

CONTENTS

<b>INTRODUCTION</b> .....	<b>1-1</b>
Overview .....	1-1
The Applicant.....	1-2
SLR Consulting Limited .....	1-2
Purpose of the EIA Report.....	1-2
EIA Screening and Scoping.....	1-3
Structure of the EIA Report.....	1-9
Statement of Competence .....	1-10
Publicity of the EIA Report.....	1-11
<b>PROJECT DESCRIPTION</b> .....	<b>1-13</b>
Site Location and Description .....	1-13
Planning History .....	1-13
Description of the Development.....	1-15
Construction Phase .....	1-24
Operation and Maintenance Phase.....	1-26
Decommissioning Phase .....	1-27
Community Benefit and Shared Ownership .....	1-29
<b>REFERENCES</b> .....	<b>1-30</b>
<b>FIGURES</b> .....	<b>1-31</b>
<b>APPENDICES</b> .....	<b>1-31</b>

TABLES

Table 1-1: Scope of the EIA Report.....	1-4
Table 1-2: Cumulative Wind Developments within approximately 10km of the Site .....	1-7
Table 1-3: EIA Team Competency .....	1-10
Table 1-4: Turbine Coordinates.....	1-17
Table 1-5: Watercourse Crossings .....	1-22
Table 1-6: Indicative Construction Programme.....	1-24
Table 1-7: Decommissioning Requirements for Infrastructure .....	1-28

FIGURES

| Figure 1.1: Site Location

Figure 1.2: Application Boundary  
Figure 1.3: Environmental Designations  
Figure 1.4: Onsite Constraints  
Figure 1.5: Consented Site Layout  
Figure 1.6: Proposed Site Layout  
Figure 1.7: Comparative Site Layout  
Figure 1.8a: Site Access  
Figure 1.9: Typical Turbine Elevation  
Figure 1.10: Indicative Turbine Foundations  
Figure 1.11: Indicative Track Detail  
Figure 1.12: Indicative Crane Hardstanding  
Figure 1.13: Indicative Cable Trench Detail  
Figure 1.14: Indicative Substation Compound  
Figure 1.15: Typical Control Building Elevations  
Figure 1.16: Indicative Construction Compound  
Figure 1.17a-c: Borrow Pit Profiles  
Figure 1.18: Predicted Visibility of Substation Compound  
Figure 1.19: Cumulative Developments with 10km of Site  
Figure 1.20: Cumulative Developments at Scoping Stage with 10km of Site

## APPENDICES

| Technical Appendix 1.1: Outline Construction Environmental Management Plan (CEMP)

## Introduction

### Overview

- 1.1 Ben Sca Wind Farm Limited (the Applicant) proposes to construct and operate a wind farm comprising of nine wind turbines with a maximum blade tip height of 149.9m and associated infrastructure known as the Ben Sca Redesign Wind Farm (the Proposed Development) in the northwest of the Isle of Skye. The site is located approximately 2.5km to the southwest of Edinbane and 7km to the east of Dunvegan. The location of the site is shown on **Figure 1.1**.
- 1.2 The Applicant was previously granted planning permission by the Highland Council (THC) on the same site for:
  - Ben Sca Wind Farm (reference 20/00013/FUL) in December 2020. The approved development is for the construction and operation of up to seven wind turbines with a maximum blade tip height of up to 135m and associated infrastructure; and
  - Ben Sca Wind Farm Extension (reference (21/05767/FUL) in April 2022. The approved development is for the construction and operation of two wind turbines with a maximum blade tip height of up to 149.9m and associated infrastructure.
- 1.3 For the purposes of this Environmental Impact Assessment (EIA) Report, the consented Ben Sca Wind Farm and Ben Sca Wind Farm Extension is referred to as the 'consented development'.
- 1.4 A five year period for the commencement of the consented development is stipulated on both the permission notices; therefore permission is valid until December 2025 for the seven turbines of Ben Sca Wind Farm and April 2027 for the additional two turbines of Ben Sca Extension Wind Farm.
- 1.5 The Proposed Development would replace the consented development, wholly within the same application site area, and would aim to:
  - maximise the renewable energy output from the site;
  - maximise the secured grid capacity contributing further to Scottish Government net-zero emission targets<sup>1</sup>;
  - ensure that the candidate turbine can be sourced and installed; and
  - reduce the distance to the connection point to the national electricity grid network, following a change dictated by Scottish & Southern Electricity Networks (SSEN) (connection point changed from Dunvegan Grid Supply Point (GSP) to Edinbane GSP).
- 1.6 As with the consented development, access to the Proposed Development would utilise the existing site entrance from the A850 and existing section of access track for the operational Ben Aketil Wind Farm.
- 1.7 The site boundary includes forestry in the northwest which is consented to be used for peatland restoration and habitat enhancement as part of the consented Habitat

