities of remoteness and wildness. Although large in scale and simple in pattern in some of its characteristics, introduction of wind turbine development could be highly intrusive, and erode valued landscape character. The hill settings and views from summits are sensitive to visual intrusion.



The dark heather and forest of the uplands contrast with the more managed pastures of the lower lying land. The moorland spurs extend from the central massif of the Cairngorms, forming prominent areas of high ground.

Very large turbines (200m+) – *High sensitivity*

This development category could significantly diminish the distinctive character of the landscape which is indivisibly linked to its surrounding areas. Turbines of this height and associated infrastructure could be intrusive and potentially impact on the recreational, community and cultural appreciation of the landscape.

Large/very large turbines (125-<200m) – *High sensitivity*

This development category could significantly diminish the distinctive character of the landscape which is indivisibly linked to its surrounding areas. Turbines of this height and associated infrastructure could be intrusive and potentially impact on the recreational, community and cultural appreciation of the landscape.

Large turbines (80-<125m) – *High sensitivity*

This development category could be prominent within the landscape, erode landscape character, and intrude on the recreational, community and cultural appreciation of the landscape.

Medium/large turbines (50-<80m) – *High sensitivity*

This LCT is highly susceptible to adverse impacts from this development category in this highly visually sensitive, high value landscape.

Small/medium turbines (30-<50m) – *High sensitivity*

This wind energy development category could be visually intrusive and erode landscape character in this high value landscape.

Cumulative issues

Cumulative visual effects from existing wind energy development and communication masts are a key sensitivity for this LCT. Operational wind farms located on the edges of the landscape spurs of outlying ridges impacting on the hill settings in views to these hills. Clashindarroch wind farm lies over hills to the west of Strath Bogie, and Kildrummy wind farm to the south.

To the west the landscape continues into Moray as *Open Upland* LCT. There are potential cumulative effects with a number of wind farms located in the Moray uplands, including Doronell, Edintore and other commercial scale wind energy development which can potentially be seen from the Aberdeenshire side of the authority boundary line.

Conclusions

- A high quality, high value landscape, sensitive to erosion of character from wind energy development of all scales beyond a domestic height turbine.
- This LCT is highly sensitive to intrusion from turbines, including from adjacent LCTs, which would have a strong visual influence on hill settings.
- Cumulative visual effects from existing wind energy development together with communication masts are a key sensitivity, including cumulative effects with wind farms located in the Moray uplands.

(20) Summits and Plateaux – Aberdeenshire (LCT 29)

Landscape character description

The high moorland plateaux encompass a vast landscape expanse, extending from the edge of the high mountains of the Cairngorms National Park almost to the coast at Stonehaven. This Landscape Character Type has a wild and exposed character with commanding views into the farmed lowland of Howe of the Mearns and the coast, and across to Deeside.



The landscape is characterised by its smooth rolling relief and rounded hill summits, with a distinct southern edge and a change of landform marking the Highland Boundary Fault. This presents a dramatic change from upland to lowland. The lower slopes assume a smaller scale and more intricate character with pastureland and clustered farms.

Key sensitivities for consideration

This is a high value landscape, highly visible and important in maintaining views to and from the highland backdrop. The LCT is expansive, regionally prominent, and is integral to the identity of Aberdeenshire. Large open areas of upland are rare in eastern Aberdeenshire and the moorland swathes of the LCT are a valuable landscape asset.

Special Landscape Area (SLA) designations which are in proximity highlight the sensitivity of the *Summits and Plateaux – Aberdeenshire* LCT. Clachnaben and Forest of Birse SLA to the west recognises the scenic qualities created by the strong rolling relief and distinctive hill profiles, its naturalness and relationship with the Cairngorms National Park. To the south lies the Braes of the Mearns SLA with its associated contrasting uniformly flat landscape of the Howe of the Mearns.

The key sensitivities of this LCT are: the landscape has characteristics of remoteness and wildness which are sensitive to encroachment from wind turbines; the dramatic juxtaposition from steep scarp slopes of these rugged uplands with the expansive low-lying farmed and settled Howe of the Mearns is a

key feature of the landscape to be maintained; and this is an expansive upland plateau area with high visibility extending across into Angus as the *Summits and Plateaux – Tayside LCT*.



An expansive upland plateau with a smooth rolling landform and rounded hill summits. Has a wild exposed character.



There is a dramatic change from upland to lowland, with smooth rolling relief and rounded hill summits contrasting with pastureland and clustered farms of a more intricate character on the surrounding lower ground.

