

Code: UKCAL-CWF-CON-EIA-RPT-00005-5002

# Volume 5 Proposed Development (Onshore)

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Chapter 2 Land Use

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# **Volume 5 Chapter 2 Land Use**

Code	UKCAL-CWF-CON-EIA-RPT-00005-5002	
Revision	Issued	
Date	18 October 2024	

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# **Acronyms and Abbreviations**

AMSC Approval of Matters Specified in Condition		
AWI	Ancient Woodland Inventory	
СЕМР	Construction Environmental Management Plan	
CIA	Cumulative Impact Assessment	
CLO	Community Liaison Officer	
СМЅ	Construction Method Statement	
EIA	Environmental Impact Assessment	
EIAR	Environmental Impact Assessment Report	
GPS	Global Positioning System	
HDD	Horizontal Directional Drilling	
LDP Local Development Plan		
MD-LOT Marine Directorate Licencing and Operation		
MLWS	Mean Low Water Spring	
ммр	Materials Management Plan	
ост	Open Cut Trench	
ONEC	Onshore Export Cable Corridor	
OnTI	Onshore Transmission Infrastructure	
OS	Ordnance Survey	
OWF	Offshore Wind Farm	
PPP	Planning Permission in Principle	
PWS	Private Water Supply(ies)	
RLB	Red Line Boundary	



SSEN-T	Scottish and Southern Electricity Networks Transmission (SSEN-T)
ТЈВ	Transition Joint Bays

# **Executive summary**

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This chapter of Volume 5 of the Environmental Impact Assessment Report (EIAR) assesses the potential environmental effects from the Proposed Development (Onshore) on land use receptors. This includes direct impacts to agricultural land and soils, and forestry and woodland as well as cumulative and inter-related effects and inter-relationships with other technical disciplines.

The assessment considers the impacts to agricultural land and soils and forestry and woodland and any resulting environmental effects. The chapter considers temporary, construction impacts only as land will be reinstated following construction, operational effects are deemed negligible. Decommissioning impacts have been scoped out of the assessment, given buried infrastructure will remain in-situ.

The following potential impacts to land use receptors were identified:

- Direct and temporary loss of agricultural land and soils.
- Direct and temporary loss or removal of forestry and woodland.
- Potential cumulative temporary losses of agricultural land and soils with other developments.

The potential impacts on woodland, trees and habitats with respect to their ecological value has been considered within Volume 5, Chapter 3: Terrestrial Ecology and Biodiversity. The loss of peatland, peaty soils and carbon storage has been considered in Volume 5, Chapter 7: Geology, Soils and Contaminated Land.

The assessment has taken account of embedded mitigation measures including:

- Reinstatement of agricultural land following construction to existing agricultural use.
- Engagement with landowners throughout the EIA process as part of the evolution of the design process and ongoing through the development lifecycle.
- Avoidance of high value agricultural and forestry land as far as practicable as part of the design of the Onshore Export Cable Corridor (ONEC). Notable forested areas in the study area will also be avoided and impacts minimised by using trenchless crossing methodologies, siting of infrastructure at detailed design and by establishing root and canopy protection zones.
- Field drains will be protected as far as practicable and impacts to field drains as a result of construction activities will be remedied as part of the reinstatement process. Livestock water supplies will also be protected and alternative supplies provided where access could be compromised by works.
- Prevention of soil borne pests and diseases through adoption of precautions as recommended by Scotland's Environment and Rural Services.

No significant effects were identified for forestry and woodland and as a result, no additional mitigation has been proposed above and beyond the embedded mitigation outlined in this chapter.

Significant effects were identified for agricultural land on the basis that certain temporary infrastructure required for construction across two phases of works such as haul roads may be present for extended durations. As a result, secondary mitigation has been proposed in the form of bespoke and targeted landowner consultation to minimise effects at any one location. Following the application of secondary mitigation, no significant residual effects are anticipated. Overall, no significant residual effects to any of the identified receptors are identified.

# 2 Land Use

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# 2.1 Introduction

- 2.1.1.1 This chapter of the Environmental Impact Assessment Report (EIAR) identifies the potential effects on land use associated with the construction, operation and decommissioning of the of the Proposed Development (Onshore) landward of Mean Low Water Spring (MLWS).
- 2.1.1.2 The following supporting studies relate to and should be read in conjunction with this chapter:
  - Impacts relating to socio-economics, tourism and recreation have been considered in Volume 6, Chapter 2: Socioeconomics, Tourism and Recreation;
  - Impacts on woodland, trees and habitats with respect to their ecological value have been assessed within Volume 5, Chapter 3: Terrestrial Ecology and Biodiversity;
  - The loss of peatland, peaty soils and carbon storage has been considered in Volume 5, Chapter 7: Geology, Soils and Contaminated Land; and
  - Amenity impacts (that is impacts relating to noise, traffic, visibility and heritage setting) have been considered in:
    - o Volume 5, Chapter 4: Landscape and Visual;
    - o Volume 5, Chapter 5: Terrestrial Archaeology and Cultural Heritage;
    - o Volume 5, Chapter 8: Airborne Noise and Vibration; and
    - o Volume 5, Chapter 9: Traffic and Transport.

# 2.2 Legislation, Policy and Guidance

- 2.2.1.1 Volume 1, Chapter 2: Legislation and Policy, of this EIAR sets out the policy and legislation associated with the Proposed Development (Onshore).
- 2.2.1.2 Legislation, Policy and Guidance that relate to the land use assessment are identified and described in Table 2-1.

#### Table 2-1: Legislation, policy and guidance

Relevant Legislation, Policy and Guidance	Description
Legislation	
The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (Scottish Parliament, 2017 <sup>1</sup> )	Regulation 7(2) Paragraph 2(a) stipulates the environmental sensitivity of the existing and approved land uses likely to be affected by the Proposed Development (Onshore) must be considered. The Environmental Impact Assessment (EIA)
	regulations also set out the requirement for a description of the factors specified in regulation likely to be significantly affected by the development including "[] land (for example land take), soil."
Agriculture and Rural Communities (Scotland) Bill [As Introduced] (Scottish Parliament, 2023 <sup>2</sup> )	Following the UK's exit from the European Union (EU) and therefore also the Common Agricultural Policy subsidy scheme, the Scottish Government is bringing forward this Bill to provide support to farming, forestry and rural communities. If passed as introduced, Scottish Ministers will be required to prepare a five year Rural Support Plan.
Policy	
	NPF4 is a long-term plan for Scotland and outlines the strategic objectives for development and infrastructure. Part 2: National Planning Policy, Section 5 Soils,
National Planning Framework 4 (NPF4) (Scottish Government, 2023 <sup>3</sup> )	Policy 5(b) makes provision for minimising the disturbance to soils from development and states: "Development proposals on prime agricultural land
	<ul> <li>[] will only be supported where it is for:</li> <li>Essential infrastructure and there is a specific location need and no other suitable site.</li> <li>The generation of energy from renewable sources"</li> </ul>

Relevant Legislation, Policy and Guidance	Description
	The Aberdeenshire Local Development Plan (LDP) intends to inform and advise developers and communities on the principles that built development should follow and where it should be located.
	Section 12: Protecting Resources makes the following provisions relevant to this chapter:
	Policy PR1 Protecting Important Resources
Aberdeenshire Local Development Plan 2023 (Aberdeenshire Council, 2023 <sup>4</sup> )	"PR1.1 We will not approve developments that have a negative effect on important environmental resources associated [] prime agricultural land, peat and other carbon rich soils, open space, and important trees and woodland. In all cases development which impacts on any of these features will only be permitted when public economic or social benefits clearly outweigh any negative effects on the protected resource, and there are no reasonable alternative sites."
	"PR1.5 Prime agricultural land is defined as classes 1, 2 and 3.1 of the Soil Survey for Scotland, Land Capability for Agriculture series. Land falling within this classification should not be developed unless it is essential, allocated in the Local Development Plan or an independent assessment of the site confirms a lesser quality of land. For clarity, time-limited proposals for renewable energy generation or mineral extraction may be acceptable on prime agricultural land providing the site will be restored and returned to its original status."
Scotland's Third Land Use Strategy 2021-2026 (Scottish Government, 2021 <sup>5</sup> )	Sets out the Scottish Government's vision, objectives and policies to achieve sustainable land use and has informed the understanding of the land use baseline environment.
A Future Strategy for Scottish Agriculture (Scottish Government, 2018 <sup>6</sup> )	Sets out the Scottish Government's strategy for prioritising agriculture as a crucial part of Scotland's economy and land use.