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<sup>1</sup> Net zero emissions of all greenhouse gases by 2045 ('Securing a green recovery on a path to net zero: climate change plan 2018–2032 – update')

Management Plans (HMPs) for the consented development. It is proposed that this area of peatland restoration is expanded as part of the Proposed Development to include the felling of further areas experiencing poor tree growth to enhance the area of bog habitats to be restored to meet the objectives of National Planning Framework 4 (NPF4).

## The Applicant

- 1.8 The Applicant is Ben Sca Wind Farm Limited, a subsidiary of EDP Renewables (EDPR). Ben Sca Redesign Wind Farm is being developed by Wind2 on behalf of EDPR.
- 1.9 Wind2 is a specialist onshore wind farm developer founded in 2016. The company has staff based in the Highlands, Perth, Edinburgh, as well as Wales and in various locations throughout England, with significant expertise in renewable energy and a track record of successfully developing onshore wind farms throughout the UK. Wind2 is working on the development of a number of renewable energy projects and is committed to investing in the Highlands and Islands of Scotland. Wind2 is also the developer for the adjacent proposed Balmeanach Wind Farm.
- 1.10 Further information on Wind2 can be found on its corporate website at <https://wind2.co.uk>.
- 1.11 EDPR is a global leader in the renewable energy sector and the world's fourth-largest renewable energy producer. EDPR is currently present in the UK and internationally in another 28 markets. EDPR has personnel based in Edinburgh and through its joint venture with ENGIE (Ocean Winds), recently completed construction on the 950MW Moray East Offshore Wind Farm, which has the capability of supplying 40% of Scotland's electricity demand.
- 1.12 Further information on EDPR can be found on its corporate website at <https://www.edpr.com/en>.

## SLR Consulting Limited

- 1.13 SLR is a Registered Environmental Assessor Member of the Institute of Environmental Management and Assessment (IEMA) and holder of the EIA Quality Mark (<http://www.iema.net/qmark>). SLR is also a Registered Organisation validated by the Institute for Archaeologists (IfA), a member of the Association of Geotechnical and Geo-environmental Specialists, and a Landscape Institute (LI) Registered Practice.
- 1.14 The company has significant experience in the preparation of planning applications and undertaking EIAs for a wide variety of projects, including waste, minerals, renewable energy and infrastructure developments.
- 1.15 Further information on SLR can be found on its corporate website at [www.slrconsulting.com](http://www.slrconsulting.com).

## Purpose of the EIA Report

- 1.16 This EIA Report is submitted in support of the planning application to THC for the Proposed Development and has been prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (the EIA Regulations).
- 1.17 The purpose of this EIA Report is to report the outcome of the EIA for the Proposed Development. It identifies the methodologies used to assess the likely significant environmental effects predicted to arise as a result of the construction, operation and decommissioning of the Proposed Development. Where appropriate, it sets out mitigation

measures designed to prevent, reduce and/or offset any significant adverse environmental impacts. An assessment of residual effects (those environmental effects that remain following the implementation of mitigation measures) is then presented. Where appropriate, opportunities for potential enhancement measures are also identified.