Very large turbines (200m+) – High sensitivity

The very tall turbines of this size category located in this highly sensitive landscape could cause significant visual intrusion. The distinctive landscape character could become eroded and severely impacted by such large structures and associated infrastructure. This development category could intrude upon the recreational, community and cultural appreciation of the landscape.

Large/very large turbines (125-<200m) – High sensitivity

This development category could significantly diminish the wild and remote character of this LCT. Turbines of this height with associated infrastructure could intrude upon the recreational, community and cultural appreciation of the landscape.

Large turbines (80-<125m) – High sensitivity

This development category could be prominent within the LCT, erode valued landscape character, and intrude on the recreational, community and cultural appreciation of this landscape.

Medium/large turbines (50-<80m) – *High sensitivity*

This LCT is highly susceptible to adverse impacts from this development category, in this highly visually sensitive, high value landscape.

Small/medium turbines (30-<50m) – *High-medium sensitivity*

This development category could be visually intrusive and erode landscape character in this highly valued landscape.

Cumulative issues

There is large scale wind farm development in central and eastern sections of the upland part of this LCT at Midhill, with medium and small scale turbines at the base of slopes.

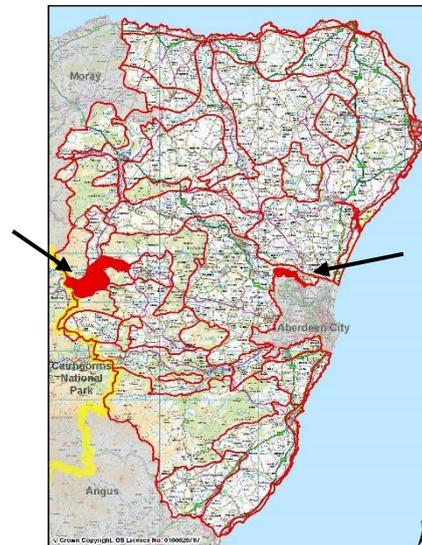
Conclusions

- A visually sensitive, high quality, high value landscape, sensitive to erosion of character from wind energy development.
- Cumulative visual effects from existing wind energy development are a key sensitivity.

(21) Narrow Winding Farmed Valley (LCT 30)

Landscape character description

This Landscape Character Type is defined by its steeply banked, strongly contained and winding river valley landform. These characteristics are a feature of the narrow stretches of the River Don valley upstream at the western edge of Howe of Alford, and downstream for a small section close to Aberdeen City on the northern side of the river.



Extending westwards from Aberdeen, the river valley landform becomes broader with a less distinct valley shape beyond LCT 30, and is therefore encompassed within the *Wooded Estates – Aberdeenshire* Landscape Character Type.

This *Narrow Winding Farmed Valley* Landscape Character Type has a strong historic character and includes estate parklands and buildings with striking bridges.

Key sensitivities for consideration

The landscape around the Upper Don provides the setting for a nationally important gateway to the Cairngorms National Park, and here the LCT sits within the Upper Don Valley Special Landscape Area which recognises the high scenic qualities of the valley. Downstream, the river valley landscape contributes a strong rural character and sense of tranquility, despite its proximity to the City. Here, the LCT lies within greenbelt and provides part of the wider setting for Aberdeen, although views are contained by the valley landform.

Overall, this LCT's contained valley profile, high quality, rural qualities and visibility increases its sensitivity to intrusion from wind energy development.



The landscape around the Upper Don provides the setting for the nationally important gateway to the Cairngorms National Park.



Downstream, the river valley landscape contributes a strong rural character and sense of tranquility, despite its proximity to the City.

Very large turbines (200m+) – High sensitivity

This development category could dominate the steeply banked, narrow and contained river valley landform, and cause significant visual intrusion.

Large/very large turbines (125-<200m) – High sensitivity

This development category could dominate the steeply banked, narrow and contained river valley landform, and cause significant visual intrusion.

Large turbines (80-<125m) – High sensitivity

This development category could dominate the steeply banked, narrow and contained river valley landform, and cause significant visual intrusion.

Medium/large turbines (50-<80m) – High sensitivity

This development category could dominate the steeply banked, narrow and contained river valley landform, and cause significant visual intrusion.

Small/medium turbines (30-<50m) – High-medium sensitivity

The heights of individual features, from clumps of trees to small woodlands and fields, could be easily dominated by turbines within this height category.

Cumulative issues

Wind turbine development is limited within this LCT, however the Upper Don Valley Special Landscape Area could potentially be visually affected by the presence of the Kildrummy wind farm

Conclusions

- A quality, high value landscape, susceptible to adverse impacts from all scales of wind energy development.
- The rural characteristics and scenic composition of this LCT could easily be eroded by encroachment from wind energy development.