Relevant Legislation, Policy and Guidance	Description
Scotland's Forestry Strategy 2019 to 2029 (Scottish Government, 2019 <sup>7</sup> )	Sets out the Scottish Government's ambitions for the nationwide expansion and sustainable management of forestry and woodland.
The Scottish Government's Policy on Control of Woodland Removal (Scottish Government, 2009a <sup>8</sup> )	Prioritises the avoidance of woodland removal with removal only allowed under certain circumstances or where it achieves significant additional public benefit. Avoidance of woodland has been prioritised by the Proposed Development (Onshore) during design development and construction.
The Scottish Soil Framework (Scottish Government, 2009b <sup>9</sup> )	Sets out the Scottish Government's recommendations for sustainable soil management and protection. The principles contained within it have been considered in this chapter.
Aberdeenshire Forestry and Woodland Strategy: Planning advice PA2023-01 (Aberdeenshire Council, 2023 <sup>10</sup> )	Planning advice which supports the Aberdeenshire Local Development Plan 2023. It provides further information on the key issues and opportunities in relation to forestry and woodland in the region. The themes and policy aims of the advice have been taken into consideration in preparation of this chapter.
Guidance	
NatureScot (previously Scottish Natural Heritage) Environmental Impact Assessment Handbook (Scottish Natural Heritage, 2018 <sup>11</sup> )	Appendix 5: Assessment of Impacts on Soils provides guidance on impact assessment in relation to soils.
Institute of Environmental Management and Assessment (IEMA): A New Perspective on Land and Soil in Environmental Impact Assessment (IEMA, 2022 <sup>12</sup> )	Seeks to help practitioners understand and account for environmental implications of development on land and soil and guidance for embedding sustainable soil management.

# 2.3 Stakeholder Engagement

- 2.3.1 Overview
- 2.3.1.1 The Onshore Scoping Report was submitted to Aberdeenshire Council in December 2022, who then circulated the report to relevant consultees. An Onshore Scoping Opinion was received from Aberdeenshire Council on 1 February 2023. Relevant comments from the Scoping Opinion specific to land use are provided in Table 2-2.
- 2.3.1.2 A copy of the Scoping Report and Scoping Opinion received can be found in Volume 7, Appendix 1 and 4.

Table 2-2: Scoping Opinion response

Consultee	Comment	Response
Aberdeenshire Council	<ul> <li>"Examples of the types of issues that should be addressed include:</li> <li>Climate Change</li> <li>Local Economic Effect</li> <li>Landscape Resource</li> <li>Soils and Geology</li> <li>Visual Amenity</li> <li>Ecology</li> <li>Nature Conservation</li> <li>European Protected Species</li> <li>Hydrology and Water Supplies</li> <li>Forestry and Tree Felling</li> <li>Transport and Traffic, including road safety issues and impact on the local road network during and after construction work</li> <li>Noise</li> <li>Cultural Heritage and Archaeology</li> <li>Land Ownership</li> <li>Tourism and Recreation, including Footpaths</li> <li>Proposed Mitigation Measures"</li> </ul>	Forestry and tree felling and land use have been addressed in this chapter of the EIAR. Baseline land use environment, including forestry, agriculture, community land, development land and private property is discussed in Section 2.4.3. Potential impacts are outlined in Sections 2.7 to 2.8. A summary of effects after the implementation of mitigation measures is presented in Table 2-16.

2.3.1.3 The Scoping Opinion did not provide recommendations for land use data sources, receptors or methodologies in support of production of the EIAR. As a result, further consultation has been undertaken throughout the preapplication stage to confirm these. Table 2-3 summarises the consultation activities carried out relevant to land use.

#### Table 2-3: Stakeholder engagement activities

Date	Consultee and Type of Consultation	Summary
20/03/2024	Aberdeenshire Council: Land Use Pre-Application Methodological Technical Note	A technical note was prepared to clarify the approach to assessing the likelihood of significant environmental effects on land use receptors following the refinement of the Proposed Development (Onshore) design. The technical note supported discussions with Aberdeenshire Council to agree the methodology and scope of this chapter of the EIAR.
20/06/2023 - 22/06/2023	Local landowners: Public Consultation Events	Three public consultation events were held in Aberdeenshire in June 2023 to present the Proposed Development (Onshore) proposals following receipt of the Onshore Scoping Opinion (see Pre-Application Consultation Report for further details, Application Document 1). Local landowners including farmers attended and provided feedback including concerns about impacts to agricultural land and practices as a result of construction of the Onshore Transmission Infrastructure (OnTI). Responses were collated and have informed the considerations of potential impacts and embedded mitigation outlined in this chapter.

2.3.1.4 Further information on the consultation process and wider engagement can be found in the Pre-Application Consultation Report (refer to Application Document 1) accompanying both the Planning Permission in Principle (PPP) application to Aberdeenshire Council and the Section 36 applications and marine licences to the Marine Directorate Licencing and Operation Team (MD-LOT).

# 2.4 Baseline Characterisation

2.4.1 Study Area

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- 2.4.1.1 The study area for the land use assessment encompasses the Proposed Development (Onshore) OnTI Red Line Boundary (RLB). This study area therefore represents areas where land is required either permanently or temporarily in order to deliver the Proposed Development (Onshore).
- 2.4.1.2 The OnTI RLB comprises the following OnTI elements landward from the MLWS:
  - A Landfall Site on the Aberdeenshire coast at 'Stake ness', located to the west of the town of Banff;
  - An Onshore Export Cable Corridor (ONEC) of an approximate length of 37 kilometres (km). The Onshore Export Cable Route (the area where the infrastructure would be located and would be required for construction activities) for the Onshore Export Cable Circuits will be up to 100m;
  - An Onshore Substation Site with 2 x Onshore Substations co-located within the same footprint; and
  - An Onshore Grid Connection Cable Corridor connecting the Onshore Substation to the Grid Connection Point at the existing New Deer Substation (for Phase 1).
- 2.4.1.3 The OnTI RLB and land use study area is identified within Figure 2-1.
- 2.4.1.4 Effects on land use will be localised around construction works. It is therefore considered that only the area directly within the construction footprint of the OnTI RLB, including temporary access points, has the potential to be affected by the Proposed Development (Onshore).
- 2.4.1.5 Where land use receptors are outside OnTI RLB but are located in close proximity (<1km), these have been identified to support baseline characterisation.





Onshore Transmission Infrastructure Red Line

# **2.4.2 Data Sources**

- 2.4.2.1 The following data sources identified have been used to establish the baseline land use characteristics for the study area:
  - Ordnance Survey (OS) mapping: OS MasterMap and OS AddressBase (OS, 2023<sup>13</sup>);
  - Google Earth (Google Earth, n.d.<sup>14</sup>);
  - Scottish Forestry Open Data:
    - o Native Woodland Survey of Scotland (Scottish Forestry, 2019a<sup>15</sup>);
    - Felling Licence Applications 1998-2011 (Scottish Forestry, 2019b<sup>16</sup>); and
    - o Felling Permissions and Licences (Scottish Forestry, 2019c<sup>17</sup>).
  - Forestry Commission Open Data (Forestry Commission, 2022<sup>18</sup>) National Forest Inventory Scotland 2022;
  - Aberdeenshire Council Local Development Plan– Local Development Plan 2023 Allocations (Aberdeenshire Council, 2023<sup>4</sup>);
  - Scotland's Soils Maps:
    - Land capability for agriculture (Soil Survey of Scotland Staff 1981<sup>19</sup>); and
    - National scale land capability for forestry (Soil Survey of Scotland Staff 1988<sup>20</sup>).
  - Caledonia OWF Phase 1 Habitat Survey Data (Caledonia Offshore Wind Farm Ltd, 2023<sup>21</sup>).

# Desk study

- 2.4.2.2 Key land use receptors which have the potential to be significantly affected as a result of the Proposed Development (Onshore) within the study area have been identified via a desk study. EIA guidance as outlined in Table 2-1 has also been considered in preparation of the land use baseline.
- 2.4.2.3 The following categories of land use receptors have been established for the purpose of this assessment:
  - Agricultural land;
  - Forestry, woodland and trees;
  - Private property and housing;
  - Community land and assets; and
  - Development land and businesses.
- 2.4.2.4 Results from the desk study and Onshore Scoping Report were confirmed by a walkover survey, as detailed in section 2.4.2.5 below.

