

# Appendix 2A Forestry Assessment

## 1.1. INTRODUCTION

This Appendix of the Further Environmental Information Report (FEI) considers the potential implications of the revised development on the woodland resource within the site boundary and its long-term management. This chapter was prepared by DGA Forestry LLP and considers revisions to the proposed tree felling to accommodate the changes to infrastructure layout following consultation.

Forestry is not being regarded as a receptor for Environmental Impact Assessment (EIA) purposes. Commercial forests are a dynamic environment, and their structure continually undergoes change due to:

- normal felling and restocking by the landowner;
- natural events, such as storm damage, pests, or diseases; and
- external factors, such as a wind farms or other development.

This chapter therefore describes:

- the plans as a result of the revised development for felling, restocking and forest management practices;
- the process by which these were derived; and
- the changes to the physical structure of the forestry within the site boundary.

It further discusses the issue of forestry waste arising from the revised development. The forestry proposals are interrelated with environmental effects, which are assessed separately in other chapters of the FEI Report. This FEI chapter should therefore be read in conjunction with other EAIR report chapters, for example: This appendix should therefore be read in conjunction with the FEI Report notably: **Chapter 2 Project Design; Chapter 4 : Landscape and Visual; Chapter 7: Renewable Energy, Carbon Balance and Peat Management; and Chapter 8: Historic Environment** as they are interrelated to the proposed changes in the forest structure.

The responsibility for the management of the remainder of the forest outwith the site boundary lies with the landowners and therefore the wider felling operations, restocking, and aftercare operations within these areas do not form part of the revised development for which consent is sought.

The majority of the proposed wind turbines and associated infrastructure are located within existing commercial forestry plantations (as shown in Figure 2.1: Site Layout of the FEI report with

areas of open moorland to the west. The woodlands are privately owned and managed. The forestry proposals have been developed to:

- identify areas of forest to be removed for the construction and operation of the revised development;
- identify those areas which may or may not be replanted as part of the revised development; and
- propose management practices for the forestry works.

In general, throughout this chapter data labelled 'baseline' refer to the current crop composition and any existing plans without any modification as a result of the revised development. Data labelled 'wind farm' or 'revised development' refer to the forestry plans incorporating the revised development.

This chapter is structured as follows:

- Legislation, Policy, and Guidance;
- Forestry Study Area;
- Forest Plans;
- Development of the Wind Farm Forest Plan;
- Baseline Conditions;
- Wind Farm Forest Plan;
- Requirement for Compensatory Planting;
- Forestry Waste;
- Forestry Management Practices; and
- Summary.

This chapter is supported by the following figures in **Annex A of this document**:

- Figure 2A.1: Forestry Study Area
- Figure 2A.2: Baseline Age Class Composition
- Figure 2A.3: Baseline Species Composition
- Figure 2A.4: Baseline Felling Plan
- Figure 2A.5: Baseline Restocking Plan
- Figure 2A.6: Revised Development Construction Felling
- Figure 2A.7: Revised Development Felling Phases Plan
- Figure 2A.8: Revised Development Restocking Plan

## 1.2. CONSULTATION

Responses to the EIA Report were received from statutory consultees between November 2024 and July 2025. The comments relevant to the Forestry Assessment, and how these have been responded to, are noted in **Table 2A.1** below.

**Table 2A.1 Consultee Comments relevant to Forestry Assessment**

| Consultee     | Date                           | Consultee Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Response                                                                                                                                                                                                                                  |
|---------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RSPB Scotland | 13 <sup>th</sup> February 2025 | It is noted that the Wind Farm Forest Plan will result in a native broadleaf woodland net gain of 1.8ha against the baseline. It is unclear whether this 1.8ha is included in the c. 14ha cited above. If broadleaf woodland creation is to be counted as Biodiversity Enhancement under this proposal, the Applicant must demonstrate that it is additional to any Long-Term Forest Plan changes required for Scottish Forestry, UK Woodland Assurance Standard or Forest Stewardship Council compliance by FLS. | All HMP proposals (see Appendix 6D of the FEI Report), detailed in the plan, including the 14ha native woodland planting are separate to the Wind Farm Forest Plan. The 1.8ha of additional planting has been removed from the assessment |