(22) Broad Wooded and Farmed Valley (LCT 31)

Landscape character description

This Landscape Character Type is defined by the meandering River Dee along its eastern stretch. The river valley is a well-defined strath extending from Crathes to the west of Aberdeen, towards the Bridge of Dee at the city boundary.

The sides of the broad valley form a series of rolling terraces patterned with bands of birch and pine, interspersed with semi enclosed pastureland. Open farmland is more of a feature to the east and along some tributaries, contrasting with the more densely wooded valley further west in adjoining landscape character types. There are rich colours with contained views of woodland, water and buildings, with occasional distant glimpses of heather-clad hills.

To the east, the northern bank of the valley is within Aberdeen City. Upstream, through Deeside, the landscape continues as the *Broad Wooded Valley with Estates* Landscape Character Type.

Key sensitivities for consideration

Wind energy development could impact on this sensitive LCT with its high quality river valley landform forming a scenic setting for Lower Deeside, and sitting within greenbelt land.

The Dee Valley Special Landscape Area (SLA) designation extends westwards through this LCT and onwards through the Deeside area. The designation recognises the landscape's close association with Aberdeenshire's landscape identity, and the importance of the River Dee for tourism and recreation with its numerous historic houses and castles.

The LCT is sensitive to visual disturbance from wind turbines in the wider setting for potential intrusion in a landscape of special significance to regional identity. At the same, the landscape is sensitive at a more localised level where intricacy of



landscape pattern is susceptible. Particularly closer to Aberdeen City, the pastoral landscape with a varied sequence of open space, small scale farmland and enclosed becomes an increasingly distinctive and discernible pattern that is sensitive to disruption by the introduction of turbines.



Contained views draw attention to details such as woodland, water and buildings, set amongst pastoral areas of green fields.



Distant glimpses of heather-clad hills add a sense of the large scale of the Dee valley.

Very large turbines (200m+) – High sensitivity

The River Dee valley landscape is highly susceptible to change from this development category. This category of development could visually dominate, and diminish the integrity of the undulating, wooded river valley, and potentially affect the scenic setting it provides.

Large/very large turbines (125-<200m) – High sensitivity

The River Dee valley landscape is highly susceptible to change from this development height category. This category of development could visually dominate, and diminish the integrity of the undulating, wooded river valley. Wind energy development could intrude upon the scenic setting of the valley which is inextricably linked to defining Aberdeenshire's landscape identity.

Large turbines (80-<125m) – High sensitivity

The River Dee valley landscape is susceptible to change from this category of development. This category of development could visually dominate, and

diminish the integrity of the undulating, wooded river valley. Commercial scale wind energy development could intrude upon the scenic setting of the valley which is inextricably linked to defining Aberdeenshire's landscape identity.

Medium/large turbines (50-<80m) – *High sensitivity*

Introduction of turbines of this size could cause visual intrusion across the valley as seen from roads and settlements. The River Dee valley landscape is highly susceptible to change from the development type. This category of wind energy development could visually dominate, and diminish the integrity of the undulating, wooded river valley. Wind energy development could impact the scenic setting of the valley which is inextricably linked to defining Aberdeenshire's landscape identity.

Small/medium turbines (30-<50m) – *High sensitivity*

Introduction of turbines of this size could introduce visual clutter in the valley, adversely impact receptors such as roads and settlements. The River Dee valley landscape is susceptible to change from this development category. This category of development could visually dominate, and diminish the integrity of the undulating, wooded river valley. Wind energy development could intrude upon the scenic setting of the valley which is inextricably linked to defining Aberdeenshire's landscape identity.

Cumulative issues

Wind energy development is limited within this LCT.

Conclusions

- A high quality, high value landscape, susceptible to adverse impact from wind turbine development of all heights.
- This well defined strath together with adjacent LCTs upstream comprise a sensitive landscape river valley setting which is part of the gateway to the Cairngorms.
- The scenic composition of this LCT could become eroded through visual intrusion from wind energy development of all categories.

(23) Farmed and Wooded River Valleys (LCT 32)

Landscape character description

This Landscape Character Type is characterised by the well settled, wooded and diverse valleys of the Rivers Deveron, Bogie and Ythan. Forming a significant feature within the extensive agricultural heartlands of Aberdeenshire, and flowing out to sea at Banff/Macduff, these straths are largely farmed. There are mixed pastures and arable fields in the flatter floodplain areas, whilst on the valley sides the farmland is interspersed with mixed woodlands.