- 1.18 For the consented development the following assessments have already been produced for the site:
- Ben Sca Wind Farm EIA Report (January 2020);
  - Ben Sca Wind Farm Supplementary Information (SI) Report (August 2020); and
  - Ben Sca Wind Farm Extension EIA Report (November 2021).
- 1.19 Throughout this EIA Report these three assessment reports are referred to where considered relevant and a comparison of predicted residual effects between the Proposed Development and the consented development is provided in **Chapter 11: Summary of Effects**.
- 1.20 A commitment to mitigation is set out in the Ben Sca Wind Farm EIA Report Chapter 16: Schedule of Commitments, Ben Sca Wind Farm EIA Report Technical Appendix 3.1: Outline Construction Environmental Management Plan (CEMP); and Ben Sca Wind Farm Extension EIA Report Chapter 4: Schedule of Commitments. The commitments to mitigation for the consented development are considered to be inherent in the Proposed Development and are therefore taken into consideration throughout this EIA Report, with updates as appropriate.

## EIA Screening and Scoping

- 1.21 An EIA screening and scoping report was prepared by SLR for the Proposed Development (available on THC's planning portal) and submitted to THC on 20 September 2023. This was accompanied by an EIA screening opinion request under Regulation 6 of the EIA Regulations; and if required, an EIA scoping request under Regulation 17 of EIA Regulations.
- 1.22 THC's screening opinion (Ref: 23/04692/SCRE), which was issued on 17 November 2023, confirmed that the Proposed Development would require an EIA for the following reasons:
- "The proposal is for an installation for the harnessing of wind power for energy production and falls within the definition of 'Schedule 2 development' (Regulation 2 - Interpretation), in that it exceeds the threshold of involving more than two turbines and the hub height is above 15 metres.
  - Additionally, the proposal consolidates two approved schemes and in doing so, increases the original consented scheme (THC ref. 20/00013/FUL) by two additional turbines of up to 149.9 metres, and, increases the extension wind farm (THC ref. 21/05767/FUL) by seven turbines of up to 149.9 metres. The changes to each scheme are considered to exceed the thresholds set out in paragraph 3 (j) Column 2 of Schedule 2 of the EIA Regulations and therefore the provisions of Paragraph 13 of the same are not considered to apply in this instance.
  - Having screened the proposal against the selection criteria outlined in Schedule 3 (including cumulative impact, pollution, impact on natural resources/the natural environment, environmental quality and the historic environment), the potential impact on the receiving environment is considered to be significant.
  - Potential Significant Effects on the Receiving Environment are:

# INTRODUCTION AND PROJECT DESCRIPTION 1

- *Landscape and visual impacts, including cumulatively and sequentially in association with other built and consented wind turbines in the locality.*
  - *Ornithological impacts.*
  - *Impacts on peat.”*
- 1.23 THC’s scoping opinion (Ref:23/04694/SCOP), which was issued on 17 November 2023, included advice from relevant consultees and set out which key topics should be included in the EIA Report. **Table 1-1** provides a summary of where each of these topics is covered within the EIA Report. Where consultees had not responded, these were followed up and, in some cases, further responses were then received as noted in the Table.
- 1.24 This EIA focuses on the three main topic areas identified in the screening opinion; and for other topics provides enough information and assessment for THC to provide an informed opinion on the whether the Proposed Development would be result in significant effects or not. As noted in paragraph 1.19, and in accordance with Regulation 5(4) of the EIA Regulations, with a view to avoiding duplication of assessments, account is taken of the available results of other relevant assessments (in relation to the consented development) in preparing this EIA Report.
- 1.25 It is acknowledged that the National Planning Policy in Scotland has changed since the submission and approval of the two consented applications for Ben Sca Wind Farm and Ben Sca Wind Farm Extension with the adoption of NPF4 in February 2023 and, therefore, where topics are influenced by the updates introduced by NPF4 (see **Chapter 2: Policy** for more detail), these are considered and reported. Where other guidance has also been introduced e.g. peatland guidance published by NatureScot (2023), this has been given due consideration, although it is noted at time of writing that the peatland guidance is undergoing additional review to ensure that it is fit for purpose.

