



Net Gain Assessment Report

Cleator Battery Storage

02/08/2022



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Contents

1. Introduction	5
2. Legislation, Planning Policy and Guidance.....	7
3. Methodology	12
4. Net Gain Assessment.....	13

1. INTRODUCTION

BACKGROUND

- 1.1. Neo Environmental Ltd has been appointed by RES to undertake a Preliminary Ecological Appraisal (PEA) for a proposed expansion of battery storage at Woodend (the “Proposed Development”) on lands circa 50 metres West of the A5086 at Woodend (the ‘Application Site’).

DEVELOPMENT DESCRIPTION

- 1.2. The proposed development comprises the addition of batteries to the West and South of the existing battery storage to allow additional battery duration to the 10MW system in place. The site may also add an additional 5MW of energy capacity to the site, within the same redline area.

SITE DESCRIPTION

- 1.3. The Application Site comprises 0.60ha of land located 1.56km North of Egremont, c. 50 metres West of the A5086 at Woodend. The site sits at an elevation of 67m in the East which rises to 74m in the West though the topography is very uneven over the peaks and troughs of the land.
- 1.4. The area immediately surrounding the subject site is an area characterised by primarily agricultural land uses interspersed with small stands of woodland, however there are residential villages locally nearby to the North, South, and West. Also of local note are River Ehen and Longlands Lake which is located 150m and 200m to the Southeast of the Application Site respectively.

STATEMENT OF AUTHORITY

- 1.5. All work has been carried out in line with the relevant professional guidance, including CIEEM’s Guidelines for Report Writing¹.

¹ CIEEM, 2017. Guidelines for Ecological Report Writing. Second Edition. Available at www.cieem.net

- 1.6. Thomas Hill, who wrote the report, has four years of experience as an ecologist in a mixture of field and office-based work. Thomas has experience in many surveys and assessments including Phase 1 habitat surveys, bat, badger, otter and water vole alongside other protected species surveys. He has worked on projects of varying scales, from simple residential extension developments up to national scale transport infrastructure projects. Thomas is currently working towards CIEEM membership.

2. LEGISLATION, PLANNING POLICY AND GUIDANCE

International Agreements

- 2.1. International agreements relevant to the Proposed Development is outlined within **Table 2-1** below.

Table 2--1: Relevant International Agreements

Directive	Main Provisions
Bern Convention	The Bern Convention ² came into force in 1982, with the principal aims to ensure conservation and protection of wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species) listed in Appendix III.
Bonn Convention	The Bonn Convention ³ came into force in 1985. Contracting Parties work together to conserve migratory species and their habitats by providing strict protection for endangered migratory species (listed in Appendix I of the Convention), concluding multilateral Agreements for the conservation and management of migratory species which require or would benefit from international cooperation (listed in Appendix II), and by undertaking cooperative research activities.
Ramsar Convention	The Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) ⁴ came into force in 1975. It is an international treaty for the conservation and wise use of wetlands.

National Legislation

Wildlife & Countryside Act 1981 / Conservation of Habitats and Species Regulations 2017

- 2.2. The Wildlife and Countryside Act 1981⁵ (as amended), formerly used to implement EU legislation, has more recently been strengthened by the Conservation of Habitats and Species

² Available at: <https://www.coe.int/en/web/bern-convention>

³ Available at: <https://www.cms.int/en/convention-text>

⁴ Available at: <https://www.ramsar.org/about-the-convention-on-wetlands-0>

⁵ Parliament of the United Kingdom, 1981. Wildlife and Countryside Act 1981 (as amended). Available at: <http://www.legislation.gov.uk/ukpga/1981/69>

Regulations 2017. This consolidates and amends existing national legislation, making it an offence to:

“Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young while it is nesting;

Intentionally kill, injure or take any wild animal listed under Schedule 5 of the Act; intentionally damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 of the Act; disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection;

Pick or uproot any wild plant listed under Schedule 8 of the Act.”

