Canford Energy from Waste
Combined Heat and Power Facility

Revision 1.1
July 2023

Appendix 8.6: Outline Biodiversity Net Gain Strategy

We inspire with energy.

Contents

1. Introduction

1.1 Background

1.1.1 MVV Environment Limited (the Applicant) has submitted a full planning application for a Carbon Capture Retrofit Ready (CCRR) Energy from Waste Combined Heat and Power (EfW CHP) Facility at Canford Resource Park (CRP), off Magna Road, in the northern part of Poole. Together with associated CHP Connection, Distribution Network Connection (DNC) and Temporary Construction Compounds (TCCs), these works are the Proposed Development.

1.1.2 The primary purpose of the Proposed Development is to treat Local Authority Collected Household (LACH) residual waste and similar residual Commercial and Industrial (C&I) waste from Bournemouth, Christchurch, Poole and surrounding areas, that cannot be recycled, reused or composted and that would otherwise be landfilled or exported to alternative EfW facilities further afield, either in the UK or Europe.

1.1.3 The Proposed Development will recover useful energy in the form of electricity and hot water from up to 260,000 tonnes of non-recyclable (residual), non-hazardous municipal, commercial and industrial waste each year. The Proposed Development has a generating capacity of approximately 31 megawatts (MW), exporting around 28.5MW of electricity to the grid. Subject to commercial contracts, the Proposed Development will have the capability to export heat (hot water) and electricity to occupiers of the Magna Business Park and lays the foundations for a future CHP network to connect to customers off Magna Road.

1.2 The Applicant

1.2.1 The Applicant is part of the MVV Energie AG group of companies. MVV Energie AG is one of Germany's leading energy companies, employing approx. 6,500 people with assets of around €5 billion and annual sales of around €4.1 billion. The Proposed Development represents an investment of approximately £290m.

1.2.2 The company has over 50-years' experience in constructing, operating, and maintaining EfW CHP facilities in Germany and the UK. MVV Energie's portfolio includes a 700,000 tonnes per annum residual EfW CHP facility in Mannheim, Germany.

1.2.3 MVV Energie has a growth strategy to be carbon neutral by 2040 and thereafter carbon negative, i.e., climate positive. Specifically, MVV Energie has committed to:

- Reduce its direct carbon dioxide (CO_2) emissions by over 80% by 2030 compared to 2018;
- Reduce its indirect CO_2 emissions by 82% compared to 2018;
- Be climate neutral by 2040; and
- Be climate positive from 2040.

1.2.4 MVV's UK business retains the overall group ethos of 'belonging' to the communities it serves whilst benefitting from over 50 years' experience gained by its German sister companies.

1.3 The Proposed Development

1.3.1 This Proposed Development is located north of Poole. It will complement the existing waste activities of the integrated waste management park known as Canford Resource Park (CRP), off Magna Road. It is within the administrative area of Bournemouth, Christchurch and Poole Council and is centred at National Grid Reference SZ 03436 96720.

1.3.2 The Proposed Development consists of the following key elements:

- EfW CHP Facility;
- CHP Connection;
- Distribution Network Connection (DNC); and
- Two Temporary Construction Compounds (TCC1 and TCC2) – only one of which will be utilised.

1.3.3 A full description of the Proposed Development is provided in **ES Chapter 3: Description of the Proposed Development**.

1.4 Purpose of this document

1.4.1 The Applicant commits to delivering a minimum of 25% Biodiversity Net Gain (BNG) for the Proposed Development. Subject to the agreement of the local planning authority, the Applicant's commitment to BNG will be secured by a Section 106 obligation. This document sets out the outline BNG strategy to deliver the Applicant's commitments.

1.5 Structure of this document

- Section 2 – Summary of BNG proposals.

2. Summary of BNG proposals

2.1.1 **Table 2.1** summarises the results of the **BNG Assessment (Appendix 8.2: Biodiversity Net Gain Calculations)**. It shows the: baseline units; post intervention units (i.e., once habits have been reinstated/created as per the outline landscape and ecology strategy); and the additional units required to achieve the target minimum of 25% BNG across area-based habitat, while meeting the BNG trading rules. No linear (hedgerow) or river units are present within the Proposed Development redline.