Both the Bogie and upper Deveron west of Huntly are strongly contained by adjacent hills and less intensively farmed. The Ythan valley has an open, broad character between Turriff and Fyvie, whilst east of Fyvie it is narrow and deeply incised.

Key sensitivities for consideration

The well settled, wooded and diverse river valleys form a distinctive and significant feature within the Aberdeenshire landscape. A small to medium scale valley landform of high landscape quality providing an important setting for settlements, and backdrop to castles and estates and with high recreational value. These qualities are acknowledged by the Deveron Valley Special Landscape Area (SLA) which covers much of this LCT.

The relatively small scale of this defined and contained valley landscape is sensitive to visual imposition from wind energy development within the valley, and is externally sensitive to visual encroachment from turbines in adjacent LCTs along the edges of the valleys.



Predominantly farmed, with woodlands and tree cover relating well to the landform.



A scenic and distinctive river valley landscape contained by rolling hills. This is a landscape with a high degree of integrity.

Very large turbines (200m+) – *High sensitivity*

This scale of turbine could excessively dominate the landscape, and erode the integrity of this distinctive river valley character.

Large/very large turbines (125-<200m) – *High sensitivity*

This category of turbine size could excessively dominate the landscape, and erode the integrity of this distinctive river valley character.

Large turbines (80-<125m) – *High sensitivity*

The integrity of the landscape pattern could be compromised by turbines within this height category which could dominate, visually detract from, and erode, the farmed and wooded character of the valley.

Medium/large turbines (50-<80m) – *High-medium sensitivity*

The integrity of the landscape pattern could be compromised by turbines within this height category which could dominate, visually detract from, and erode, the farmed and wooded character of the valley.

Small/medium turbines (30-<50m) – *High-medium sensitivity*

Turbines within all the height categories could adversely impact the distinctive setting this landscape provides for settlements. Wind energy development could add visual clutter, erode the quality of the landscape setting for the local

population, and impact on recreational enjoyment for visitors. There may be some potential in small parts of the LCT to accommodate change from turbines within this height category type.

Cumulative issues

The landscape is sensitive to cumulative effects, also taking into account wind farms in neighbouring Landscape Character Types and along the edges of the valleys. Visibility of the operational Glens of Foudland, Dummuies and Clashindarroch wind farms run through parts of the Deveron Valley and into Moray where the Deveron Valley landscape extends. Generally, this LCT is potentially visually affected by a number of commercial scale wind turbines located in its area or context.

Conclusions

- A visually sensitive, quality, high value landscape, sensitive to visual intrusion and erosion of character from wind energy development.
- Cumulative visual effects from existing wind energy development are a key sensitivity.

(24) Broad Wooded Valley with Estates (LCT 33)

Landscape character description

This Landscape Character Type is defined by the richly wooded, broad valley setting of the River Dee. This valley landscape is grand in scale and associated with the presence of numerous wooded estates and attractive small towns. The Water of Feugh, although smaller in size than the Dee, is dramatic with its rocky chasm and sequence of waterfalls. Both river valleys exhibit overall a similar mix of wooded slopes together with open fields and settlement.



From east to west, the landscape transitions from a pastoral area of green fields and shady woods to a more highland character, with steep wooded sides rising to moorland as the valley continues into the Cairngorms National Park.

Key sensitivities for consideration

Being closely associated with Aberdeenshire's landscape identity this high quality LCT is highly sensitive to intrusion from wind turbine development. The landscape setting provides a nationally important gateway to the Cairngorms National Park with its expansive views along the valley and up to surrounding uplands. The Dee Valley Special Landscape Area (SLA) designation covers most of this LCT recognising the importance of the River Dee for its scenic and recreational value, and for contributing sense of place and identity.

This LCT is sensitive to visual imposition from wind energy development within the valley, and is externally sensitive to visual encroachment from turbines in adjacent LCTs along the edges of the valleys.



A large scale valley landform of undulating slopes and hills, with flat valley floors. Pastoral green fields and shady woods transition to a more highland character towards the Cairngorms National Park.



Whilst views along the strath and out to surrounding uplands give a sense of scale, this richly wooded landscape provides a strong sense of containment, particularly on lower slopes.

Very large turbines (200m+) – High sensitivity

Wind turbines in this size category could dominate the valley area and diminish the integrity of the landscape. Turbines could appear prominent, and significantly detract from the richly wooded backdrop on the valley sides which form an integral feature of the landscape and setting for historic estates and traditional settlements.