**Table 1-1: Scope of the EIA Report**

Topic	EIA Chapter	Technical Report
Description of the Development	<b>Chapter 1: Introduction and Project Description</b>	n/a
Alternatives	<b>Chapter 1: Introduction and Project Description</b>	n/a
Land Use and Policy	<b>Chapter 2: Policy</b> Sets out current policy, NPF4 requirements and other material considerations <b>Chapter 8: Socio-economics and Land Use</b> Chapter presents an updated assessment on land use impact	<b>Planning, Sustainable Design and Access Statement</b>
Sustainability	<b>Chapter 1: Introduction and Project Description</b>	<b>Planning, Sustainable Design and Access Statement</b>
Landscape and Visual	<b>Chapter 3: Landscape and Visual</b> Chapter includes a full Landscape and Visual Impact Assessment (LVIA) including cumulative assessment	Supported by: <b>TA3.1: Landscape and Visual Methodology</b> <b>TA3.2: Landscape Sensitivity</b> <b>TA3.3: Viewpoint Analysis</b>

Topic	EIA Chapter	Technical Report
		<b>TA3.4: Residential Visual Amenity Assessment (RVAA)</b>
Cultural Heritage	<b>Chapter 7: Cultural Heritage and Archaeology</b> Chapter focuses on onsite archaeology and design. Scoped out heritage assets outwith the site as agreed with Historic Environment Scotland (HES)	n/a
Ornithology	<b>Chapter 4: Ornithology</b> Chapter including an ornithological impact assessment Scope of surveys and methods agreed with NatureScot	Supported by: <b>TA4.1: Ornithology Surveys 2023</b> <b>TA4.2: Confidential Ornithology Report</b> <b>TA4.3: Collision Risk Modelling</b> <b>TA4.4: White-tailed eagle Population Modelling</b>
Ecology	<b>Chapter 5: Ecology</b> Chapter including an ecological impact assessment Scope of surveys and methods agreed with NatureScot in January 2024 subsequent to the scoping opinion being issued	Supported by: <b>TA5.1: Habitats and Vegetation Survey Report</b> <b>TA5.2: Protected Mammals Report</b> <b>TA5.3: Outline Habitat Management Plan (HMP)</b> <b>TA5.4: Forestry Report</b>
Water Environment	<b>Chapter 6: Hydrology, Hydrogeology and Soils</b> Chapter focuses on onsite mitigation through design and revision of potential impacts on water environment	n/a
Geology, Soils and Peat	<b>Chapter 6: Hydrology, Hydrogeology and Soils</b> Chapter includes onsite mitigation through design, updates to peat data where required and revision of potential impacts on peatland habitats	Supported by: <b>TA6.1: Peat Management Plan (PMP)</b> <b>TA6.2: Peat Landslide Hazard and Risk Assessment (PLHRA)</b> <b>TA9.4: Carbon Balance Assessment</b>
Borrow Pits	<b>Chapter 1: Introduction and Project Description</b>	Detailed drawings of modelled borrow pits included as <b>Figures 1.17a-c</b>
Pollution Prevention and Environmental Management	<b>Chapter 10: Schedule of Mitigation</b>	Supported by: <b>TA1.1: Outline Construction Environmental Management Plan (CEMP)</b>



Topic	EIA Chapter	Technical Report
Forestry	<b>Chapter 1: Introduction and Project Description</b>	Supported by: <b>TA5.4: Forestry Report</b>
Contaminated Land	n/a – no issues confirmed with THC contaminated land officer	n/a
Noise	<b>Chapter 9: Other Considerations</b> Chapter includes a summary of the findings of the noise and vibration impact assessment provided in <b>TA9.3</b> .	<b>TA9.3: Noise and Vibration Impact Assessment Report</b> Report in compliance with methods agreed with THC Environmental Health Officer (EHO)
Traffic and Transport	<b>Chapter 9: Other Considerations</b> Chapter includes a summary of the findings of the transport statement	<b>TA9.1: Transport Statement and TA9.2: Construction Traffic Management Plan (CTMP)</b> Reports in compliance with methods agreed with THC Transport Planning team
Aviation, Radar and Telecommunications	<b>Chapter 9: Other Considerations</b>	n/a
Socio-Economic, Community Benefits and Community Wealth Building	<b>Chapter 8: Socio-economics and Land Use</b> Chapter presents an updated assessment on socio-economic impact in 2024	<b>Planning, Sustainable Design and Access Statement</b>
Recreation and Tourism	<b>Chapter 8: Socio-economics and Land Use</b> Chapter presents an updated assessment on recreation and tourism in 2024	Supported by: <b>TA8.1: Outline Access Management Plan (AMP)</b>
Health and Safety and Shadow Flicker	<b>Chapter 9: Other Considerations</b>	n/a
Significant Effects on the Environment	All EIA Chapters	n/a
Mitigation	Included in all EIA Chapters and compiled in <b>Chapter 10: Schedule of Mitigation</b>	Supported by: <b>TA1.1: Outline Construction Environmental Management Plan (CEMP)</b>