Environment Act 2021

- 2.3. This Act introduced a legally binding target on species abundance for 2030, aiming to reverse declines of key wild species. It creates a requirement for 10% net biodiversity gain as part of development projects, and for a series of Nature Recovery Strategies to cover England. The new Act makes minor amendments to the 1981 Act and 2017 Regulations (see above). It expands measures taken against illegal deforestation, enshrines a legal duty for water companies to reduce adverse impacts from storm overflow discharge, and gives statutory effect to conservation covenants. To assist in the above, it also creates an Office for Environmental Protection.
- 2.4. The Environment Act supersedes the former UK Post-2010 Biodiversity Framework and UK Biodiversity Action Plan (“BAP”). While certain provisions of the Act are only likely to enter force later in 2022 and 2023, some are already current. The Natural Environment and Rural Communities Act 2006
- 2.5. The Natural Environment and Rural Communities (NERC) Act⁶ places a duty on planning authorities to have due regard for biodiversity and nature conservation during operations. This aims to ensure that biodiversity is a key consideration in the local planning process.
- 2.6. Section 41 of the NERC Act lists a number of habitats and species of principal importance for the conservation of biodiversity in England.

Hedgerows Regulations 1997

- 2.7. Under the Hedgerows Regulations 1997, certain hedgerows⁷ are classified as ‘Important’ based on factors such as the presence of a certain number of woody native plant species. Subject to certain exceptions, the removal of an ‘Important’ hedgerow is prohibited.

⁶ Available at <https://www.legislation.gov.uk/ukpga/2006/16/contents>

⁷ Available at <https://www.legislation.gov.uk/uksi/1997/1160/contents/made>

2.8. 'Removal' includes uprooting all or part of the hedgerow, as well as any acts that could lead to the hedgerow's destruction. Removal is permitted under Section 6 of the Act under a small number of exemptions, including:

"[...] for carrying out development for which planning permission has been granted or is deemed to have been granted, except development for which permission is granted by article 3 of the Town and Country Planning General Permitted Development Order 1995 in respect of development of any of the descriptions contained in Schedule 2 to that Order other than Parts 11 (development under local or private Acts or orders) and 30 (toll road facilities)."

Protection of Badgers Act

2.9. The Protection of Badgers Act 1992⁸ makes it illegal to kill, injure or take a badger or to intentionally or recklessly interfere with a badger sett. Sett interference includes disturbing badgers whilst they are occupying a sett or obstructing access to it.

Planning Policy

National Planning Policy Framework (2021)

2.10. The National Planning Policy Framework ("NPPF")⁹ sets out the government planning policies for England and how they should be applied. With regards to ecology and biodiversity, Chapter 11 "Conserving and Enhancing the Natural Environment", paragraph 170, states that planning policies should:

- Minimise impacts on, and provide net gains in, biodiversity where possible.
- Recognise the wider benefits of natural capital and ecosystem services.

2.11. Under these aims, paragraph 171 stresses the need to plan for natural capital at a catchment or landscape scale, linked to national and local targets. Paragraph 175 sets out the principles that local planning authorities should apply when determining planning applications:

- Refuse planning permission if significant harm cannot be avoided, adequately mitigated, or, as a last resort, compensated for;
- Encourage opportunities to incorporate biodiversity in and around developments, especially where this can secure measurable net gains for biodiversity;

⁸ Parliament of the United Kingdom (1992). Protection of Badgers Act 1992. Available at: <http://www.legislation.gov.uk/ukpga/1992/51/contents>

⁹ Department for Housing, Communities and Local Government (2021). National Planning Policy Framework

- Permission should not normally be permitted where an adverse effect on a nationally designated Site of Special Scientific Interest is likely;
- Refuse planning permission if development will result in the loss or deterioration of irreplaceable habitats, such as ancient woodland and ancient or veteran trees, unless there are wholly exceptional circumstances e.g. when the benefits of the development clearly outweigh the loss or deterioration.