|                         |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Argyll and Bute Council | 9 <sup>th</sup> July 2025 | The Applicant should provide a detailed plan of where broadleaved planting will be undertaken on the margins of forestry and should also confirm the figure of 13.9ha of riparian/broadleaved planting they propose to undertake (stated in paragraph 4.4.1 of the Outline Habitat Management Plan Appendix 10.H) and how this relates to the 1.8ha increase in mixed broadleaves identified in Table 4A.11 of the EIAR Forestry Assessment. | Areas of broadleaf planting included as part of the HMP proposals are not included within the Wind Farm Forest Plan figure or calculations. These are covered separately under Appendix 6D of the FEI Report. Any changes to the overall broadleaf composition detailed within the calculations are concerning felling and restructuring due to the development layout. |
|-------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 1.3. LEGISLATION, POLICY AND GUIDANCE

There have been no changes to relevant legislation, policy or guidance relating to forestry since production of the EIA Report. Please refer to Volume 3 of the **EIA Report Appendix 4A: Forestry Assessment Section 4.3** for details.

### 1.4. FORESTRY STUDY AREA

Although there have been changes to the layout of the proposed development, now referred to as the revised development and associated changes in forestry felling, the Forestry Study Area remains the same as that identified in the EIA Report. Please refer to **EIA Report Appendix 4A 'Forestry Assessment' Section** and **Figure 1 Forestry Study Area** for details.

### 1.5. FOREST PLANS

No updates to this section are required as a result of the revised development and the information set out in **EIA Report Appendix 4A 'Forestry Assessment' Section 4.5** remains relevant.

### 1.6. DEVELOPMENT OF A WIND FARM FOREST PLAN

No updates to this section are required as a result of the revised development and the information set out in **EIA Report Appendix 4A 'Forestry Assessment' Section 4.6** remains relevant, although updated figures have been produced to show revised felling and restocking plans. These are submitted as **Figures 2A.2 'Baseline Age Class Composition', 2A.3 Baseline Species Composition, 2A.6 'Revised Development Construction Felling', 2A.7 'Revised Development Felling Phases Plan' and 2A.8 'Revised Development Restocking Plan' in Annex A of this appendix.**

## 1.7. BASELINE CONDITIONS

Since the original EIA Report was produced, tree felling operations have continued within the Forestry Study Area (FSA). These changes have been captured within the tables below calculating the revised felling and restocking areas, woodland loss, and subsequent compensatory planting requirements for the revised development layout.

### Baseline Planting Year/Age Class Structure

Many woodlands established in the mid to late 1900s, were planted in large contiguous blocks, often over a limited number of years and with a limited range of species. Such woodlands develop poor structural diversity, especially on upland sites. Restructuring the age class and species of such forests is desirable and would yield both forest management and environmental benefits.

The woodlands within the FSA have been going through restructuring by felling and restocking and as a result the structural diversity of the woodlands is fairly evenly split across age classes. Their age class is detailed below in **Table 2A.2: 'Baseline Age Class Composition'** and shown in **Figure 2A.1 Baseline Age Class**. Table 2A.2 below differs from Table 4A.2 of EIA Report Appendix 4A due to the changes to the forest structure as part of the ongoing management programme.

