Technical Appendix 6.1: Biodiversity Net Gain Assessment

1. Introduction

1.1.1. This technical appendix details the Biodiversity Net Gain (BNG) assessment at the Proposed Varied Development (PVD) and the biodiversity enhancement measures required to meet a significant biodiversity net gain of +10%[1]. The BNG assessment has been undertaken using the SSER BNG Project Toolkit[2] and is a quantitative measure of the habitat impact and improvement from the Proposed Development. A quantitative approach to biodiversity assessment can be used in construction projects to demonstrate compliance with NPF4 Policy 3, which requires demonstratable and significant improvements in biodiversity as a part of development projects. The assessment is required to evaluate whether the current outline Habitat Management Plan (oHMP)[3] for the Consented Scheme, is still appropriate to offset any residual impacts from the PVD and provide an enhancement in biodiversity value in accordance with NPF4 Policy 3 requirements. This BNG assessment should be read in conjunction with the Achany Extension Wind Farm Section 36C Variation - EIAR **Volume 2: Chapter 6 – Ecology**.

2. Method

2.1. Biodiversity Net Gain Method

2.1.1. The biodiversity metrics currently in use in the Scottish planning system are predominantly based on a framework that was originally developed by the Department for Food and Rural Affairs (DEFRA) and Natural England. There are two main published biodiversity metrics based on this framework, the English Statutory Biodiversity Metric and the Scottish and Southern Energy Renewables (SSER) biodiversity project toolkit.

2.1.2. Metrics based on this format are first used to calculate the baseline, or pre-development value of a site. This requires several input components, some of which are manually added by the user (e.g. habitat type, habitat area and habitat condition) and some which are automatically generated (e.g. 'distinctiveness' scores) based on the habitat type. Baseline habitat condition is scored using condition assessment sheets produced by Natural England (criteria within these sheets also inform the condition score of post-development habitats). Values from each component are then multiplied together to provide a baseline 'Biodiversity Unit' (BU) value.

2.1.3. Once a baseline value is established, the predicted ecological value of the site post-development can be calculated, considering any expected habitat losses and planned habitat creation or restoration. Metrics also apply a series of 'risk multipliers' to any post-development habitat creation or restoration. These reflect how difficult it is to achieve

[1] CIRIA and CIEEM C776a (2019): Biodiversity Net Gain: Good Practice Principles for Development – a practical guide (Page 97).

[2] SSE Renewables (2025) https://www.sserenewables.com/sustainability/nature-positive/

[3] Wood Group (2021). Technical Appendix 8.10: Outline Habitat Management Plan

the planned intervention and how long it is expected to take for the created / restored habitat to reach a specified target condition. By comparing the baseline BU value with the post-development BU value, a metric tool can be used to help understand whether nature is likely to be left in a demonstrably better state than before development (in accordance with NPF4 Policy 3).

2.1.4. This BNG assessment at the PVD has been undertaken using the SSER BNG Toolkit which shares the same scoring system as the Statutory Metric but with specific adaptations in habitat value and application for applicability for use in a Scottish context. The differences between the Statutory Metric and SSER BNG Toolkit have been agreed in consultation with Regulators and are detailed within NatureScot Guidance (2025) on the use of existing biodiversity metrics in the Scottish planning system.[4]

2.2. Habitats Included Within the Assessment

2.2.1. Whilst the general approach to calculating offsetting and compensation requirements is the same between the Statutory Metric and the SSER Project Toolkit, the method for calculating an uplift in the SSER Project Toolkit differs, in so much as, compensation and enhancement are directly linked to the level of impact, rather than including all the habitats within the red line boundary (RLB). As agreed with NatureScot (2025) the guidance on the use of existing biodiversity metrics in the Scottish planning system states:

2.2.2. 'Rather than calculating uplift as a percentage of the total baseline biodiversity value within a development's red line boundary, SSER introduces the concept of a 'biodiversity assessment boundary'. This is defined as areas which are either directly or indirectly affected by the development and areas which are being used to compensate for biodiversity impacts. Any habitats within the red line boundary that are expected to be retained at baseline habitat type and condition, with no direct or indirect impacts, are excluded from the biodiversity assessment boundary. Uplift is then calculated as a percentage of the total baseline BU value of habitats within the biodiversity assessment boundary.'