Table 2.1: Summary of BNG Units required for the Proposed Development with TCC1

BNG Unit type	On-site baseline (units)	On-site post-intervention (units)	Onsite net % change (units/(%))	25% uplift on baseline (units)	Units required to achieve 25% gain (units)*
Area-based habitat units	40.60	36.43	-10.26	50.75	14.32
Linear habitat units	0	0	0	0	0
River habitat units	0	0	0	0	0
*** = onsite net change +/- 25% uplift on baseline**					

Table 2.2: Summary of BNG Units required for the Proposed Development with TCC2

BNG Unit type	On-site baseline (units)	On-site post-intervention (units)	Onsite net % change (units/(%))	25% uplift on baseline (units)	Units required to achieve 25% gain (units)*
Area-based habitat units	35.55	27.76	-21.90	44.44	16.68
Linear habitat units	0	0	0	0	0
River habitat units	0	0	0	0	0

BNG Unit type	On-site baseline (units)	On-site post-intervention (units)	Onsite net % change (units/(%))	25% uplift on baseline (units)	Units required to achieve 25% gain (units)*

*** = onsite net change +/- 25% uplift on baseline**

2.1.2 WH White Ltd, the landowner of large parcels of land surrounding the Proposed Development, has agreed in principle to permit and facilitate habitat creation/enhancement within this adjacent land for the purposes of enabling the Proposed Development to deliver an overall minimum 25% net gain in biodiversity habitat units. Surveys to determine the current baseline conditions of this off-site land, in order to develop a detailed plan to achieve 25% net gain, will be undertaken during the appropriate survey season.

2.1.3 The following modelling provides example scenarios for achieving 25% BNG through habitat compensation provided off-site. This assumes that the off-site habitat baseline does not have strategic significance and is within the same Local Planning Authority, and includes baseline habitat types likely to be found within the land surrounding the Proposed Development based on a review of aerial mapping.

2.1.4 These example scenarios illustrate how a minimum of 25% BNG can be achieved, but do not take into account the trading rules. For the trading rules to also be met, it is likely that a combination of several habitat type enhancements will be required (e.g., predominantly grassland enhancement, with a smaller area of woodland or mixed scrub enhancement). The exact proportions can be determined within the detailed BNG plan.

Area-based habitat unit modelling for the Proposed Development with TCC1:

- ***Enhancing*** 3.25 ha of other neutral grassland from poor to good condition would generate a net change of approximately 15.24 area-based units resulting in 27.27% net gain; or
- ***Enhancing*** 5.25 ha of other neutral grassland from moderate to good condition would generate a net change of approximately 14.71 area-based units resulting in 25.96% net gain; or
- ***Enhancing*** 2.75 ha of mixed scrub from poor to good condition would generate a net change of approximately 15.41 area-based units resulting in 27.68% net gain; or
- ***Enhancing*** 4 ha of mixed scrub from moderate to good condition would generate a net change of approximately 14.38 area-based units resulting in 25.15% net gain; or
- ***Enhancing*** 3.75 ha of other woodland; broadleaved/mixed from poor to good condition would generate a net change of approximately 14.71 area-based units resulting in 25.97% net gain; or
- ***Enhancing*** 5.25 ha of other woodland; broadleaved/mixed from moderate to good condition would generate a net change of approximately 14.71 area-based units resulting in 25.96% net gain.

Area-based habitat unit modelling for the Proposed Development with TCC2:

- ***Enhancing*** 3.75 ha of other neutral grassland from poor to good condition would generate a net change of approximately 17.58 area-based units resulting in 27.56% net gain; or
- ***Enhancing*** 6.0 ha of other neutral grassland from moderate to good condition would generate a net change of approximately 16.81 area-based units resulting in 25.38% net gain; or
- ***Enhancing*** 3.0 ha of mixed scrub from poor to good condition would generate a net change of approximately 16.81 area-based units resulting in 25.38% net gain; or
- ***Enhancing*** 4.75 ha of mixed scrub from moderate to good condition would generate a net change of approximately 17.07 area-based units resulting in 26.14% net gain; or
- ***Enhancing*** 4.25 ha of other woodland; broadleaved/mixed from poor to good condition would generate a net change of approximately 16.67 area-based units resulting in 25.01% net gain; or
- ***Enhancing*** 6.0 ha of other woodland; broadleaved/mixed from moderate to good condition would generate a net change of approximately 16.81 area-based units resulting in 25.38% net gain.

2.1.5 The above summary of the BNG requirements to deliver a minimum 25% gain for the Proposed Development will be used as the basis for discussion with the landowner.

Baseline

2.1.6 The habitat baseline for the Proposed Development and calculation of associated baseline biodiversity units is set out in **Appendix 8.1 Baseline Ecology Report** and **Appendix 8.2 Biodiversity Net Gain Calculations**, with habitat condition determined using the habitat condition assessment sheets from the Defra Biodiversity Metric. The habitat baseline would be updated where necessary via pre-construction surveys to ensure it provides an accurate representation of the type and condition of habitats present prior to the commencement of the Proposed Development. The pre-construction surveys will be set out in the **Ecological Construction Method Statement**, and secured via planning condition.