**Table 2A.2 Baseline Age Class Composition**

| Age Yrs      | Area (ha)      | Area (%)     |
|--------------|----------------|--------------|
| n/a          | 4,628.4        | 47.7         |
| 1-10 years   | 449.4          | 4.6          |
| 11-20 years  | 461.3          | 4.8          |
| 21-30 years  | 182.2          | 1.9          |
| 31-40 years  | 300.8          | 3.1          |
| 41-50 years  | 2,084.3        | 21.5         |
| 51-60 years  | 1,425.3        | 14.7         |
| 61-70 years  | 56.4           | 0.6          |
| 71-80 years  | 37.5           | 0.4          |
| 80+ years    | 68.9           | 0.7          |
| <b>Total</b> | <b>9,694.5</b> | <b>100.0</b> |

The current guidelines contained within the UK Forestry Standard (UKFS) are that in forests characterised by a lack of diversity due to extensive areas of even-aged trees, stands adjoining felled areas should be retained until the restocking of the first coupe has reached a minimum height of 2 metres (m). For planning purposes, this is likely to be between 5 and 15 years depending on establishment success and growth rates. It is recognised that in large even-aged plantations, especially in the uplands, restructuring age class structure to meet this target may take more than one rotation.

## Species Composition

The current baseline species composition of the woodlands within the FSA is shown in **Figure 2A.3 Baseline Species Composition** and illustrated in **Table 2A.3 below**. Table 2A.3 below shows a slight change in the areas compared to Table 4A.3 of EIA Report Appendix 4A, but the total area of woodland remains the same at 9,694.5 ha. This is due to the landowner's planned felling and restocking operations.

Please note there may be minor discrepancies in the totals within the tables contained in this chapter. This is due to rounding of the individual values for the different parameters in the database.

**Table 2A.3 Baseline Species Composition**

| Species           | Area (ha)      | Area (%)     |
|-------------------|----------------|--------------|
| Sitka spruce      | 4,802.5        | 49.5         |
| Mixed broadleaves | 265.8          | 2.7          |
| Other conifer     | 530.3          | 5.5          |
| Open ground       | 4,096.0        | 42.2         |
| <b>Total</b>      | <b>9,694.5</b> | <b>100.0</b> |

The main species are commercial conifers, principally Sitka spruce, which in pure or mixed stands, accounts for approximately 49.5% of the total FSA. Other conifers account for 5.5% of the FSA and broadleaf woodland 2.7%. Open ground accounts for approximately 42.2%.

The species composition reflects the practice and guidance which prevailed at the time the woodlands were established. Restructuring as part of a long-term forest plan would aim to introduce an increased proportion of broadleaves and other conifers into the woodland composition.

## Baseline Felling Plan

The Baseline Felling Plan shown in **Figure 2A.4 Baseline Felling Plan** and illustrated in **Table 2A.4 below** shows a slight change in the areas compared to Table 4A.4 of EIA Report Appendix 4A, but the total area of woodland remains the same at 9,694.5 ha. This is due to the landowner's planned felling and restocking operations.

**Table 2A.4 Baseline Felling Composition**

| Felling Phase      | Area (ha) | Area (%) |
|--------------------|-----------|----------|
| No Felling         | 4,064.3   | 41.9     |
| Phase 2: 2024-2028 | 125.3     | 1.3      |
| Phase 3: 2029-2033 | 440.4     | 4.5      |

|                      |                |              |
|----------------------|----------------|--------------|
| Phase 4: 2034-2038   | 562.0          | 5.8          |
| Outside Plan Period  | 4,242.0        | 43.8         |
| Long Term Retentions | 64.5           | 0.7          |
| Natural Reserves     | 196.1          | 2.0          |
| <b>Total</b>         | <b>9,694.5</b> | <b>100.0</b> |

A proportion of the FSA is designated as 'No Felling'" due either to open ground, land awaiting restocking or crops with no felling year assigned.

A large area of the FSA is designated as "Outside Plan Period". These areas are generally immature crops whose prospective felling year lies outside of the current Forest Plan period, which covers 10 years of felling and restocking from time of approval. Woodlands not covered by a current forest plan have been assigned to Outside Plan Period unless they have been previously identified as Long Term Retentions (LTR) or Natural Reserves (NR).

Some areas of crop in the baseline felling plan have been assigned a delayed felling age by the forest managers. These areas are Long Term Retentions (LTR), crops to be retained beyond their age of economic or silvicultural maturity for conservation and biodiversity purposes. These woodlands would otherwise be managed as normal and would in due course be felled and replanted. The identification of LTRs is part of the requirements of UKWAS and the UKFS.