# **Site Specific Surveys**

- 2.4.2.5 A land use walkover survey, encompassing the study area and surrounding environment, was undertaken in March 2024 to ground-truth baseline data gathered from the desk study and through the scoping exercise.
- 2.4.2.6 Given the large area encompassed by the OnTI RLB, a full walkover of the study area by foot was not practicable. However, several vantage points and areas of interest were investigated and provided a robust overview of the study area, surrounding baseline environment and key land use receptors.
- 2.4.2.7 Points of interest, in particular notable forested areas, were mapped using the ArcGIS (Geographical Information System) Field Maps application. Point data and polygons with associated photography were captured on the ground and provided an additional level of certainty not afforded through an entirely desk-based assessment.
- 2.4.2.8 Key forestry and woodland features identified during the desk study and recorded during the Phase 1 Habitat Surveys (see Volume 5, Chapter 3: Terrestrial Ecology and Biodiversity for a detailed description of habitat types) were validated during the walkover survey. Survey work was recorded with a Global Positioning System (GPS) device using the Field Maps application with supporting georeferenced photography.

# 2.4.3 Baseline Description

- 2.4.3.1 A review of literature and available spatial datasets, supplemented by consultation with local landowners (see Table 2-3) and site walkover surveys has been used to establish the existing baseline environment for Land Use.
- 2.4.3.2 The study area, shown in Figure 2-1, is rural in nature, and can be categorised as either 'Very Remote Rural' or 'Remote Rural' (Scottish Government, 2020<sup>22</sup>). There are a number of small settlements in close proximity (<1km) to the study area including Whitehills, Ladysbridge, Fintry and King Edward.
- 2.4.3.3 The predominant land use within the study area is agriculture, including both arable and grazed farmland. The land type within the study area is characterised as being a combination of Gently Undulating Coastal Farmland, Undulating Agricultural Heartland, or Farmed and Wooded River Valleys (NatureScot, 2019<sup>23</sup>).
- 2.4.3.4 Other prominent features in proximity to the study area include small pockets of land allocated under the Aberdeenshire Local Development Plan 2023, including Protected / Reserved Sites and Opportunity Sites at Ladysbridge and Whitehills (as outlined in Appendix 7a Banff and Buchan Settlement Statement of the Aberdeenshire LDP<sup>24</sup>).

- 2.4.3.5 Small pockets of plantation and natural and semi-natural woodland (mixed, broadleaved and coniferous) are present throughout and in close proximity to the study area. There are no large-scale areas of commercial forestry located within the study area.
- 2.4.3.6 Notable infrastructure includes the existing road network, electrical overhead lines and wind turbines which service local farms. The existing Scottish and Southern Electricity Networks Transmission (SSEN-T) New Deer Substation and Moray East Substation is located adjacent to the Onshore Substation Site.

# Agricultural land and soils

- 2.4.3.7 Agriculture is the most common land use in and surrounding the study area, with farms and agricultural fields frequent and regularly dispersed. Agricultural practices are a mixture of arable fields consisting of grassland and arable crops and livestock farming of cattle and sheep. Aberdeenshire farmland can be classified as a third rough grazing, a third crops and a third improved grass and is an area of mixed farming<sup>25</sup>.
- 2.4.3.8 Farms are generally medium size, some with large barns and silos. Smaller farms and crofts are also present but less common and occur on higher slopes such as the Greeness area.
- 2.4.3.9 At the time of the walkover survey in March 2024, the following agricultural practices were noted: fields freshly ploughed / being ploughed and sown with spring crop; rough grazing of sheep and cattle, young lambs and calves in fields and cattle returning to pasture following winter.
- 2.4.3.10 The study area comprises a mixture of areas of prime agricultural land (Class 3.1), moderately productive agricultural land (Classes 3.2 and 4.1) and localised areas of low productivity agricultural land (Class 4.2 and lower)<sup>19</sup>. Descriptions of each agricultural land class and the respective area within the study area are provided in Table 2-4.

#### Table 2-4: Agricultural land class divisions and descriptions within the study area

Productivity	Land Class Division	<b>Division Description</b>	Area, hectares (ha), within study Area
Prime	3.1	Land capable of producing consistently high yields of a narrow range of crops and/ or moderate yields of a wider range. Short grass leys are common.	235
Moderate	3.2	Land capable of average production though high yields of barley, oats and grass can be obtained. Grass leys are common.	660
	4.1	Land capable of producing a narrow range of crops, primarily grassland with short arable breaks of forage crops and cereal	6
Low	4.2	Land capable of producing a narrow range of crops, primarily on grassland with short arable breaks of forage crops	13

- 2.4.3.11 The coverage of agricultural land classes throughout the study area and surrounding environment is shown on Figure 2-2.
- 2.4.3.12 In addition to arable farming, the Aberdeenshire region is also recognised for its livestock farming, accounting for over 33% of Scotland's beef cattle and 41% of sheep farming. Livestock farming is common throughout the study area with several cattle farms observed during the land use walkover survey in March 2024, with winter housed cows returning to pasture as a result of warmer weather. Numerous areas of rough sheep grazing were also observed during the survey.
- 2.4.3.13 Other forms of rural, non-agricultural land practices exist within the study area and Aberdeenshire region including horse grazing paddocks.





### Forestry, woodland and trees

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- 2.4.3.14 The study area is largely unforested apart from localised areas of plantation woodland, private woodland around properties and native/seminatural amenity woodland. There are no areas of large-scale commercial plantation forestry within the study area, the closest being at Delgaty Woods (OS NJ 77345 46829) (approximately 100m from the OnTI RLB) and Greeness (OS NJ 78301 47182) (approximately 20m from the OnTI RLB).
- 2.4.3.15 There are no areas of Ancient Woodland Inventory (AWI) within the study area, the closest AWI being:
  - Delgaty Woods (approximately 100m from the OnTI RLB);
  - Wood of Ferneystrype (approximately 30m from the OnTI RLB)
  - Toms Hill (approximately 300m from OnTI RLB); and
  - Whyntie Wood/Greencothill (felled) (approximately 350m from OnTI RLB).
- 2.4.3.16 The study area is covered predominantly by Classes F4 and F5 for forestry capability<sup>20</sup>, defined as "land with moderate flexibility for trees" and "land with limited flexibility for trees" respectively. There is one small area (~10ha) within the study area located around the proposed crossing of the River Deveron which is Class F3, defined as "land with good flexibility for trees".
- 2.4.3.17 The nearest area of actively managed woodland is Forestry and Land Scotland's Delgaty Woods, near Turriff, located approximately 100m from the study area. Delgaty Woods is part of Buchan Woods Land Management Plan 2021 – 2031 (Forestry and Land Scotland, 2021<sup>26</sup>) and covers an area of 154ha.
- 2.4.3.18 Notable forested areas within the study area include areas of broadleaved plantation woodland and semi-natural woodland around Scattery Farm and Haugh of Scattery located on the northern and southern banks of the proposed crossing of the River Deveron with a strip of woodland also located at Hill of Scattery. Key forested areas within the study area are described in Table 2-5.

#### Table 2-5: Key forested areas within the study area

Forestry area	Area of forestry within study area (ha)	Location	Туре	Description
Scattery (Privately Owned)	0.82	Eastern bank of the River Deveron, set back approximately 20m from the riverbank. OS Grid Reference: NJ 69348 57532	Broadleaved Plantation	Predominantly semi- mature poplar with various other species including larch, sycamore, ash and silver birch.
Haugh of Scattery (Privately Owned)	0.69	Plantation on the western bank of the River Deveron, set approximately 20m back from the water's edge. OS Grid Reference: NJ 69181 57472	Mixed (predominantly broadleaved) plantation woodland	Predominantly mature poplar with various other species including ash, willow and alder from semi mature to mature with open understory
Hungryhills Farm (Privately Owned)	0.88	Buffer strip on the western bank of the River Deveron at the bottom of Hungryhills Farm extending from the water up approximately 50m. OS Grid Reference: NJ 69214 57632	Broadleaved woodland plantation	Predominantly semi- mature woodland buffer strips alongside the River Deveron comprising sessile oak, beech, ash, wych elm amongst other species. Good structure down to the water.
Hill of Scattery (Privately Owned)	0.05	South-east of Scattery Farm, separating the agricultural fields around Scattery to the west with the fields around Hill of	Broadleaved Woodland Plantation	Strip of semi-mature to mature beech trees along field margins with gorse hedgerows.

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Forestry area	Area of forestry within study area (ha)	Location	Туре	Description
		Scattery / Beechend / Breedless to the east.		
		OS Grid Reference: NJ 70163 57008		
Boyndie (Boyndie Wind Farm)	0.03	To the east of Boyndie Wind Farm and immediately to the west of Boyndie visitor centre. OS Grid Reference: NJ 63789 63801	Lowland mixed deciduous / shrub	Predominantly mixed scrub comprising gorse, broom, rowan, elder and hawthorn. Some areas to the east of the corridor comprising young semi-natural recreational woodland such as silver birch, rowan ash and willow.

2.4.3.19 Figure 2-3 illustrates the land capability for forestry in the study area and surrounding area and key forested areas in the study area identified through the desk study and site walkover.