Large/very large turbines (125-<200m+) – High sensitivity

Turbines of this height category could dominate the valley and diminish the integrity of the landscape. Turbines could appear prominent, and significantly detract from the richly wooded backdrop on the valley sides which form an integral feature of the landscape and setting for private estates and traditional settlements.

Large turbines (80-<125m) – High sensitivity

Turbines in this height category could dominate the valley, diminish the integrity of the landscape, and adversely impact on the setting of numerous villages, towns and estates, affecting scale and/or historic character.

Medium/large turbines (50-<80m) – *High sensitivity*

Turbines could be visually prominent and compromise the setting of the numerous villages, towns and private estates in this well settled landscape.

Small/medium turbines (30-<50m) – *High-medium sensitivity*

This large-scale valley could potentially accommodate this development category in small parts without widespread adverse impacts on the existing framework of trees and development.

Cumulative issues

There are few wind turbines in this landscape. No cumulative issues are identified at the time of writing this planning advice.

Conclusions

- A quality, high value landscape along this large-scale river valley landscape with its rich scenery and strong cultural and historic associations.
- A landscape highly susceptible to adverse impacts from wind energy development. The valley's richly wooded backdrop provides a scenic setting to numerous historic estates and traditional settlements is likely to be unsuitable for commercial scale wind turbine development.

5. Summary findings

This study has identified the underlying landscape sensitivity of the Aberdeenshire landscape to wind energy development in relation to each of the wind turbine height categories assessed. In addition, known cumulative issues arising from existing and approved wind turbine applications have been indicated. Overall, this helps provide a landscape sensitivity based indication of future wind energy development opportunities and constraints in Aberdeenshire.

This section firstly summarises the existing pattern of wind energy development interest in Aberdeenshire. It then considers existing and emerging trends and issues, and finally identifies where the main opportunities and constraints to future wind energy development lie across Aberdeenshire in relation to landscape sensitivity.

5.1 Development pattern - consented wind turbine applications

Onshore commercial scale wind energy development has been taking place in Aberdeenshire for over two decades. The scope of this study did not include a detailed cumulative assessment, however it does identify where wind energy development interest has been focused to date. Figure 5, in Appendix 2 provides a map of all consented wind turbine applications to date.

Each individual wind energy project will have to fully assess the predicted cumulative effects issue at their time of making a planning application. Their proposed development, in accordance with the most up to date general policy on assessing cumulative effects at the time of application, will need to take into consideration all known wind energy projects that fall within a proposed scheme's Zone of Theoretical Visibility (ZTV)⁷.

Note: Information on wind turbine planning applications to date is provided for reference only in relation to landscape sensitivity. Future wind energy projects will be required to provide detailed and up to date cumulative assessment

⁷ A Zone of Theoretical Visibility (ZTV) is the area over which a development could theoretically be seen. The production of a ZTV is usually one of the first steps in LVIA, helping to identify where impacts will be considered.

information in line with industry best practice and policy at the time of making a planning application.

5.2 Current and emerging trends and issues

The following trends and issues are identified in relation to onshore wind energy development interests to date within Aberdeenshire:

- The greatest number of consented onshore large-scale wind turbine applications to date primarily fall within the farmed lands and plains characterized by the following Landscape Character Types (LCT):

LCT 24 Coastal Farmed Ridges and Hills – Aberdeenshire;
LCT 14 Gently Undulating Coastal Farmland;
LCT 17 Coastal Agricultural Plain;
LCT 20 – Undulating Agricultural Heartland;
LCT19 Farmed Rolling Ridges and Hills; and
LCT 27 Farmed Moorland Edge – Aberdeenshire.

Large scale wind farms are also located in upland areas associated with LCT *29 Summits and Plateaux - Aberdeenshire.*

- Commercial scale wind energy development applicants are now proposing significantly taller turbines than seen previously. The recently consented Fetteresso Wind Farm application will introduce turbines ranging from 149 to 200m to tip height. (The turbines previously approved at Fetteresso were 125m to tip height, and were at that time the tallest in Aberdeenshire).
- Singular and wind farms of large or very large wind turbines are concentrated in areas stretching from Huntly to Ellon/St Fergus, with others in the vicinity of Stonehaven, Laurencekirk and Inverboyndie/Banff.
- Extensions to operational wind farms are introducing significantly larger turbines than the original development, notably Mid Hill Wind Farm, Fetteresso. It is anticipated that the coalescing of developments is likely to be seen increasingly more often.
- Commercial scale wind energy development in neighbouring Moray and Angus, notably on upland areas close to the Aberdeenshire boundary present inter-visibility and cumulative issues for the Aberdeenshire area and need to be taken into consideration by wind energy development applicants. This is particularly in relation to detailed cumulative assessment work for any proposed development with a Zone of Theoretical Visibility (ZTV) that extends beyond the local authority boundary.
- To date there has been no repowering of older operational wind farm developments in Aberdeenshire. It is anticipated that there will be a phase of repowering operational wind farms. With regards to landscape and visual

issues, any proposals to repower existing wind energy facilities should be determined independently of any prior planning conclusions/decisions.

