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7. FORESTRY

7.1. Introduction

- 7.1.1. This Chapter does not repeat the information set out in *Chapter 7: Forestry* of the Shepherds' Rig EIA Report (November 2018) where that information remains valid in the context of the reduced number of turbines now proposed as the Revised Development (**AEI Figure 4.1**). As such, the Additional Environmental Information (AEI) supplements Chapter 7 of the EIA Report (November 2018) and should be read in conjunction with it.
- 7.1.2. The Wind Farm Felling Plan (**AEI Figure 7.1**) and Wind Farm Restock Plan (**AEI Figure 7.2**) has been updated to reflect the reduced number of turbines associated with the Revised Development.
- 7.1.3. In their response to the EIA Report (November 2018), Forestry Commission Scotland (now Forestry and Land Scotland) raised no objection to the Shepherds' Rig Wind Farm.
- 7.1.4. Forestry is not regarded as a receptor for EIA purposes. Commercial forests are dynamic and continually undergoing change due to normal felling and restocking by the landowner, natural events and external factors. The effects of forest felling and restocking are assessed in the relevant chapters of this AEI Report. This chapter should be read in conjunction with the other AEI Report chapters, in particular, *Chapter 4: Description of the Proposed Development*; *Chapter 8: Landscape & Visual*; *Chapter 9: Ecology*; and *Chapter 10: Ornithology* as they are interrelated to the changes in the forest structure.

7.2. Legislation and Policy Context

- 7.2.1. There have been a number of changes to forestry related legislation and policies since the preparation of the *Chapter 7: Forestry*, which formed part of the EIA Report (November 2018). These are summarised below.

Forestry and Land Management (Scotland) Act 2018¹

- 7.2.2. Until 1st April 2019, the Scottish Ministers owned the National Forest Estate (NFE), provided funding and had responsibility for forestry strategy and policy, but the management of the NFE and delivery of forestry functions had been the responsibility of the Forestry Commissioners.
- 7.2.3. The Forestry Commission was a cross-border public authority and a UK non-ministerial department with a statutory Board of Commissioners. The Commission was made up of a number of parts, including in Scotland:
- Forest Enterprise Scotland (FES), which carried out forestry operations and managed the NFE on Scottish Ministers' behalf; and
 - Forestry Commission Scotland (FCS), which was responsible for the other forestry functions in Scotland.

¹ The Scottish Government (2018). The Forestry and Land Management (Scotland) Act 2018, Edinburgh. Available at <http://www.legislation.gov.uk/asp/2018/8/contents/enacted> [accessed on 15.04.19].

7.2.4. When full devolution of forestry to the Scottish Government was completed on 1 April 2019, FCS and FES became two new agencies of the Scottish Government:

- Scottish Forestry (SF) is responsible for regulatory, policy and support functions; and
- Forestry and Land Scotland (FLS) is responsible for the management of the NFE and any other land managed for the purposes of the Forestry and Land Management (Scotland) Act 2018.

7.2.5. With the introduction of the Forestry and Land Management (Scotland) Act 2018 and its associated Regulations on April 1st 2019, the old regulatory regime of felling control under the Forestry Act 1967² was repealed in Scotland. From 1 April 2019, anyone wishing to fell trees in Scotland requires a Felling Permission issued by SF, unless an exemption applies or another form of felling approval such as a felling licence (including a forest plan) has previously been issued.

7.2.6. Under the new Regulations, felling which is authorised by planning permission consent continues to be exempt from the Regulations and does not require a Felling Permission issued by SF.

Scotland's Forestry Strategy 2019 – 2029

7.2.7. Scotland's Forestry Strategy 2019 – 2029 (SFS)³ was published in 2019. The strategy provides an overview of contemporary Scottish forestry; presents the Scottish Government's 50-year vision for Scotland's forests and woodlands; and sets out a 10-year framework for action. The vision is that:

"...in 2070, Scotland will have more forests and woodlands, sustainably managed and better integrated with other land uses. These will provide a more resilient, adaptable resource, with greater natural capital value, that supports a strong economy, a thriving environment, and healthy and flourishing communities."

7.2.8. It lists a number of objectives summarised below:

- Increase the contribution of forests and woodlands to Scotland's sustainable and inclusive economic growth;
- Improve the resilience of Scotland's forests and woodlands and increase their contribution to a healthy and high-quality environment; and
- Increase the use of Scotland's forest and woodland resources to enable more people to improve their health, well-being and life chances.