Land Capability for Forestry

0

status Approved	scale 1:120,000	_
DRAWING NUMBER	SHEET NO	<sup>rev</sup>
N/A	01 of 01	N/A

### Private property and housing

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- 2.4.3.20 As outlined above, the study area and surrounding area is rural in nature, with little to no densely populated residential areas. The majority of properties located throughout and in proximity to the study area are associated with agricultural holdings.
- 2.4.3.21 In total, four OS AddressBase (comprising Local Authority and Royal Mail) addresses lie within the study area. Of these four, two are associated with the residential property at Burnside located within the Onshore Substation Site, for which Caledonia Offshore Wind Farm Limited (the Applicant) is the owner. The other two registered addresses are associated with a pond and a street record and are not associated with residential properties.
- 2.4.3.22 An additional 51 registered addresses lie within 100m of the study area.
- 2.4.3.23 The study area does not encompass any major settlement areas. The closest settlement areas to the study area (working from the Landfall Site inland) as identified in the Aberdeenshire LDP include:
  - Banff approximately 5km from the study area;
  - Whitehills approximately 1km from the study area;
  - Ladysbridge approximately 850m from the study area; and
  - Turriff approximately 3km from the study area.
- 2.4.3.24 Two smaller settlement areas not identified in the Aberdeenshire LDP proximate to the study area include:
  - Boyndie approximately 350m from the study area; and
  - King Edward approximately 1km from the study area.
- 2.4.3.25 Figure 2-4 illustrates the settlement areas outlined above in the context of the OnTI RLB.





Onshore Transmission Infrastructure Red

# Community land and assets

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2.4.3.26 Protected / Reserved Sites are areas protected under the Settlement Statement for Banff and Buchan of the Aberdeenshire 2023 LDP<sup>24</sup> for their existing contribution to the region (for example - contributing to the character of place). There are no Protected / Reserved sites within the study area. The nearest Protected / Reserved sites to the study area are outlined in Table 2-6 below.

Protected / Reserved Site	Distance from Study Area (m)	Description
Ladysbridge Woodland	600	To protect the woodlands as an amenity for the settlement, and forming part of the green-blue network, and to prevent coalescence with the adjacent village of Boyndie.
Ladysbridge House	1,100	To protect the area as a significant contribution to the character of the place, forming the historic setting of Ladysbridge House.
Ladysbridge Park	1,000	To protect the park and its facilities as an amenity for the village.
Whitehills Village	1,300	To protect the setting of Whitehills as a significant contribution to the character of the place.
Whitehills Opportunity Site 1 (OP1)	1,300	Marks the proposed strategic landscaping required for site OP1 Housing Land.
Whitehillls playing field	1,300	To protect the playing field and recreation ground as amenities for the settlement.
Whitehills Red Well	1,300	To protect the setting of Whitehills and the ancient 'Red Well' as a significant contribution to the character of the place.

Table 2-6: Closest Protected and Reserved Sites to the study area

2.4.3.27 Protected / Reserved sites in the context of the OnTI RLB are illustrated on Figure 2-4.

2.4.3.28 Boyndie visitor centre is located approximately 120m to the east of the OnTI RLB. There is a non-designated amenity walking path which runs from the visitor centre to the wind farm on the former Royal Air Force Boyndie airfield. Potential effects associated with this path are considered within Volume 5, Chapter 9: Traffic and Transport.

#### **Development land and business**

- 2.4.3.29 There are no opportunity sites, retail centres, existing employment land or strategic reserved employment land designated within the Aberdeenshire Council LDP 2023 within the study area.
- 2.4.3.30 The closest opportunity sites are:
  - Ladysbridge Housing Land approximately 1.1km from the study area.
  - Whitehills Housing Land approximately 1.6km from the study area.

#### 2.4.4 Future Baseline

- 2.4.4.1 A range of possible future conditions associated with land use are possible and there is inherent uncertainty associated with projections. It is however considered highly likely that the study area and surrounding area in terms of land use will be broadly comparable to the existing baseline in the future. Potential changes to the land use baseline environment may include:
  - Changes to agricultural land capability and peatland quality / class as a result of the climate crisis.
  - Changes to forestry and woodland. As no areas of commercial woodland lie within the study area commercial felling or further replanting is expected to be minimal. Changes to private woodland areas are likely to minor and localised.
  - Expansion of nearby settlement areas including Ladysbridge and Whitehills.
  - Development and decommissioning of infrastructure, in particular high voltage electricity transmission infrastructure associated with national grid reinforcement and upgrades for new future onshore and offshore renewables generation.
- 2.4.4.2 Volume 7A, Appendix 7-1: Cumulative Impact Assessment Methodology provides details of the reasonably foreseeable project or development that are assumed to be fully built and in use by the time the Proposed Development (Onshore) construction starts from Q3 2027. The following reasonably foreseeable project or development are assumed to make up the future baseline of relevance to the Proposed Development (Onshore) during construction and operation are set out in Table 2-7.

Table 2-7: Future baseline project or developments



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Planning reference	Description	Part of construction future baseline?	Part of operation future baseline?
APP/2023/1454	Green Volt Offshore Windfarm, laying of underground cables and erection of substation.	No	Yes
APP/2023/2040	Denhead Solar Farm. Formation of 25MW Solar Farm, Siting of Substation, CCTV, Erection of Security Fencing, Formation of Access and Associated Infrastructure.	Yes	Yes

- 2.4.4.3 Implementation of reasonably foreseeable project or development APP/2023/2040 and APP/2023/1454 will result in a small sections of the OnTI RLB being developed to facilitate the development of these schemes. There will be no direct interaction with this scheme.
- 2.4.4.4 APP/2023/2040 will be complete and operational in advance of the Proposed Development (Onshore) and therefore this reasonably foreseeable project or development has been included as part of the future baseline and considered within this topic assessment. Application APP/2023/1454 is considered within the Cumulative Assessment within Section 2.8.

### 2.4.5 Data Gaps and Limitations

- 2.4.5.1 The baseline has been established using publicly available data sources and ground-truthed through a site walkover survey on 14 March 2024. It was not practicable or possible to access the full study area given the area covered by the OnTI RLB and land accessibility. Vantage points were used to gain a representative overview of the baseline environment, with key areas of woodland identified and visited.
- 2.4.5.2 A comprehensive desk based assessment has also been completed. Despite a thorough assessment to ensure that the key receptors in the study area have been captured, it is possible that a small number of receptors may not have been identified through the data collection process.
- 2.4.5.3 Agricultural land has been established through a desk based assessment using the Land Capability for Agriculture<sup>19</sup> dataset and reinforced through a walkover survey. Land owner surveys have not been completed nor has a detailed agricultural land class survey been conducted. However, the

methods employed to establish the agricultural baseline have been agreed through consultation with Aberdeenshire Council (Table 2-3).

# 2.5 EIA Approach and Methodology

- 2.5.1 Overview
- 2.5.1.1 This section outlines the methodology for assessing the likely significant effects on land use from the construction, operation and decommissioning of the Proposed Development (Onshore).

### 2.5.2 Impacts Scoped in to the Assessment

2.5.2.1 The Onshore Scoping Report was submitted to Aberdeenshire Council in December 2022. The Scoping Report set out the overall approach to assessment and allowed for the refinement of the Proposed Development (Onshore) over the course of the assessment. The proposed scope of the assessment is set out in Table 2-8.

Table 2-8: Land use scope of assessment

Potential Impact	Phase	Nature of Impact
Temporary loss of agricultural land and soils	Construction	Direct
Temporary loss of forestry and woodland due to felling	Construction	Direct

### 2.5.3 Impacts Scoped out of the Assessment

2.5.3.1 The impacts scoped out of the assessment during EIA scoping, and the justification for this, are listed in Table 2-9.