Other areas within the FSA have been designated as Natural Reserves (NR). These are areas which are considered of higher conservation interest than commercial species and are managed by minimum intervention unless alternative management has higher conservation or biodiversity value. The identification of NRs is part of the requirements of UKWAS and the UKFS.

The baseline felling programme is designed to provide the required separation between felling coupes, where possible. This may take more than one rotation to achieve, especially in the uplands where wind firm boundaries between felling coupes are limited

## Baseline Restocking Species Composition

Although there have been ongoing management operations on site, there have been no changes to the baseline restocking species composition since production of the EIA Report. Please refer to **EIA Report Appendix 4A Section 4.7** for details.

## 1.8. WIND FARM FOREST PLAN

### Introduction

The effect of the revised development on the structure of the woodlands within the FSA has been compared against the Baseline Forest Plan. This has concentrated on changes to the felling and restocking species plans required to accommodate the revised development.

### Revised Development Felling Plan

The revised development Felling Plan is shown across two figures. **Figure 2A.6 ‘Revised Development Construction Felling’** shows only the felling required for construction of the revised development; these data are summarised in **Table 2A.5** below. **Figure 2A.7 ‘Revised Development Felling Phases Plan’** shows how this felling relates to the associated Forest Plans on the various properties, these data are summarised in **Table 2A.6** below.

**Table 2A.5 Felling Required for Construction**

| Felling                  | Area (ha)      | Area (%)   |
|--------------------------|----------------|------------|
| No Felling – open ground | 3,809.3        | 40.3       |
| Infrastructure Felling   | 105.3          | 1.1        |
| Advanced Felling         | 87.0           | 1.0        |
| No Felling – woodland    | 5,692.9        | 57.6       |
| <b>Total</b>             | <b>9,694.5</b> | <b>100</b> |

The total felling required to accommodate construction of the Revised Development, including infrastructure and advanced felling, totals 192.3 ha.

Infrastructure felling is felling which is required for the footprint of the proposed development.

Advanced felling is felling required as a result of the infrastructure felling, either to consolidate coupe shapes or fell back to a wind firm edge to prevent wind blow.

**Table 2A.6 Revised Development Felling Phases**

| Felling Phase        | Area (ha)      | Area (%)     |
|----------------------|----------------|--------------|
| No Felling           | 4,063.6        | 41.9         |
| Phase 2: 2024-2028   | 288.5          | 3.0          |
| Phase 3: 2029-2033   | 430.0          | 4.4          |
| Phase 4: 2034-2038   | 529.9          | 5.5          |
| Outside Plan Period  | 4,122.1        | 42.5         |
| Long Term Retentions | 64.4           | 0.7          |
| Natural Reserves     | 196.0          | 2.0          |
| <b>Total</b>         | <b>9,694.5</b> | <b>100.0</b> |



The Baseline and Revised Development Felling Plans are compared in **Table 2A.7** below.

**Table 2A.7 Comparison of Felling Plans**

| Felling Phase        | Baseline       | Windfarm       | Difference |            |
|----------------------|----------------|----------------|------------|------------|
|                      | Area (ha)      | Area (ha)      | Area (ha)  | Area (%)   |
| No Felling           | 4,064.3        | 4,063.6        | -0.7       | 0.0        |
| Phase 2: 2024-2028   | 125.3          | 288.5          | 163.2      | 1.7        |
| Phase 3: 2029-2033   | 440.4          | 430.0          | -10.4      | -0.1       |
| Phase 4: 2034-2038   | 562.0          | 529.9          | -32.1      | -0.3       |
| Outside Plan Period  | 4,242.0        | 4,122.1        | -119.9     | -1.2       |
| Long Term Retentions | 64.5           | 64.4           | -0.1       | 0.0        |
| Natural Reserves     | 196.1          | 196.0          | -0.1       | 0.0        |
| <b>Total</b>         | <b>9,694.5</b> | <b>9,694.5</b> | <b>0.0</b> | <b>0.0</b> |