7.2.9. It further describes the priorities as:

- Ensuring forests and woodlands are sustainably managed;
- Expanding the area of forests and woodlands, recognising wider land-use objectives;

² UK Government (1967). Forestry Act 1967 (as amended). HMSO, London. Available at <https://www.legislation.gov.uk/ukpga/1967/10/contents> [accessed on 15.04.19]

³ Scottish Government (2019) Scotland's Forestry Strategy 2019-2029. Available at <https://www.gov.scot/publications/scotlands-forestry-strategy-20192029/> [Accessed on 25.03.2019]

- Improving efficiency and productivity, and developing markets;
- Increasing the adaptability and resilience of forests and woodlands;
- Enhancing the environmental benefits provided by forests and woodlands; and
- Engaging more people, communities, and businesses in the creation, management, and use of forests and woodlands.

7.2.10. There are ambitious targets included within the strategy for new woodland creation:

- 10,000 hectares (ha) per year in 2018;
- 12,000 ha per year from 2020/21;
- 14,000 ha per year from 2022/23; and
- 15,000 ha per year from 2024/25.

7.2.11. The stated objective is to increase Scotland's woodland cover from the current 18.5% to 21% by 2032.

7.3. Forestry Study Area and Site Description

7.3.1. There have been no changes to the Forestry Study Area (FSA) or the general description of the Site so that Section 7.3 of the EIA Report remains valid.

7.4. Forest Plans

7.4.1. There have been no changes to the baseline Forest Plan so that Section 7.4 of the EIA Report remains valid.

7.5. Methodology – Development of the Wind Farm Forest Plan

7.5.1. There have been no changes to the methodology used in the development of the wind farm forest plan as detailed in Section 7.5 of the EIA Report. The only changes have been to the turbine layout and associated infrastructure as described in *AEI Chapter 4 Description of the Revised Development* and shown on **AEI Figure 4.1**.

7.6. Baseline Conditions

Age Class Structure and Species Composition

7.6.1. There have been no changes to the baseline age class structure or species composition so that Section 7.6 of the EIA Report remains valid.

7.7. Baseline Felling Plan

7.7.1. There have been no changes to the baseline felling plan so that Section 7.7 of the EIA Report remains valid.

7.8. Baseline Restocking Plan

7.8.1. There have been no changes to the baseline restocking plan so that Section 7.8 of the EIA Report remains valid.

7.9. Wind Farm Forest Plan

7.9.1. The effect of the Revised Development on the structure of the woodlands has been compared against the existing baseline felling and restocking plans. This has concentrated on amendments to the felling plan and the restocking design required to accommodate the Revised Development as shown on **AEI Figure 4.1**.

7.10. Wind Farm Felling Plan

7.10.1. The wind farm felling plan has been amended to reflect the Revised Development, as shown on **AEI Figure 7.1** and summarised in AEI Table 7.1.

AEI Table 7.1: Wind Farm Felling Plan

Felling Phase	Area (ha)	Area (%)
No felling	134.2	16.36
Phase 1: 2014 - 2018	41.0	4.99
Phase 2: 2019 - 2023	244.1	29.76
Phase 3: 2024 - 2028	69.5	8.34
Long Term Retention	5.2	0.63
Natural Reserves	32.9	4.00
Outside Plan Period	293.6	35.79
Totals	820.5	100%

7.10.2. The baseline and wind farm felling data are compared in AEI Table 7.2.

AEI Table 7.2: Comparison of Baseline and Wind Farm Felling Plans

Felling Phase	Baseline Felling Plan	Wind Farm Felling Plan	Variance
	Area (ha)	Area (ha)	Area (Ha)
No felling	129.7	134.2	4.6
Phase 1: 2014 - 2018	41.3	41.0	-0.3
Phase 2: 2019 - 2023	204.7	244.1	39.4
Phase 3: 2024 - 2028	89.7	68.5	-21.2
Long Term Retention	10.0	5.2	-4.8
Natural Reserves	34.0	32.9	-1.1
Outside Plan Period	311.2	293.6	-17.5
Totals	820.5	820.5	0

7.10.3. There is an increase of 39.4 ha in felling during Phase 2: 2019 – 2023. This is due to felling advanced for the construction of the Revised Development. This is balanced out by reduced felling in later phases, particularly Outside Plan Period.