#### Table 2-9: Impacts scoped out

Potential Impact	Justification
Construction	
	No private properties are located within the study area (the residential property within the Onshore Substation Site is under option agreement with the Applicant).
Temporary land take and disturbance to	Temporary disturbance to properties as a result of construction noise is considered in Volume 5, Chapter 8: Airborne Noise and Vibration.
private properties and nousing	Potential impacts to Private Water Supplies (PWS) are addressed in Volume 5, Chapter 6: Hydrology and Hydrogeology.
	Any crossing of access tracks to properties and potential temporary severance is managed through embedded mitigation M- 71.
Temporary loss of or disturbance to community land	There are no Protected or Reserved Sites within the study area. The ONEC presents a wide corridor, the Onshore Export Cable Route will be refined within the ONEC at the detailed design stage. The OnTI RLB lies outwith the boundary of the Boyndie Visitor Centre and as a result impacts will be avoided.
Operation and Maintenance	
	All land at the Landfall Site and along the ONEC will be reinstated to its prior agricultural capability.
Long term / permanent loss of agricultural land and soils	Given the wider context of the Proposed Development (Onshore) and the wider availability of agricultural land both within the study area and wider region, the loss of agricultural land at the Substation Site (12 ha) is considered a negligible amount. Additionally, landowner agreements are in

Potential Impact	Justification
	place for any land required for the Substation Site.
Long term / permanent loss of forestry or woodland	No net loss of areas of forestry or woodland.
Long term / permanent loss of or disturbance to private properties and housing	No private properties are located within the study area (the residential property within the Onshore Substation Site is under option agreement with the Applicant). Long term disturbance to properties as a result of operational noise are considered in Volume 5, Chapter 8: Airborne Noise and Vibration.
Long term / permanent loss of or disturbance to community land.	No community land will be permanently lost or disturbed as a result of the Proposed Development (Onshore).
Decommissioning	
Temporary loss of agricultural land and soils	All underground OnTI is anticipated to remain in-situ. As a result, no decommissioning impacts are anticipated to agricultural land and soils.
Temporary loss of forestry and woodland due to felling	All underground OnTI is anticipated to remain in-situ. As a result, no decommissioning impacts are anticipated to forestry and woodland.

# 2.5.4 Assessment Methodology

- 2.5.4.1 The project-wide generic approach to assessment is set out in Volume 1, Chapter 7: EIA Methodology. The assessment methodology for and use within the EIAR is consistent with that provided in the Scoping Report and follows the principles set out in Volume 1, Chapter 7: EIA Methodology. The sensitivity of the receptor is considered in combination with the magnitude of impact to determine the impact significance.
- 2.5.4.2 Land use specific sensitivity and magnitude criteria are based on professional judgement. Table 2-10 sets out the criteria applied for

categorising the sensitivity of land use receptors as either high, medium or low.

Table 2-10: Land use receptor sensitivity criteria

Receptor Sensitivity	Criteria
High	Presence of prime quality agricultural land (Grade 1, 2 or 3.1). or Land use is of high importance and/or rarity with limited potential for substitution or access to alternatives.
Medium	Presence of agricultural land of moderate quality (Grade 3.2 and 4). or Land use is of medium importance and/or rarity with moderate potential for substitution or access to alternatives.
Low	Presence of agricultural land of low quality (Grade 5, 6 and 7). Or Land use is of low importance and/or rarity with alternatives available.

- 2.5.4.3 The magnitude of change to land use receptors is considered as either high, medium, low or negligible, definitions for which are provided in Table 2-11.
- 2.5.4.4 The following definitions apply to the time periods used in assessing the magnitude of change:
  - Long term: Greater than 5 years;
  - Medium term: 2 to 5 years; and
  - Short term: Less than 2 years.

Table 2-11: Magnitude of change definitions used in the Land Use assessment

Magnitude of change	Definition
High	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements. E.g. permanent loss or sterilisation of prime agricultural land or forestry. Impact is long-term or permanent in nature; and/or High frequency (occurring repeatedly or continuously for a long period of time) and/or high intensity.
Medium	Partial loss of/damage to key characteristics, features or elements, e.g. partial removal or substantial amendment to acquisition of land compromising viability of property or businesses. Moderate permanent or long-term (5-10 years) reversible changes, over the majority of the receptor, affecting usability, risk, value over the local area, possibly affecting regulatory compliance.
Low	Minor alteration of an area of land use / element of land use receptor. Temporary change affecting usability, risk or value over the short-term (<5 years).
Negligible	Negligible change to any of the factors above / very slight or no change to baseline conditions. Minor permanent or temporary change, undiscernible over the medium- to long-term short-term.

2.5.4.5 As per Volume 1, Chapter 7: EIA Methodology, significant environmental effects have been established using a significance matrix, as illustrated in Table 2-12:.

Table 2-12: EIA significance matrix used to assig	gn significance of environmental effect
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Significance of Effect		Sensitivity of Receptor			
		Negligible	Low	Medium	High
	Negligible	Negligible	Negligible	Negligible	Negligible
Impact Magnitude	Low	Negligible	Negligible	Minor	Minor
	Medium	Negligible	Minor	Moderate	Moderate
	High	Negligible	Minor	Moderate	Major

### 2.5.5 Approach to Cumulative Effects

- 2.5.5.1 The Cumulative Impact Assessment (CIA) assesses the impact associated with the Proposed Development (Onshore) together with other relevant plans, projects and activities. Cumulative effects are therefore the combined effect of the Proposed Development (Onshore) in combination with the effects from a number of different projects, on the same receptor or resource.
- 2.5.5.2 The approach to the CIA for Land Use follows the process outlined in Volume 1, Chapter 7: EIA Methodology.
- 2.5.5.3 The list of relevant developments for inclusion within the CIA is outlined in Volume 7A, Appendix 7-1: Cumulative Impact Assessment Methodology.
- 2.5.5.4 Developments which are located within the study area have the potential to result in a cumulative effect on land use. Developments which are either operational or in the decommissioning stage are considered to be part of the baseline and are not considered within the assessment.

### 2.5.6 Embedded Mitigation

- 2.5.6.1 Where possible, mitigation measures will be embedded into the design of the Proposed Development (Onshore).
- 2.5.6.2 Where embedded mitigation measures have been developed into the design of the Proposed Development (Onshore) with specific regard to Land Use, these are described in Table 2-13. The impact assessment presented in Sections 2.7 to 2.8 take into account this embedded mitigation.



#### Table 2-13: Embedded mitigation

Code	Mitigation Measure	Securing Mechanism
M-39	An Outline Construction Environmental Management Plan (CEMP) has been produced and included alongside the EIAR to support the Planning Permission in Principle (PPP) (Volume 7, Appendix 10: Outline Construction Environment Management Plan). The Outline CEMP includes measures on pollution prevention, noise control, biosecurity, and waste management. The Outline CEMP will then be developed further through the final design process and this will result in a detailed CEMP being submitted for discharge. The CEMP will be implemented to avoid, minimise or mitigate effects on the environment during the construction and decommissioning phases of the Proposed Development (Onshore).	Detailed CEMP secured through a condition attached to the PPP.
M-40	Following construction, agricultural land not required through the operational phase will be reinstated to ensure it can return to existing agricultural use. Once land is no longer required for installation of the Onshore Export Cable Circuits the land will be reinstated to its original use for the remainder of the construction stage (where applicable) and for the operation and maintenance stage. Temporary access infrastructure could be permanently retained where sought by the landowner but would be subject to the required consents being obtained prior to reinstatement activities occurring. Topsoil and sub-soil will be treated and stored appropriately to minimise risk of erosion and/or soil degradation indirectly affecting soil quality.	Design Principles through Construction Method Statement (CMS) secured through a condition attached to the PPP. Materials Management Plan (MMP) as part of the detailed CEMP secured through a condition attached to the PPP.



Code	Mitigation Measure	Securing Mechanism
M-41	Engagement with landowners throughout the EIA process as part of the evolution of the design process. Continued engagement with landowners throughout the detailed design phase.	External communication with landowners will be undertaken by the Community Liaison Officer (CLO) and secured through a condition attached to the PPP.
M-65	Avoidance of high value agricultural and forestry land. The ONEC avoids areas of high value agricultural and forestry value as far as practicable. Agricultural land and other sensitivities were carefully considered as part of the site selection and alternatives process and feedback gathered from public consultation was used to amend the ONEC.	Design Principles through Construction Method Statement (CMS) secured through a condition attached to the PPP.
M-66	Notable forested areas at Scattery around the river Deveron will be avoided via crossing of the river using HDD <sup>i</sup> . Impacts to semi-natural woodland adjacent to Boyndie Visitor Centre will be minimised or avoided where practicable. Any resultant loss of woodland will be compensated to ensure no loss of woodland at detailed design stage and secured through the relevant Approval of Matters Specified in Conditions (AMSC) application.	Design Principles through a CMS secured through a condition attached to the PPP.
M-67	Temporary land take required for construction will be minimised with the land-take for the OnTI RLB kept to the minimum necessary for safe construction.	Design Principles through a CMS secured through a condition attached to the PPP.

<sup>i</sup> Trenchless crossing techniques hereafter referred to as 'HDD' in this chapter of the EIAR.