Copeland Borough Council Local Plan 2021-2038¹⁰

- 2.12. The Plan sets out an overall strategy for the proper planning and sustainable development of the borough and consists of a written statement and accompanying plans and maps
- 2.13. Chapter 15 of the Plan refers to the county's natural heritage and contains a number of key policies (outlined below), which aim to protect and enhance biodiversity within the borough:

Strategic Policy DS1PU: Presumption in Favour of Sustainable Development

"The Council will take a positive approach to sustainable development by approving applications without delay where they accord with the Development Plan (and where relevant, any neighbourhood plan), unless material considerations indicate otherwise."

Strategic Policy N1PU: Conserving and Enhancing Biodiversity and Geodiversity

"Potential harmful impacts of any development upon biodiversity and geodiversity must be identified and considered at the earliest stage. Proposals must demonstrate, to the satisfaction of the Council, that the following mitigation hierarchy must have been undertaken: Avoidance (...) Mitigation (...) Compensation (...) Compensation is a last resort and will only be accepted in exceptional circumstances."

Strategic Policy N3PU: Biodiversity Net Gain

"All development, with the exception of that listed in the Environment Act must provide a minimum of 10% biodiversity net gain over and above existing site levels, following the application of the mitigation hierarchy set out in Policy N1PU above. This is in addition to any compensatory habitat provided under Policy N1PU. (...)"

¹⁰ Available from : <https://www.copeland.gov.uk/sites/default/files/attachments/localplanpublicationdraft.pdf>

Policy N5PU: Protection of Water Resources

“New development must seek to protect or improve the quality of surface and groundwater water resources, including designated coastal Bathing Waters and Shellfish Waters downstream. (...)”

Policy N13PU: Woodlands, Trees and Hedgerows

“Existing trees and hedgerows which contribute positively to the visual amenity and environmental value of their location will be protected. Developers are encouraged to incorporate tree planting and hedgerows into new developments where possible and appropriate. (...)”

2.14. The Local Plan also highlighted a Sustainability Appraisal Scoping Report which provided the following objectives relevant to this application:

- ENV1 – Biodiversity – To conserve and enhance biodiversity in Copeland
- ENV3 – Water Resources – To maintain and enhance the water quality of Copeland’s inland and coastal water and coasts and to sustainably manage water resources
- ENV6 – Energy – Increase energy efficiency in the built environment, and promote the use of energy from renewable sources.

Biodiversity Action Plans

2.15. The UK Biodiversity Action Plan (UKBAP; 1994)¹¹ was organised to fulfil the Rio Convention on Biological Diversity in 1992, to which the UK is a signatory. Lists of national Priority species and habitats were produced with all listed species/habitats having specific action plans, defining the measures required to ensure their conservation.

2.16. While the UKBAP has since been superseded by the Environment Act 2021 (see above), regional and local BAPs have been produced to develop plans for species/ habitats of nature conservation importance at regional and local levels.

2.17. The county of Cumbria does not have a current Local Biodiversity Action plan. The closest equivalent, as confirmed by Cumbria County Council and Cumbria Wildlife Trust, is “Cumbria Local Nature Recovery Strategy – Pilot”¹² (2020). This, amongst other things, details the more than 300 species of priority in the UK which have been recorded in Cumbria or have possibility to be reintroduced.

¹¹ Available at <https://data.jncc.gov.uk/data/cb0ef1c9-2325-4d17-9f87-a5c84fe400bd/UKBAP-BiodiversityActionPlan-1994.pdf>

¹² Available at: [Cumbria Local Nature Recovery Strategy – Pilot Scheme | Cumbria County Council](#)

3. METHODOLOGY

- 3.1. Net gain assessment is currently carried out using DEFRA's Biodiversity Metric 3.1 (JP039)¹³. According to Natural England (the DEFRA agency responsible for creating the biodiversity metric assessment methodology):

The Biodiversity Metric 3.1 is an update to the previously published Biodiversity Metric 3.0. Biodiversity metric 3.1 was published in April 2022.

Biodiversity Metric 3.1 is a biodiversity accounting tool that can be used for the purposes of calculating biodiversity net gain.