## Cumulative Developments

- 1.26 The site is located within an area of Skye where a number of other wind farms are also proposed. In accordance with the EIA Regulations, the assessment in this EIA Report has considered ‘cumulative effects’ of these other wind farms. By definition, these are effects that result from incremental changes caused by past, present or reasonably foreseeable projects of a similar nature to the Proposed Development, together with the Proposed Development.



- 1.27 THC noted in their scoping opinion that the cumulative wind developments to be considered in the EIA should include operational, consented, application stage and scoping projects, where applicable. Likely cumulative effects have been defined as the likely effects that the Proposed Development may have in combination with these other wind farm developments in the local area (i.e. the incremental effects resulting from the Proposed Development if all other developments are assumed to be constructed/operated). Projects that are at time of writing (at 31 January 2024) at scoping stage but likely to be submitted to Scottish Government Energy Consents Unit (ECU) or THC within Spring 2024 have also been included. Where possible, liaison with the developers of those projects has taken place to ascertain the stage at which applications may be submitted and confirm the final turbine layouts which will be applied for, to enable meaningful assessment. The extent to which the potential combined effects through the co-existence of wind projects is considered and is described as appropriate throughout **Chapters 3 to 9** of this EIA Report.
- 1.28 All projects noted by THC in their scoping response within the vicinity of the site (all over 50m to blade tip height) are included in **Table 1-2** and identified on **Figures 1.19 and 1.20**. Additionally, the Skye Reinforcement Project<sup>2</sup> (which is currently under consideration) would be located approximately 4km to the south of the Proposed Development and is therefore included in the cumulative assessments.
- 1.29 The study area for considering cumulative effects varies per technical discipline and each EIA Report Chapter refers to the cumulative sites considered as appropriate. In general, most specialisms have considered cumulative effects to approximately 10km from the site which includes the developments outlined in **Table 1-2** and shown on **Figures 1.19 and 1.20**.

**Table 1-2: Cumulative Wind Developments within approximately 10km of the Site**

Development	Stage	No. of Turbines	Tip Height (m)	Closest Distance to Proposed Turbine (km and direction)	Comments
<b>Operational</b>					
Ben Aketil Wind Farm and Extension	Operational	12	100.5	1.1km to the west	Would be replaced by Ben Aketil Repowering and Extension if consented.
Edinbane Wind Farm	Operational	18	100	1.5km to the east	Would be replaced by Edinbane Repowering if consented.
<b>Approved</b>					
Beinn Mheadhonach	Approved	4	99.5	11.8km to the southeast	Would be replaced by Beinn Mheadhonach Redesign if consented.
Glen Ullinish Wind Farm	Approved	11	149.9	5.5km to the southeast	Would be replaced by Glen Ullinish II if consented.

<sup>2</sup> Electricity transmission infrastructure upgrade project that proposes to replace the existing single 132kV overhead line (OHL), spanning 160km between the Fort Augustus 400kV substation on the mainland to Ardmores on the Isle of Skye. There will be a new substation at Edinbane and upgraded pylons/wooden poles passing to the south of the site.