Code	Mitigation Measure	Securing Mechanism
	The OnTI RLB has been established based on identifying the shortest and most economical route from landfall to Grid Connection Point avoiding sensitive environmental constraints.	
M-68	Field drains will be protected as far as practicable and impacts to field drains as a result of construction activities will be remedied at source.	Outlined within the Outline CEMP and secured by condition attached to the PPP.
M-69	Livestock water supplies will be protected and alternative supplies provided where access could be compromised by works.	Design Principles through a CMS secured through a condition attached to the PPP
M-70	Prevention of soil borne pests and diseases through adoption of precautions as recommended by Scotland's Environment and Rural Services and specified within MMP as part of the detailed CEMP.	Outlined within the Outline CEMP and secured by condition attached to the PPP.
	Works around Hill of Scattery woodland strip will adhere to the following principles:	
M-92	<ul> <li>Establish root and tree canopy protection zones for all trees not being removed to minimize soil compaction and impact on trees remaining in situ.</li> <li>Reduction in corridor width: The working corridor width will be reduced to 50m.</li> </ul>	Design Principles through a CMS secured through a condition attached to the PPP.
M-96	Where cable crossings of private access tracks are required alternative access arrangements will be provided or crossing works scheduled in	Design Principles through a CMS secured through a condition attached to the PPP.



Code	Mitigation Measure	Securing Mechanism
	agreement with landowners to ensure access is maintained for residents when they require it.	

# 2.6 Key Parameters for Assessment

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- 2.6.1.1 Volume 1, Chapter 4: Proposed Description Onshore details the parameters of the Proposed Development (Onshore) using the Rochdale Envelope approach. This section identifies those parameters during construction, operation and decommissioning relevant to potential impacts on land use
- 2.6.1.2 The worst case assumptions with regard to land use are summarised in Table 2-14.

# 2.6.2 Proposed Development (Onshore) Phasing

- 2.6.2.1 As described in Volume 1, Chapter 5: Proposed Development Phasing, three possible construction programme scenarios have been identified for the Proposed Development (Onshore).
- 2.6.2.2 The assessment of impacts presented in this chapter considers the sequential construction scenario. This scenario represents the worst case due to the longer construction durations and the impact of two distinct phases of works.
- 2.6.2.3 The worst case assumptions with regard to the consideration of construction scenarios are also summarised in Table 2-14.
- 2.6.2.4 The assessment parameters outlined in the table below are presented for both phases of works under the sequential construction scenario.

Table 2-14: Worst Case Assessment Scenario considered for each Impact as part of the assessment of Likely Significant Effects

Potential Impact	Assessment Parameter	Explanation
Construction		
	Landfall Site and ONEC	
Temporary loss of agricultural land during construction and installation of the OnTI	4 x HDD works located within an area of the following indicative dimensions of 464m (L) x 17.2m (D) (as a maximum) at the Landfall Site for the Onshore Export Cable Circuits. HDD works carried out over two construction periods (i.e., 2 x HDD ducts installed in phase 1 followed by a subsequent 2 x HDD ducts installed in phase 2). 1 x temporary Landfall Site construction compound approximately 20,000m <sup>2</sup> required for either construction phases.	Aligns with the sequential construction scenario. The worst case scenario for temporary loss of agricultural land is the largest footprint and extent of excavation required over two distinct construction phases where all activities completed in the first phase are undertaken again in the
	4 x Transition Joint Bays (TJBs) installed two at a time over two construction phases.	second phase.
	4 x Onshore Export Cable Circuits installed predominantly using Open Cut Trench (OCT) apart from at sensitive crossings where HDD will be used. Installed two at a time over two construction phases. Total ONEC of approximately 37km and an Onshore Export	



Potential Impact	Assessment Parameter	Explanation
	Cable Route (i.e., the working corridor) of up to 100m wide.	
	An Onshore Grid Connection Cable Corridor to connect the Onshore Substations to the Grid Connection Point at the existing New Deer Substation (for Phase 1).	
	4 x construction compounds (maximum $3750m^2$ per primary compound) and 1 x haul road for each construction phase.	
	Onshore Substations	
	2 x construction and electrical commissioning of Onshore Substations over two construction periods.	
	2 x construction compounds over two construction periods (One for each phase).	
Temporary loss of forestry land during construction and installation of the OnTI	No large-scale areas of tree loss are anticipated. Minor, localised areas of tree felling will be required over either phase 1 or phase 2 of construction and installation of the OnTI.	Aligns with the sequential scenario and reflects the maximum felling that might be required for construction and installation of the OnTI.



Potential Impact	Assessment Parameter	Explanation
	ONEC	
	4 x Onshore Export Cable Circuits installed predominantly using OCT apart from at sensitive crossings where HDD will be used. Installed two at a time over two construction phases. Total ONEC of approximately 37km and an Onshore Export Cable Route (i.e., the working corridor) of up to 100m wide.2 x sets of construction compounds (maximum 3750m <sup>2</sup> per primary compound) and haul roads over two construction periods.	

# 2.7 Potential Effects

# 2.7.1 Construction

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### Temporary loss of agricultural land and soils

- 2.7.1.1 During construction and installation of the OnTI there will be a direct and temporary loss of agricultural land and soils as a result of land required for construction activities. There is no anticipated long term loss of agricultural land or soils as land will be reinstated to ensure it can return to existing agricultural use. The footprint and worst case construction scenario for the temporary loss of agricultural land and soils is outlined in Figure 2-1 and Table 2-14.
- 2.7.1.2 As described in Section 2.4.3, the agricultural land throughout the study area is a mix of arable and grazed land for livestock, ranging from Class 3.1 (Prime) to Class 5.2 (Low productivity). The predominant agricultural land class within the study area is Class 3.2, which is classed as Moderate Productivity, with 19.45 ha throughout the study area. Given the presence of Prime agricultural land however, the receptor (agricultural land and soils) is considered to be of high sensitivity given the value and importance of agricultural land to the region.
- 2.7.1.3 As outlined in Section 2.6.2, the worst case construction scenario for Land Use is the sequential scenario, due to the potential for impacts to reoccur to agricultural land and soils over two distinct construction phases. The worst case construction duration under the Sequential Scenario is a total of 7 years, accounting for up to a 5 year gap between phases. As a worst case it is assumed that agricultural land would be fully reinstated throughout phase 1 of construction, with temporary loss of agricultural land and soils occurring again during phase 2 of construction.
- 2.7.1.4 Construction will occur in stages, therefore temporary land take would be staged across the full construction period. Detailed construction methodologies will be determined at detailed design, but it is anticipated that the Onshore Export Cable Circuits will progress in sections from one Cable Joint Bay to the next in the order of trenching, installation and reinstatement. As a result, whilst the overall worst case combined construction duration for both phases is 7 years with the addition of up to a five year gap, the temporary land take (i.e., the open cable trench) at any one time would be limited to each section. Therefore, the total duration of individual agricultural land take for installation of the Onshore Export Cable Circuits would not reflect the total worst case and would be less than 5 years at any one location.
- 2.7.1.5 In some instances, there may be the requirement for certain construction infrastructure to remain in-situ for extended periods of time to facilitate

installation of the OnTI over two construction phases. This might include haul roads, construction compounds and temporary access tracks. As a result, there may be temporary agricultural land take which exceeds 5 years at any one location.

- 2.7.1.6 Temporary land take of agricultural land and soils is not considered to be widespread in the wider context of the overall agricultural land still available. Routing of the ONEC has been designed to avoid areas of high value agricultural land as far as practicable (M-65) and to provide flexibility for cable alignments at detailed design in consultation with landowners. Some areas of Class 3.1 have however been unavoidable. Furthermore, the ONEC presented will be subject to further refinement at AMSC stage, where the maximum working corridor width will be 100m (the Onshore Export Cable Route). The Onshore Export Cable Route will be designed to minimise the amount of temporary land take with land take kept to the minimum necessary for safe construction (M-67). As a result, a limited portion of prime and moderate productivity agricultural land is anticipated to be temporarily lost during construction.
- 2.7.1.7 Excavated soil would be used in land reinstatement at the end of the construction period, with soils stored for a short a time as possible in order to minimise impacts from erosion (M-40). It is envisaged the storage of soil would follow best practice guidance and be secured through CMS and the use of a MMP included as part of the full CEMP (M-39; M-70). This is in accordance with the Aberdeenshire LDP Policy PR1.5 which recognises the potential acceptability of time-limited proposals for renewable energy generation on prime agricultural land providing the site is restored and to its original status.
- 2.7.1.8 The integrity and functioning of field drains and livestock water supplies will also be maintained as far as practicable, with alternative supplies identified in the event of damage (M-68; M-69).
- 2.7.1.9 Whilst the total duration of works over two construction phases is a combined total of 7 years, construction impacts at any one location as a result of installation of the Onshore Export Cable Circuits would be less than 5 years given that the installation of the Onshore Export Cable Circuits would progress in sections. As outlined in 2.7.1.5, there may be the requirement for some construction infrastructure such as haul roads, construction compounds and temporary access tracks to remain in-situ for extended periods of time. Considering the potentially extended durations of construction infrastructure to remain in place, the magnitude of impact is anticipated to be medium.
- 2.7.1.10 Taking the high sensitivity of agricultural land and soils and the medium magnitude of impact, the overall effect of temporary loss of and disturbance to agricultural land during construction is considered to be moderate and therefore significant in EIA terms.