Of the 192.3 ha of felling required for construction of the revised development; 162.4 ha would be advanced from later phases in the associated Forest Plans. This is balanced out by reduced felling in other periods as detailed below;

- 10.4 ha advanced from Phase 3
- 32.1 ha advanced from Phase 4
- 119.9 from Outside Plan Period

The level of felling for the revised development differs from EIA Report Appendix 4A 'Forestry Assessment' Section 4.8. There is a reduction in felling for the revised development;

- construction felling within EIA Report Appendix 4A was 198.1 ha, total construction felling for the revised development is 192.3 ha, a reduction of 5.8 ha.

This overall reduction in felling is due to;

- a reduction in wind farm infrastructure within the revised development; and
- a reappraisal of the level of advanced felling required as a result.

### Revised Development Restocking Plan

The Baseline Species Plan has been amended to integrate the revised development infrastructure requirements into the forest design and to take account of the site conditions. The Revised Development Restocking Species Plan is shown in **Figure 2A.8 'Revised Development Restock Species Plan'** and summarised in **Table 2A.8**. Wind farm open ground refers to the permanent loss of crop to permanent infrastructure only of the revised development.

**Table 2A.8 Revised Development Restocking Species Composition**

| <b>Restock Species</b>           | <b>Area (ha)</b> | <b>Area (%)</b> |
|----------------------------------|------------------|-----------------|
| Sitka spruce                     | 3,705.5          | 38.2            |
| Sitka spruce/Other conifer       | 211.6            | 2.2             |
| Sitka spruce/ Mixed broadleaves  | 0.5              | 0.0             |
| Mixed conifer/ Mixed broadleaves | 3.5              | 0.0             |
| Mixed broadleaves                | 929.6            | 9.6             |
| Other conifer                    | 1,018.9          | 10.5            |
| Open ground                      | 3,728.9          | 38.5            |
| Wind farm open ground            | 96.0             | 1.0             |
| <b>Total</b>                     | <b>9,694.5</b>   | <b>100.0</b>    |

The Baseline and Revised Development Restocking Species Plans have been analysed to assess the changes that construction of the revised development would have on the species composition of the forests. These data are presented in **Table 2A.9**.

**Table 2A.9 Restocking Species Plan Comparison**

| <b>Species</b>                   | <b>Baseline</b>  | <b>Revised Development</b> | <b>Difference</b> |                 |
|----------------------------------|------------------|----------------------------|-------------------|-----------------|
|                                  | <b>Area (ha)</b> | <b>Area (ha)</b>           | <b>Area (ha)</b>  | <b>Area (%)</b> |
| Sitka spruce                     | 3,781.2          | 3,705.5                    | -75.7             | -0.8            |
| Sitka spruce/Other conifer       | 211.6            | 211.6                      | 0.0               | 0.0             |
| Sitka spruce/ Mixed broadleaves  | 0.5              | 0.5                        | 0.0               | 0.0             |
| Mixed conifer/ Mixed broadleaves | 3.5              | 3.5                        | 0.0               | 0.0             |
| Mixed broadleaves                | 929.9            | 929.6                      | -0.3              | 0.0             |
| Other conifer                    | 1,035.1          | 1,018.9                    | -16.2             | -0.2            |
| Open ground                      | 3,732.7          | 3,728.9                    | -3.8              | 0.0             |
| Wind farm open ground            | 0.0              | 96.0                       | 96.0              | 1.0             |
| <b>Total</b>                     | <b>9,694.5</b>   | <b>9,694.5</b>             | <b>0.0</b>        | <b>0.0</b>      |

The change in area of stocked woodland in the forests due to the revised development is shown in **Table 2A.10** below.