- 3.2. This report uses the methodology and calculation tool referenced above. Broadly speaking, the metric assessment involves calculating scores for 'biodiversity units' (indicators of site's biodiversity value) pre- and post-development. Each score is based on the area (or, for linear habitats, the length) of different habitats present or proposed, their ecological distinctiveness, connectivity, condition, how long they take to create, and how likely it is that any proposed habitat creation will succeed.

¹³ Natural England, 2021. The Biodiversity Metric 3.1 (JP039). Available at <http://nepubprod.appspot.com/publication/6049804846366720>

4. NET GAIN ASSESSMENT

- 4.1. Biodiversity unit calculations for the habitats within the Application Site pre-construction is given in **Table 1** below. Further details of baseline habitats can be found in the accompanying **Preliminary Ecological Appraisal**.
- 4.2. Loss calculations is given in **Table 2**, and post-construction biodiversity unit calculations in **Table 3** below. Further details of the proposed habitat creation and enhancement can be found in the supporting Detailed Planting Plan.
- 4.3. **Table 4** shows the overall results of the net gain calculations. This highlights a **28.53% gain** in area habitat units. This should be considered an excellent level of compensation for the loss of mostly poor condition neutral grassland. This is well in excess of 10% requirement of the Environment Act, showing that the Proposed Development is expected to lead to **significant biodiversity net gain**.

Table 1: Baseline Area Habitat Biodiversity Units

Habitats and areas			Distinctiveness		Condition		Strategic significance			Suggested action to address habitat losses	Ecological baseline
Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic Significance multiplier		Total habitat units
Grassland	Modified grassland	0.0687	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required \geq	0.14
Grassland	Modified grassland	0.1351	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required \geq	0.81
Grassland	Other neutral grassland	0.008	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (\geq)	0.03
Grassland	Other neutral grassland	0.2054	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (\geq)	0.82
Grassland	Other neutral grassland	0.1055	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (\geq)	0.42
Urban	Artificial unvegetated, unsealed surface	0.158	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00
Urban	Developed land; sealed surface	0.0266	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00

Table 2: Baseline Area Habitat Loss

Broad Habitat	Habitat type	Area (ha)	Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost
Grassland	Modified grassland	0.0687	0	0	0.00	0.00	0.07	0.14
Grassland	Modified grassland	0.1351	0.1351	0	0.81	0.00	0.00	0.00
Grassland	Other neutral grassland	0.008	0.008	0	0.03	0.00	0.00	0.00
Grassland	Other neutral grassland	0.2054	0	0.1407	0.00	0.56	0.06	0.26
Grassland	Other neutral grassland	0.1055	0	0.1055	0.00	0.42	0.00	0.00
Urban	Artificial unvegetated, unsealed surface	0.158	0.158	0	0.00	0.00	0.00	0.00
Urban	Developed land; sealed surface	0.0266	0.0266	0	0.00	0.00	0.00	0.00

Table 3: Site Area Habitat Creation

Proposed habitat	Area (ha)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic position multiplier	Temporal multiplier		Difficulty multipliers		Habitat units delivered
								Time to target condition (years)	Multiplier	Difficulty of creation	Multiplier	
Grassland - Other neutral grassland	0.1407	Medium	4	Good	3	Low Strategic Significance	1	15	0	Low	1	1.22
Woodland and forest – Other woodland; broadleaved	0.1055	Medium	4	Fairly Good	2.5	Low Strategic Significance	1	15	0	Low	1	0.79

Table 4: Biodiversity Metric Results

On-site baseline	<i>Habitat units</i>	2.22
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	<i>Habitat units</i>	2.86
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
On-site net % change (Including habitat retention, creation & enhancement)	<i>Habitat units</i>	28.53%
	<i>Hedgerow units</i>	0.00%
	<i>River units</i>	0.00%
Off-site baseline	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	0.63
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	28.53%
	<i>Hedgerow units</i>	0.00%
	<i>River units</i>	0.00%