- 7.10.4. The 34.9 ha of advanced felling represents a reduction of 15.7 ha from the 55.1 ha of advanced felling associated with the Proposed Development as described in the 2018 EIA Report.

7.11. Wind Farm Restocking Plan

- 7.11.1. The baseline restocking plan has been amended to integrate the infrastructure of the Revised Development into the forest design and to take account of the site conditions. The wind farm restocking plan is based on the same design principles as detailed within the EIA Report.

- 7.11.2. The wind farm restocking plan is shown in **AEI Figure 7.2** and is summarised in AEI Table 7.3. The data labelled "Wind Farm Open Ground" (W/F OG) refers to crops which will be felled for the construction and operation of the Revised Development but will not be replanted to accommodate Revised Development infrastructure.

AEI Table 7.3: Wind Farm Restocking Plan

Species	Area (ha)	Area (%)
Open Ground	138.80	16.92
Sitka Spruce	447.87	54.58
Sitka Spruce/Mixed Conifer	69.41	8.46
Mixed Conifer	52.03	6.34
Mixed Broadleaves	41.88	5.10
Mixed Woodland	6.79	0.83
Wind Farm Open Ground	62.72	7.64
Totals	820.5	100.0%

- 7.11.3. The baseline and wind farm restocking data have been analysed to assess the effect construction of the Revised Development will have on the species composition of the forest. These data are presented in AEI Table 7.4.

AEI Table 7.4: Comparison of Baseline and Wind Farm Restocking Plans

Species	Baseline	Wind Farm	Variance
	Area (ha)	Area (ha)	Area (ha)
Open Ground	149.11	138.80	-10.31
Sitka Spruce	490.08	447.87	-42.21
Sitka Spruce/Mixed Conifer	77.91	69.41	-8.50
Mixed Conifer	53.60	52.03	-1.57
Mixed Broadleaves	40.39	41.88	1.50
Mixed Woodland	9.38	6.79	-2.59
Wind Farm Open Ground	0.0	62.72	62.72
Totals	820.5	820.5	

7.11.4. There are a number of changes to the species composition as a result of the Revised Development as summarised below:

- The area of conifer woodland decreases by 52.28 ha. This is principally Sitka spruce crops;
- The area of broadleaf woodland increases by 1.5 ha compared with the baseline; and
- There are minor changes to the proportions of other species.

7.11.5. The change in area of stocked woodland due to the Revised Development is shown in AEI Table 7.5. Stocked woodland is land containing woodland of any type, whether that is commercial conifer plantations or broadleaf woodland. Unstocked woodland consists of all open ground within the FSA which includes unplanted land, either due to ground conditions or constraints; management boundaries; or designed open ground as part of the forest design.

AEI Table 7.5: Stocked Woodland Assessment

Species	Baseline	Wind Farm	Variance
	Area (ha)	Area (ha)	Area (ha)
Stocked	671.3	618.0	-53.4
Unstocked	149.1	202.5	53.4
Totals	820.5	820.5	

7.12. Requirement for Compensatory Planting

7.12.1. As a result of the construction of the Revised Development, the area of stocked woodland decreases by 53.4 ha. This is a reduction of 7.7 ha from the 61.1 ha of woodland loss associated with the Proposed Development presented in the EIA Report. As such, there remains a requirement for compensatory planting.

7.12.2. In order to comply with the criteria of the Scottish Government's Control of Woodland Removal Policy, off-site compensation planting would be required. The Applicant is committed to providing appropriate compensation planting. The extent, location and composition of such planting is to be agreed with the SF, taking into account any revision to the felling and restocking plans prior to the commencement of construction.

7.13. Forestry Management Practices

7.13.1. There are no proposed changes to the proposed forestry management practices. The Standards and Guidelines remain the same except where replaced by newer editions or updates.

7.14. Summary

7.14.1. Advanced felling required for the construction of the Revised Development is 39.4 ha.

7.14.2. There is a decrease in the stocked woodland area of 53.4 ha compared with the baseline restocking plan.

- 7.14.3. In order to comply with the Scottish Government's Control of Woodland Removal Policy, offsite compensation planting would be required. The Applicant is committed to providing appropriate compensation planting.