**Table 2A.10 Stocked Woodland Area Comparison**

| <b>Species</b> | <b>Baseline</b>  | <b>Revised Development</b> | <b>Variance</b>  |                 |
|----------------|------------------|----------------------------|------------------|-----------------|
|                | <b>Area (ha)</b> | <b>Area (ha)</b>           | <b>Area (ha)</b> | <b>Area (%)</b> |
| Stocked        | 5,961.8          | 5,867.9                    | -93.9            | -1.0            |
| Unstocked      | 3,732.7          | 3,826.6                    | 93.9             | 1.0             |

|              |                |                |            |            |
|--------------|----------------|----------------|------------|------------|
| <b>Total</b> | <b>9,694.5</b> | <b>9,694.5</b> | <b>0.0</b> | <b>0.0</b> |
|--------------|----------------|----------------|------------|------------|

The changes in the structure of the woodlands due to the revised development are discussed below. The changes refer to a comparison of the Revised Development Restocking Species Plan against the Baseline Restocking Species Plan; summarised in **Table 2A.9**:

- there would be a net reduction in the area of conifer woodland of 91.9 ha (mixed conifer, Sitka spruce and Sitka spruce/open ground combined);
- broadleaf woodland would decrease by 0.3 ha;
- open ground as part of the forest design would decrease by 3.8 ha;
- Long term wind farm permanent open ground would total 96.0 ha; and
- the net reduction in stocked woodland area within the FSA would be 93.9 ha equivalent to 1.0% of the FSA.

There is a difference in the stocked woodland area between the revised development and EIA Report Appendix 4A 'Forestry Assessment'. There is an increase in the unstocked woodland area of 14.4 ha within the revised development. This is due to various changes to the infrastructure layout.

Areas of broadleaf planting could be undertaken as part of a Habitat Management Plan, in suitably identified areas (see Appendix 6D of the FEI Report for the proposals), these plans are separate to the Wind Farm Forest Plan.

### 1.9. REQUIREMENT FOR COMPENSATORY PLANTING

As a result of the construction of the revised development, there would be a net loss of woodland area. The area of stocked woodland in the FSA would decrease by 93.9 ha.

There is an increase in the area of compensatory planting of 2.7 ha between the revised development and the original EIA Report Appendix 4A: Forestry Assessment. In order to comply with the criteria of the Scottish Government's Control of Woodland Removal Policy, compensation planting would be required. The Applicant is committed to providing appropriate compensatory planting. The extent, location, and composition of such planting to be agreed with Scottish Forestry, taking into account any revision to the felling and restocking plans prior to the commencement of construction of the revised development.

### 1.10. FORESTRY WASTE

No updates to this section are required as a result of the revised development and the information set out in **EIA Report Appendix 4A 'Forestry Assessment' Section 4.10** remains relevant.

### **1.11. FORESTRY MANAGEMENT PRACTICES**

No updates to this section are required as a result of the revised development and the information set out in **EIA Report Appendix 4A 'Forestry Assessment' Section 4.11** remains relevant.

### **1.12. STANDARDS AND GUIDELINES**

No updates to this section are required as a result of the revised development and the information set out in **EIA Report Appendix 4A 'Forestry Assessment' Section 4.11** remains relevant.

### **1.13. SUMMARY**

The total FSA extends to 9,694.5 ha and is comprised of privately owned and managed woodlands (see **Figure 2A.1**).

A total of 192.3 ha of woodland requires to be felled to accommodate the revised development, of which 162.4 ha would be advanced from later phases in the associated Forest Plans. This represents a reduction of 5.8 ha of construction felling compared to the felling plans set out in the EIA Report. This reduction in felling has arisen due to various changes in wind farm infrastructure within the revised development; and a reappraisal of the level of advanced felling required as a result.

The species composition of the forest would change as a result of the revised development forestry proposals. In particular, the area of conifer woodland would decrease by 91.9 ha.

The area of unplanted ground would increase and, as a result, there would be a net loss of woodland area of 93.9 ha.

In order to comply with the Scottish Government's Control of Woodland Removal Policy, compensation planting would be required to mitigate for the loss of woodland area. The Applicant is committed to providing the required compensatory planting. The extent, location, and composition of such planting to be agreed with Scottish Forestry, taking into account any revision to the felling and restocking plans prior to the commencement of construction.

## ANNEX A Figures