5.3 Opportunities and constraints

The following conclusions are drawn in terms of whether a particular Landscape Character Type (LCT) is able to accommodate change through the introduction of wind turbines without undue negative effects on its underlying landscape character and qualities. These conclusions are drawn based on the assessments undertaken for this Planning Advice document. These assessments considered the underlying landscape character as its baseline, i.e. the combination of elements and features that make one landscape (LCT) area distinct from another. This is based on the premise that whilst landscape, attitudes and perceptions are inevitably subject to change over time, the fundamental characteristics and qualities that distinguish one landscape from another have underlying endurance.

5.3.1 Summary findings – landscape sensitivity

This study has considered the susceptibility of key landscape and visual characteristics of 24 assessment units (i.e. Landscape Character Types) within the Aberdeenshire area, to identify relative landscape sensitivities with regard to the turbine height categories outlined in Section 3. The landscape value associated with the assessment unit was also the subject of appraisal, with the identified landscape character, visual sensitivities and value combined to arrive at an overall sensitivity rating.

The sensitivity maps provided in Figure 4 series (see Appendix 2) provide an overview of the key findings. These maps illustrate the sensitivity of the landscape assessed in the study area to each wind turbine height category (or typologies), illustrating where the landscape is most and least sensitive to change by each of those categories.

Conclusions can be drawn from the sensitivity assessment overall as to where the opportunities and constraints to wind energy development associated with landscape impact broadly lie across the Aberdeenshire landscape. Whilst the following outlines where there is most and least potential to accommodate wind turbines in terms of landscape sensitivity, these conclusions are indicative only

and developers/applicants should carry out a full Landscape and Visual Impact Assessment, including assessment of cumulative affects for individual commercial scale wind energy proposals.

Note: With regard to landscape related issues and typically for large scale wind energy development, from Aberdeenshire Council's perspective a landscape's original identified (i.e. prior to any wind energy development) landscape sensitivity will be highlighted and taken into consideration during the determining process of future wind energy planning applications.

5.3.2 Opportunities

Generally the main underlying potential opportunity for wind energy development in relation to landscape sensitivity lies within some of the larger scale more extensive lowland Landscape Character Types, notably, the coastal farmland and agricultural heartland LCTs identified below. These may be able to accommodate larger turbines sizes. This is based on a combination of one or more factors including: suitable larger scale simple landforms and landscape patterns; existing development or land use affecting character; lower visual sensitivity and lower landscape value, although not all of these factors are always present in each case.

The Landscape Character Types (LCT) with most potential for future wind energy development are farmland areas, predominantly those covered by the following LCTs.

Coastal farmland

The coastal farmland Landscape Character Types identified as having the most potential to appropriately site commercial scale wind energy development are:

LCT 14 *Gently Undulating Coastal Farmland*

LCT 16 *Coastal Farmland with Ridges and Valleys*

LCT 17 *Coastal Agricultural Plain - Aberdeenshire*

LCT 24 *Coastal Farmed Ridges and Hills - Aberdeenshire*

Agricultural heartland

Some of Aberdeenshire's agricultural heartland could potentially accommodate commercial scale wind energy development in less prominent areas. However, significant numbers of wind turbines are already located in some of these areas which may limit future opportunity for locating commercial scale wind energy development in relation to landscape sensitivity. These LCTs are:

LCT 20 Undulating Agricultural Heartland

LCT 18 Low Hills and Basins

LCT 23 Farmed Basin - Aberdeenshire

LCT 25 Farmed Strath - Aberdeenshire

5.3.3 Constraints

Locations that are most sensitive to erosion of key landscape and visual characteristics from wind energy development are predominantly LCTs identified as having importance to the identity of the Aberdeenshire landscape, with high visual prominence, high relative remoteness, and/or recreational value. The LCTs falling within this category primarily relate to the **coastal, upland and river valley** landscapes. All LCTs are assessed as being highly sensitive to impact from wind turbine development of a height above 125m tall. However, 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 potential for development. It is not the purpose of sensitivity judgements to say that development should be accepted or rejected on account of a sensitivity rating.