2.1.7 An off-site habitat baseline would be provided where necessary (see **Section 2.1.15 Off-site BNG measures** below).

BNG assessment

2.1.8 The preliminary BNG assessment of the Proposed Development is set out in **ES Chapter 8: Ecology** and the **Biodiversity Net Gain Calculations (Appendix 8.2)**, using the Defra Biodiversity Metric to compare the baseline, impacts (i.e., habitat loss/change) and post-intervention (i.e., habitat creation and enhancement) to

provide an early estimate of BNG for the Proposed Development as-designed at the planning application submission stage.

BNG assessment updates

2.1.9 The BNG assessment would be refined and updated through detailed design post-consent and selection of the TCC; and at the end of construction using as-built data of habitat clearance and landscaping to ensure the final BNG calculation is an accurate portrayal of the habitat change as result of the construction of the Proposed Development.

Version of the Biodiversity Metric

2.1.10 The version of the Biodiversity Metric used in subsequent iterations of the BNG assessment will be kept under review in light of guidance by Defra/Natural England and agreed with the local planning authority.

Delivery of BNG

2.1.11 The BNG delivery mechanism will follow a hierarchical approach:

i. Maximising on-site BNG measures in the first instance;

ii. When on-site BNG measures have been exhausted, delivering off-site BNG measures on adjacent sites to the Proposed Development and within the ownership of WH White Ltd;

iii. Utilising other sites within the same local authority area as the Proposed Development if required and where possible; and

iv. If (i) to (iii) cannot be achieved, other sites not necessarily local to the Proposed Development or the purchase of credits will be considered.

2.1.12 The Applicant will outline the delivery mechanism(s) within the BNG Strategy once the change in biodiversity units is finalised at the detailed design stage post-consent, and the delivery mechanism would be updated and confirmed at the as-built stage following the respective updates to the BNG assessment.

On-site BNG measures

2.1.13 The Applicant has taken steps to maximise the biodiversity units provided on-site within the EfW CHP Facility Site as shown on the **Landscape, Ecology and Arboricultural Management Framework (Appendix 8.5)** for the Proposed Development (to be secured by planning condition). The on-site post-intervention change in biodiversity units set out in **ES Chapter 8: Ecology**.

2.1.14 As described above, the BNG assessment would be updated to calculate the on-site post-intervention change in biodiversity units at the detailed design and as-built stages, and would account for the final detailed **Landscape, Ecology and Arboricultural Management Plan**.

Off-site BNG measures

2.1.15 Where there is a BNG deficit following on-site BNG measures, the Applicant will provide appropriate off-site BNG measures in order to achieve a total minimum of 25% BNG for the Proposed Development. The Applicant is in the process of identifying opportunities for delivering off-site BNG measures.

2.1.16 Any off-site habitat measures (i.e., habitat creation or enhancement) would be supported by appropriate habitat surveys to determine the baseline habitat types and condition, and the BNG assessment would be updated to present habitat proposals and calculate change in biodiversity units. Any off-site habitat measures will need to fulfil the BNG trading rules, but would seek to accord with relevant local, regional and national strategic conservation priorities where possible, and the National Habitat Network which identifies areas for strategic habitat creation.

2.1.17 The mechanisms and any associated legal agreements for securing the delivery of off-site BNG measures would be set out in the BNG Strategy.

Registering biodiversity units

2.1.18 The Applicant would fulfil any mandatory requirements to register on and off-site biodiversity units with the relevant planning authority and/or statutory nature conservation body.

Implementation, monitoring and management

2.1.19 Following initial habitat creation, on-site and off-site BNG habitat measures would be subject to a monitoring and management period which is a pre-requisite of BNG; to ensure habitats establish and maintain target condition. The period would continue for the operational lifetime of the Proposed Development which is beyond the 30-year period that is a pre-requisite of BNG. The regime for implementation, monitoring and managing on-site habitats included on the **Landscape, Ecology and Arboricultural Management Plan** is set out in the **Landscape, Ecology and Arboricultural Management Framework (Appendix 8.5)**.

2.1.20 Where off-site BNG measures are to be provided, an appropriate accompanying strategy for habitat implementation, monitoring and management would be set out in the BNG Strategy.

Sharing monitoring data

2.1.21 The Applicant would fulfil any mandatory requirements to share monitoring data with the relevant planning authority and/or statutory nature conservation body, and the intervals for sharing monitoring data would be set out in the BNG strategy.