# Temporary loss of forestry / woodland

CALEDON A

- 2.7.1.11 The ONEC has been designed to avoid areas of ancient woodland, commercial forestry and private woodland. As a result, there are no areas of AWI or areas of commercial forestry within the study area. There are small areas of privately owned localised woodland located throughout the study area, as identified in Section 2.4.3 and illustrated on Figure 2-3. Notable areas include around the proposed crossing of the River Deveron at Scattery, the Hill of Scattery and adjacent to Boyndie Visitor Centre. Impacts to woodland at Scattery will be avoided through the use of HDD to cross the Deveron, avoiding the need to fell trees. The OnTI RLB intersects a small area of native woodland adjacent to Boyndie visitor centre. The Onshore Export Cable Route (the working corridor) will be sited where practicable so as to minimise impacts to this woodland, routing through the lesser value scrub immediately to the west.
- 2.7.1.12 There will be the requirement to remove some trees from the woodland strip at Hill of Scattery. However, impacts will be minimised by reducing the Onshore Export Cable Route width to 50m and by establishing root and tree canopy protection zones for all trees not being removed to minimize soil compaction and impact on trees remaining in situ. Some of the woodland areas around the crossing of the River Deveron, such as at Haugh of Scattery and Hungryhills Farm may be required to be felled to facilitate the establishment of the HDD compound for the River Deveron crossing. The compound will be sited at detailed design to avoid these areas as far as practicable. Where there is any resultant loss of woodland this will be compensated in accordance with the Scottish Government's Control of Woodland Removal Policy<sup>8</sup>.
- 2.7.1.13 As detailed in Section 2.4.3, the forestry and woodland capability throughout the study area predominantly ranges from Class F4 to Class F5 which is defined as land with moderate flexibility for trees and land with limited flexibility for trees. There is one small area (~10ha) within the study area located around the proposed crossing of the River Deveron which is Class F3, defined as land with good flexibility for the growth and management of tree crops. Given the lack of AWI, commercial forestry plantation and minimal areas of Class F3 forestry land the receptor (forestry and woodland) is considered to be of low sensitivity. This is due to its low to moderate value to the region and its ability to accommodate change.
- 2.7.1.14 Some trees will be required to be felled depending on detailed design and final works locations. Any loss of woodland will be compensated in line with the Control of Woodland Removal Policy to ensure that there will be no net loss of woodland as a result of construction of the OnTI. The magnitude is therefore considered to be low.
- 2.7.1.15 Taking the low sensitivity of forestry and woodland within the study area and the low magnitude of impact, the overall effect of temporary loss of

forestry and woodland during construction is considered to be negligible and not significant in EIA terms.

- 2.7.2 Operation
- 2.7.2.1 No potential effects are anticipated to be experienced by land use receptors during the operational stage. Operational effects have therefore been scoped out of the assessment.

## 2.7.3 Decommissioning

2.7.3.1 No potential effects are anticipated to be experienced by land use receptors during the decommissioning stage as it is anticipated that buried infrastructure will remain in-situ. Decommissioning effects have therefore been scoped out of the assessment.

# 2.8 Cumulative Effects

### 2.8.1 Overview

2.8.1.1 The list of developments identified for assessing cumulative effects is presented in Volume 7A, Appendix 7-1: Cumulative Impact Assessment Methodology. In Table 2-15 the potential for cumulative effects with each of these developments is examined, and an assessment of the cumulative effects presented where appropriate.

Development	Potential for significant cumulative effects	Comments
Green Volt Offshore Windfarm, laying of underground cables and erection of substation	Yes	Construction and installation of the Proposed Development's Onshore Export Cable Circuits has the potential to result in cumulative temporary loss of agricultural land and soils.
APP/2023/1454 (the Green Volt Application)		Loss of forestry and woodland is anticipated to be minor and the use of trenchless crossings to mitigate and prevent / reduce the loss of woodland. As a result, potential cumulative impacts on forestry and



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Development	Potential for significant cumulative effects	Comments
		woodland due to temporary loss have not been considered.
Stromar Offshore Wind Farm Onshore Infrastructure Stromar Offshore Wind Farm Limited Pre-application stage (the Stromar Application)	Yes	Construction and installation of the Proposed Development has the potential to result in cumulative temporary loss of agricultural land and soils. As the proposed scheme is at scoping stage and the boundaries for the development have not been identified it is not possible to undertake a cumulative impact assessment. This scheme has therefore not been considered further.
Beauly to Blackhillock to New Deer to Peterhead 400kv Connection Pre-application stage (herein after referred to as the Beauly Application)	Yes	Construction and installation of the Proposed Development has the potential to result in cumulative temporary loss of agricultural land and soils. As the proposed scheme is at scoping stage and the boundaries for the development have not been identified it is not possible to undertake a cumulative impact assessment. This scheme has therefore not been considered further.

# 2.8.2 Construction

### Temporary loss of agricultural land and soils

2.8.2.1 Potential cumulative impacts on agricultural land and soil are expected as a result of direct loss during construction of the OnTI. The construction of the Greenvolt Application, specifically the construction and installation of Onshore Export Cable Circuits, could generate a greater temporary loss of agricultural land and soils.

- 2.8.2.2 The temporary land take for the Greenvolt Application is broadly comparable to that of this Proposed Development (Onshore) and similarly passes through areas of Class 3.1 (Prime) to Class 4.2 (Low Productivity) agricultural land. This loss of land would also be temporary and it is understood that the land would be reinstated following the construction stage to its previous agricultural capability.
- 2.8.2.3 Whilst agricultural land and soils is considered to be of high sensitivity due to its high value to the Aberdeenshire region, the cumulative impacts of the Proposed Development (Onshore) are considered to be of a low magnitude with the Greenvolt Application. This is as a result of temporary nature of the impact and its low intensity and reversibility when considering embedded mitigation. The significance of effect is therefore assessed as minor and not significant in EIA terms.

### 2.8.3 Operation

2.8.3.1 As no operational effects have been identified as a result of the Proposed Development (Onshore), developments which have the potential to result in significant operational cumulative effects have not been considered.

# 2.9 In-combination Effects

- 2.9.1.1 In-combination impacts may occur through the inter-relationship with another EIAR topic that may lead to different or greater environmental effects than in isolation.
- 2.9.1.2 There is also the potential for in-combination impacts resulting from onshore and offshore works. These are identified within Volume 6, Chapter 5: Intertidal Assessment and are therefore not repeated here.
- 2.9.1.3 The potential in-combination effects for land use receptors resulting from effects between onshore Proposed Development (Onshore) works are described below in Section 2.9.2.
- 2.9.2 In-Combination effects between Proposed Development (Onshore) works
- 2.9.2.1 As there are no significant adverse effects on land use receptors identified within this chapters assessment, it is considered that any in-combination effects on the receptors identified in Section 2.7 from other environmental topics within the EIAR would not result in a different or greater environmental effect than has already been identified. Minor losses of woodland area would have potential impacts to terrestrial ecology and biodiversity receptors, which is considered in Volume 5, Chapter 3: Terrestrial Ecology and Biodiversity. Construction impacts to soils and

areas of peatland is discussed in Volume 5, Chapter 7: Geology, Soils and Contaminated Land.

- 2.9.2.2 Future climate conditions derived from the UK Climate Projections 2018 (UKCP18) (Met Office, 2018<sup>27</sup>) for the north-east of Scotland indicate that the study area may undergo climatic changes including higher temperatures, increase in severe weather events, reduced precipitation in summer and increased precipitation in winter, increased sea levels and less snow and ice. Surface water flows are likely to become more variable, with more frequent extremes.
- 2.9.2.3 Increasing long spells of hot weather and wildfires may result in soils developing water repellence, which may reduce or temporarily impede water infiltration. Increased soil repellence may compound with temporary impacts to agricultural land and soils as a result of construction of the OnTI (for example, increased rates of erosion or degradation while topsoil is stored prior to being reinstated).