Coastal LCTs

The coastal LCTs have been assessed as highly sensitive to commercial scale wind turbines because these are high quality, high value landscapes being largely covered by the Special Landscape Areas designation, and by their limited physical extent. Although they are open, windswept and of medium to large scale which might suggest suitability for wind energy development, the coastal location renders them visually sensitive as tall vertical structures could

excessively dominate in the open coastal setting. The coastal LCTs are also highly susceptible to visual influence from wind turbine development in neighbouring LCTs.

The coastal LCTS are:

LCT 10 Cliffs and Rocky Coast - Aberdeenshire

LCT 11 Fragmented Rocky Coast

LCT 12 Beaches, Dunes and Links - Aberdeenshire

LCT 13 Raised Beach Coast – Aberdeenshire

River Valley LCTs

The river valley landscapes provide high quality, richly scenic, and are largely designated as Special Landscape Areas. These LCTs are important for providing a nationally important gateway setting to the Cairngorms National Park, notably in Donside and Deeside, as well as regionally significant settings with recreational value. All of these LCTs are highly sensitive to visual effects from wind turbines:

LCT 30 Narrow Winding Farmed Valley

LCT 31 Broad Wooded and Farmed Valley

LCT 32 Farmed and Wooded River Valleys

LCT 33 Broad Wooded Valley with Estates

Upland LCTs

The upland areas have particularly sensitive landscapes on account of their extensive visibility, with key viewpoints and features susceptible to visual effects from wind energy development. These upland LCTs are:

LCT 28 Outlying Hills and Ridges

LCT 29 Summits and Plateaux.

5.4 Concluding statement

This Planning Advice provides a strategic appraisal of the relative sensitivity of the Aberdeenshire landscape to onshore wind energy development, based on NatureScot's Landscape Character Assessment framework, identifying where the main opportunities and constraints lie for future wind energy development. This should assist in guiding development towards better locations for wind turbines in the interests of maintaining the integrity and quality of Aberdeenshire's distinctive landscape.

This planning advice establishes a guide for landscape sensitivity to wind energy development in the interests of preventing erosion of the combination of elements and features that establish landscape quality and make one landscape area distinct from another. This assessment has been undertaken on the underlying landscape character (i.e. prior to any wind energy development), using this as its baseline for the study. It is the responsibility for individual wind energy planning applicants to establish their site-specific landscape and visual baseline for, and submit, an assessment of the cumulative landscape and visual effects through the LVIA process.

Appendix 1: Sensitivity assessment tables

The sensitivity tables are annexed as a separate pdf (see Appendix 1 – Sensitivity assessment tables).

The following provides a key to the sensitivity ratings that were applied to the assessments:

Landscape Character
<p>“High”: Most or all of the key characteristics of the Landscape Character Type (LCT) are highly sensitive to change from the wind energy development type, with widespread and severe adverse impacts likely to arise.</p> <p>“High-medium”: Key characteristics are sensitive to change from the development type. There is conflict with some criteria, but the landscape may be able to accommodate change in very small parts.</p> <p>“Medium”: Some of the key characteristics are sensitive to change from the development type. There is some ability to accommodate development in some situations without widespread or severe change.</p> <p>“Medium-low”: Fewer of the key characteristics are sensitive to change from the development type. There may be opportunities to accommodate change in many locations without widespread or severe effects on the assessment criteria.</p> <p>“Low”. Key characteristics are unlikely to be adversely affected by the development type. The development type may be accommodated without widespread or severe adverse impacts on the landscape.</p>
Visual amenity
<p>“High”: A Landscape Character Type (LCT) with extensive internal and external visibility on account of its characteristics. The wind energy development type is likely to be highly visible to a wide range and number of sensitive receptors, and conflict with all or most criteria.</p> <p>“High-medium”: The development type is likely to have extensive internal and external visibility across most of the landscape, and there is some conflict with the criteria, but the landscape has some potential to accommodate change in very small parts.</p> <p>“Medium”: The development type is potentially visible to a wide range of receptors, and there is some conflict with the criteria, but the landscape has a degree of ability to accommodate development in some situations without widespread or severe change.</p>

“Medium-low”: Fewer of the criteria are sensitive to change from the development type. There may be opportunities to accommodate change in many locations without widespread or severe impacts on the receptors.

“Low”. The receptors are unlikely to be adversely affected by the development type which may be accommodated without widespread significant adverse impacts on the landscape.