2.2.3. This approach is more proportional on most developments but particularly those that have a relatively small footprint compared to the size of the RLB. It ensures the mitigation hierarchy is thoroughly embedded into project decisions e.g. incentivises the avoidance of higher value habitats within the RLB as the level of compensation required is directly driven by the level of impact (which encourages avoidance and minimisation measures). A further deviation from the Statutory Metric (and to provide a more complete assessment in upland settings), is that the SSER Project Toolkit includes indirect impacts, in this case to account for potential changes in hydrology. Therefore, habitats within 10m of the infrastructure have also been included in the assessment as a

[4] NatureScot (2025): Guidance on the use of existing biodiversity metrics in the Scottish planning system

precautionary approach to the BNG assessment (and in-line with the PVD ecology chapter).

2.2.4. The BNG assessment has been completed using the habitat loss calculations provided in **Chapter 6, Table 6.8** 'Summary of Habitat Loss Calculation Results for the Proposed Varied Development' to identify where potential losses in habitat value associated with the PVD may occur. Gains in biodiversity value have been assessed against the commitments in the Consented Schemes oHMP which primarily focusses on peatland restoration, with habitat management units suitable for peatland restoration totalling 307ha.

2.3. Limitations

2.3.1. The BNG assessment has been undertaken using the existing data for the Consented Scheme. No Statutory Metric habitat condition sheets have been completed as it was not a requirement during data collection for the Consented Scheme. Targeted Peatland condition data (See **Chapter 6, Table 6.6**: 'Peatland Habitat Condition Survey Results') was collected for the Consented Scheme and commentary on other habitats' condition provided within survey reports. Much (96%) of the peatland at the site has been demonstrated to be highly modified, drained or eroding. Where there was no easy correlation in the habitat condition data collected with the Statutory Metric conditions sheets, or no condition data available, a precautionary value 'moderate' or 'high' condition has been used within the Toolkit, following the precautionary principle.

3. Biodiversity Net Gain Result

3.1.1. Taking account of the proposed decreases and increases in biodiversity value associated with the construction, operation and delivery of the Habitat Management Plan at the PVD, **Table 1** details the BNG assessment result. All habitats have been assessed using the default multipliers in the SSER Toolkit and time to target condition values.

Table 1: Biodiversity Net Gain Result (Area Habitats)

Stage	Biodiversity Units (BU)	BU Gained / Lost from Baseline	% BNG
Baseline Biodiversity Unit Value	3694.30	-	-
Construction Phase (demonstrating the loss in BU Value).	2732.05	-962.25	-
Post Development / Implementation of the oHMP	**4230.78**	**+536.49**	**+15%**

3.1.2. The baseline biodiversity value at the Proposed Development has been calculated at 3694.30BU. During construction it is anticipated that the Proposed Development will incur a decrease in area-based biodiversity value by minus 962.25BU (against the baseline value). The decrease in BU's is a result of the permanent construction footprint,

the temporary loss of habitats e.g. construction compounds and indirect habitat modification (out to 10m). This temporary decrease in biodiversity value is however offset by the re-instatement and enhancement (peatland restoration) of area-based habitats within the consented oHMP, which fully compensate for the loss in biodiversity units during construction (-962.25BU) and permanent habitat change (footprint), to deliver increases in biodiversity value by +536.49BU **(+15%)** on top of the baseline biodiversity value. The final biodiversity value, post development is anticipated to be 4230.78BU. It should be noted that opportunities for further biodiversity enhancement are being explored e.g. riparian planting and should be included in the PVD's full HMP should the necessary agreements be finalised. The BNG assessment can be updated to reflect any changes to the HMP at condition discharge.

4. Conclusion

4.1.1. The Proposed Development has been assessed using the SSER BNG Toolkit to provide a quantitative biodiversity assessment for the scheme. The results of the biodiversity assessment demonstrate that the scheme will deliver a significant biodiversity net gain in area-based biodiversity units (+536.49BU) on top of the baseline biodiversity value, achieving a **+15% biodiversity net gain**. The peatland condition at the site is highly modified therefore it is likely indirect impacts will not extend the full 10m in places. In addition, further creation and enhancement opportunities will be sought as part of the PVD such as riparian woodland planting. Therefore, the +15% BNG is likely to be a conservative estimate of the potential gains that may be achieved through the implementation of the final HMP for the PVD.

4.1.2. The PVD is projected to realise significant biodiversity net gains (+10% or above is significant BNG). A BNG assessment at +15% above baseline provides confidence that the Proposed Development will achieve demonstrably positive effects for biodiversity, in accordance with NPF4 Policy 3, and the site will be left in a measurably better state than beforehand.

4.1.3. This BNG assessment should be transposed into a full and final HMP, prior to implementation of the Proposed Development (in consultation with relevant stakeholders) to capture any changes in habitat creation proposals e.g. riparian woodland planting.