# 2.10 Mitigation Measures and Monitoring

- 2.10.1.1 Under the sequential scenario, temporary impacts to agricultural land and soils would occur twice over two construction phases. Given there is the potential for certain construction infrastructure to remain in-situ for a period greater than 5 years, potentially significant effects have been identified for the temporary loss and disturbance of agricultural land and soils.
- 2.10.1.2 Secondary mitigation is proposed in the form of bespoke agreements with landowners where certain construction infrastructure such as haul roads and construction compounds are left in-situ for a period exceeding 5 years. Secondary mitigation will only be applied where it is identified that the presence of construction infrastructure at any one location exceeds 5 years. Agreements will be developed on a case-by-case basis in consultation with the relevant landowners and may encompass measures such as appropriate siting of infrastructure so as to minimise impacts as far as practicable.
- 2.10.1.3 It is anticipated that this would be secured through the CEMP and the requirement for community engagement via a Community Liaison Officer.

# 2.11 Residual Effects

### 2.11.1 Construction Effects

2.11.1.1 Considering the secondary mitigation outlined above, reducing the temporal impact of the Proposed Development (Onshore) to agricultural land and soils it is anticipated the resulting magnitude would change from

moderate to low. Taking the high sensitivity of the receptor and the low magnitude of impact, the resulting effect would be minor and not significant in EIA terms

# 2.11.2 Operation Effects

- 2.11.2.1 No significant operation effects have been identified and therefore no additional mitigation has been proposed. No residual operation land use effects are anticipated.
- 2.11.3 Decommissioning Effects
- 2.11.3.1 Decommissioning effects have been scoped out of the land use assessment. Therefore, no mitigation has been proposed/is practicable.

# 2.12 Summary of Effects

2.12.1.1 Table 2-16 presents a summary of the significant effects assessed within this EIAR in relation to land use, any mitigation required, and the residual effects are provided.



#### Table 2-16: Summary of land use effects

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect
Construction	1	,		,	
Temporary loss of agricultural land and soils	Medium	High	Moderate – Significant	Bespoke agreements with landowners where certain construction infrastructure such as haul roads and construction compounds are left in-situ for a period exceeding 5 years. Agreements will be developed on a case-by-case basis in consultation with the relevant landowners and may encompass measures such as appropriate siting of infrastructure so as to minimise impacts as far as practicable.	Minor (not significant)
Temporary loss of forestry and woodland	Low	Low	Negligible – Not significant	None required above embedded mitigation outlined in Table 2-13	Negligible (not significant)

# 2.13 References

<sup>1</sup> Scottish Parliament (2017) 'The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017. Available at: <u>https://www.legislation.gov.uk/ssi/2017/102/contents/made</u> (Accessed 07/10/2024)

<sup>2</sup> Scottish Parliament (2023) 'Agriculture and Rural Communities (Scotland) Bill' [As Introduced]. Available at: <u>https://www.parliament.scot/bills-and-laws/bills/agriculture-and-rural-communities-scotland-bill/introduced</u> (Accessed 07/10/2024)

<sup>3</sup> Scottish Government (2023) 'National Planning Framework 4'. Available at: <u>https://www.gov.scot/publications/national-planning-framework-4/</u> (Accessed 07/10/2024)

<sup>4</sup> Aberdeenshire Council (2023) 'Aberdeenshire Local Development Plan 2023'. Available at: <u>https://www.aberdeenshire.gov.uk/planning/plans-and-policies/ldp-2023/</u> (Accessed 07/10/2024)

<sup>5</sup> Scottish Government (2021) 'Land use - getting the best from our land: strategy 2021 to 2026'. Available at: <u>https://www.gov.scot/publications/scotlands-third-land-use-strategy-2021-2026-getting-best-land/documents/</u> (Accessed 07/10/2024)

<sup>6</sup> Scottish Government (2018) 'A future strategy for Scottish agriculture'. Available at: <u>https://www.gov.scot/publications/future-strategy-scottish-agriculture-final-report-scottish-governments-agriculture-champions/</u> (Accessed 07/10/2024)

<sup>7</sup> Scottish Government (2019) 'Scotland's Forestry Strategy 2019–2029'. Available at: <u>https://www.gov.scot/publications/scotlands-forestry-strategy-20192029/</u> (Accessed 07/10/2024)

<sup>8</sup> Scottish Government (2009a) 'The Scottish Government's Policy on Control of Woodland Removal'. Available at: <u>https://forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal</u> (Accessed 07/10/2024)

<sup>9</sup> Scottish Government (2009b). 'The Scottish Soil Framework'. Available at: <u>https://www.gov.scot/publications/scottish-soil-framework/</u> (Accessed 07/10/2024)

<sup>10</sup> Aberdeenshire Council (2023) 'Aberdeenshire Forestry and Woodland Strategy'. Available at: <u>http://publications.aberdeenshire.gov.uk/dataset/planning-advice</u> (Accessed 07/10/2024)

<sup>11</sup> Scottish Natural Heritage (now NatureScot) (2018) 'Environmental Impact Assessment Handbook'. Available at: <u>https://www.nature.scot/professional-advice/planning-and-development/environmental-assessment/environmental-impact-assessment</u> (Accessed 07/10/2024)

<sup>12</sup> IEMA (2022) 'A New Perspective on Land and Soil in Environmental Impact Assessment'. Available at: <u>https://www.iema.net/resources/blog/2022/02/17/launch-of-new-eia-guidance-on-land-and-soils</u> (Accessed 07/10/2024)

<sup>13</sup> Ordnance Survey (2023) MasterMap Topography Layer. Available at: <u>https://www.ordnancesurvey.co.uk/products/os-mastermap-topography-layer</u> (Accessed 07/10/2024)



<sup>14</sup> Google Earth (2022) 'Google Earth Pro'. Available at: <u>https://earth.google.com/intl/earth/versions/</u> (Accessed 07/10/2024)

<sup>15</sup> Scottish Forestry (2019a) 'Native Woodland Survey of Scotland'. Available at: <u>https://forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss</u> (Accessed 07/10/2024)

<sup>16</sup> Scottish Forestry (2019b) 'Felling Licence Applications 1998-2011'. Available at: <u>https://open-data-</u> <u>scottishforestry.hub.arcgis.com/search?groupIds=1c0cfcaa37dc48d4a835440a3bb301ac</u> (Accessed 07/10/2024)

<sup>17</sup> Scottish Forestry (2019c) Felling Permissions and Licences. Available at: <u>https://open-data-</u> <u>scottishforestry.hub.arcgis.com/search?groupIds=1c0cfcaa37dc48d4a835440a3bb301ac</u> (Accessed 07/10/2024)

<sup>18</sup> Forestry Commission (2022) 'National Forest Inventory Woodland Scotland 2021' Available at: <u>https://data-forestry.opendata.arcgis.com/search?tags=Scotland</u> (Accessed 07/10/2024)

<sup>19</sup> Soil Survey of Scotland Staff (1981) Land Capability for Agriculture maps of Scotland. Macaulay Institute for Soil Research, Aberdeen. Available at: <u>https://www.hutton.ac.uk/learning/natural-resource-datasets/soilshutton/soils-maps-</u> <u>scotland/download</u> (Accessed 07/10/2024)

<sup>20</sup> Soil Survey of Scotland Staff (1988) Land Capability for Forestry. Macaulay Institute for Soil Research, Aberdeen. Available at: <u>https://www.hutton.ac.uk/learning/natural-resource-datasets/soilshutton/soils-maps-scotland/download</u>(Accessed 07/10/2024)

<sup>21</sup> Caledonia Offshore Wind Farm Limited (2023) 'Phase 1 Habitat Survey Data'

<sup>22</sup> Scottish Government, 2020. 'Scottish Government Urban Rural Classification 2020'. Available at: <u>https://www.gov.scot/publications/scottish-government-urban-rural-</u> <u>classification-2020/</u> (Accessed 07/10/2024)

<sup>23</sup> NatureScot (2019) Landscape Character Types and Descriptions. Available at: <u>https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions</u> (Accessed 07/10/2024)

<sup>24</sup> Aberdeenshire Council (2023) 'Aberdeenshire Local Development Plan 2023. Appendix 7a Settlement Statements – Banff and Buchan'. Available at: <u>https://www.aberdeenshire.gov.uk/planning/plans-and-policies/ldp-2023/</u> (Accessed 07/10/2024)

<sup>25</sup> Aberdeenshire Council (2016) 'The Land Based Sector in NE Scotland facing the future' Available at: <u>https://www.aberdeenshire.gov.uk/media/22087/land-based-sector-web.pdf</u> (Accessed 07/10/2024)

<sup>26</sup> Forestry and Land Scotland (2021) 'Buchan woods land management plan'. Available at: <u>https://forestryandland.gov.scot/what-we-do/planning/active/buchan-woods-land-management-plan</u> (Accessed 07/10/2024)



 $^{\rm 27}$  Met Office (2018) 'UK Climate Projections (UKCP) Climate change projections over land'. Available at:

https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/summaries/climatechange-projections-over-land (Accessed 07/10/2024)

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