Landscape value

“High”:.The landscape is covered and strongly influenced by landscape related designations, has natural, cultural or historical designations, and has strong recreational, community and cultural associations. There would be significant and widespread impact from the development type.

“High-medium”: The landscape is in part covered but strongly influenced by landscape related designations with some natural, cultural or historical designations, and some recreational and community associations, or the landscape may have some potential to accommodate change in very small parts.

“Medium”: The landscape is at least in part covered by landscape related, natural, cultural or historical designations with some recreational and community associations, or the landscape has a degree of ability to accommodate development in some situations without widespread or severe change.

“Medium-low”: The landscape has few landscape related, natural, cultural or historical designations, little recognised or apparent landscape value, and limited recognised related interests and limited recreational or community associations. There may be opportunities to accommodate change in many locations without widespread or severe impacts.

“Low”. The landscape has no natural, cultural or historical designations, no recognised or apparent landscape value, and no recognised related interests nor recreational or community associations. The development type may be accommodated without significance adverse impact on community, cultural or perceptual value.

Appendix 2: Maps

The following maps are annexed as a separate pdf (see Appendix 2 Maps):

Figure 1– Study Area

Figure 2 – Study Assessment Units

Figure 3 – Landscape related designations and Landscape Character Types (LCT)

Figure 4 series – Landscape Sensitivity ratings for each of the LCTs:

Figure 4.1 Small-Medium Turbines 30-<50m

Figure 4.2 Medium/large turbines 50-<80m

Figure 4.3 Large turbines 80-<125m

Figure 4.4 Large/very large turbines 125-<200m

Figure 4.5 Very large turbines 200m+

Figure 5 – Consented wind turbine applications in the study area

Appendix 3: Glossary

Term	Meaning
Landscape capacity	<p>The amount of specified development or change which a particular landscape and the associated visual resource is able to accommodate without undue negative effects on its character and qualities.</p> <p>The more focused concept of Landscape Sensitivity is now preferred, as specifying an amount of change would depend on so many other factors.</p>
Landscape sensitivity	<p>A measure of the ability of a landscape to accommodate change arising from specified development types (or land management) without undue negative effects on landscapes and their value. It combines professional judgements of the susceptibility of the landscape to change, and the values attached to the landscape.</p>
Landscape susceptibility	<p>The degree to which a defined landscape including its character and associated visual resources might respond to specified development types without undue negative consequences.</p>
Landscape value	<p>The relative value attached to different landscapes by society/the community for a range of reasons, such as recreation or historic interest.</p>
Landscape and Visual Impact Assessment (LVIA)	<p>A LVIA forms part of the overall environmental assessment requirement for a proposed wind energy development. It is a technique used to assess the effects of change on the landscape and is formulated to inform the design decision process including site selection, layout design and identity of the most fitting wind turbine specification. It can also be used as part of the appraisal of development proposals and planning applications. Both 'visual' and 'physical' impacts are assessed, including construction impacts such as possible environmental impacts such as peat slides and creation of borrow pits, together with ancillary development. A LVIA is carried out as per agreed industry best practice based on the up to date Guidelines for Landscape and Visual Impact Assessment and national policy/guidance from NatureScot.</p>
Wind energy development	<p>This guidance is for wind turbine and wind farm developments that fall within the height to blade tip categories defined in Section 3. For the purposes of</p>

	<p>this study, it is assumed that larger turbines are more likely to form part of a more extensive, commercial 'wind farm'.</p>
<p>Zone of Theoretical Visibility (ZTV)</p>	<p>The area over which a development could theoretically be seen, based on a 3D digital model of the topography within a study area. The ZTV usually presents a 'bare ground' scenario – i.e. a landscape without screening structures or vegetation.</p>

Appendix 4: Resources

Local policies and advice:

Aberdeenshire Local Development Plan 2023:

<https://aberdeenshire.gov.uk/planning/plans-and-policies/ldp-2023/>

[PA2023-21 Planning Advice – Assessing Wind Energy Developments](#)

[Strategic Landscape Capacity Assessment for Wind Energy in Aberdeenshire \(2014\)](#)

National guidance:

NatureScot Landscape Sensitivity Assessment Guidance (Methodology):

<https://www.nature.scot/professional-advice/landscape/landscape-tools-and-techniques/landscape-sensitivity-studies>

NatureScot Onshore wind energy advice available at:

<https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/renewable-energy/onshore-wind-energy>

The Landscape Institute and the Institute of Environmental Management and Assessment, Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, 2013