# INTRODUCTION AND PROJECT DESCRIPTION 1

Development	Stage	No. of Turbines	Tip Height (m)	Closest Distance to Proposed Turbine (km and direction)	Comments
<b>Application</b>					
Balmeanach Wind Farm	Application	10	149.9	0.7km to the southeast	Currently being considered by THC.
Ben Aketil Repowering and Extension	Application	9	200	1.2km to the west	Currently being considered by ECU, would replace existing Ben Aketil if consented.
Glen Ullinish II Wind Farm	Application	47	200	2.7km to the southeast	Currently being considered by ECU, would replace existing Glen Ullinish if consented.
Beinn Mheadhonach Redesign	Scoping	5	145	11.5km to the southeast	Not yet submitted to THC, would replace consented Beinn Mheadhonach if consented.
<b>Scoping</b>					
Breakish Wind Farm	Scoping	16 (scoped at 20)	180 (scoped at 180)	44km to the southeast	Not yet submitted to ECU (expected Spring 2024). Applicant has obtained the final turbine layout from the developer and the application layout has been assessed rather than the scoping layout.  Located over 40km from the site and is therefore not considered to be relevant in combination with or the Proposed Development for most topics. Breakish has been considered in relation to cumulative transport impacts.
Edinbane Repowering and Extension	Scoping	19	200	1.5km to the east	Not yet submitted to ECU, would replace existing Edinbane if consented.
Waternish Wind Farm	Scoping	11 (scoped at 15)	149.9 (scoped at 200)	2.5km to the north	Not yet submitted to ECU (expected Spring 2024), however the Applicant has obtained the final turbine layout from the developer and the application layout has been assessed rather than the scoping layout.

Development	Stage	No. of Turbines	Tip Height (m)	Closest Distance to Proposed Turbine (km and direction)	Comments
Edinbane – Land at 4 Edinbane	Screening	2	150	3.7km to the northeast	Status unknown as no forthcoming application at present.

## Structure of the EIA Report

1.30 This EIA Report comprises four volumes:

- **Volume 1: Non-Technical Summary (NTS)** – summarises the findings of the EIA in a non-technical manner;
- **Volume 2: Written Statement** – details how the EIA process has been applied to the Proposed Development; describes the Proposed Development and how its design has evolved; and reports the findings of the EIA for those environmental topics considered to have the potential for likely significant effects. It comprises 11 chapters as follows:
  - Chapter 1: Introduction and Project Description
  - Chapter 2: Policy Context
  - Chapter 3: Landscape and Visual
  - Chapter 4: Ornithology
  - Chapter 5: Ecology
  - Chapter 6: Hydrology, Hydrogeology and Soils
  - Chapter 7: Cultural Heritage and Archaeology
  - Chapter 8: Socio-economics and Land Use
  - Chapter 9: Other Considerations
  - Chapter 10: Schedule of Mitigation
  - Chapter 11: Summary of Effects
- **Volume 3a and 3b-d: Figures and Visualisations** – to support the text presented in Volume 2; and
- **Volume 4: Technical Appendices** – contains the technical reports, survey data and other material to support the text presented in Volume 2.

1.31 Although not part of the EIA Report, a **Planning, Sustainable Design and Access Statement** also accompanies the planning application for these proposals. Its purpose is to assess the Proposed Development in the context of the Development Plan and other relevant material considerations and provide evidence of how sustainable design and access criteria have been considered.

1.32 In accordance with Regulation 3 of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013, as amended, and Section 35C of the Town and Country Planning (Scotland) Act 1997, as amended, a **Pre-Application Consultation (PAC) Report** is also included with the planning submission.

## Statement of Competence

- 1.33 This EIA Report has been prepared and compiled by professional practitioners at SLR Consulting Limited (SLR), with support from subconsultants as required. SLR is a registered Environmental Impact Assessor, Member of the Institute of Environmental Management and Assessment (IEMA) and holder of the IEMA EIA Quality Mark. The company has significant experience in the preparation of planning applications and undertaking EIA for a wide variety of renewable energy and other development projects. Further information on SLR can be found on its corporate website at [www.slrconsulting.com](http://www.slrconsulting.com).
- 1.34 **Table 1-3** demonstrates the relevant competency of each of the team members for the technical disciplines covered in this EIA Report.

**Table 1-3: EIA Team Competency**

Discipline	Specialist Assessor	Qualifications	Years of Experience
EIA Project Management	SLR Fiona Scott	BSc (Hons) CEnv MEnvSc	15+
Planning	SLR Michael Fenny	MA (Hons) MSc MRTPI	15+
Landscape and Visual	Abseline Mary Fisher Mark Evans	BSc (Hons) MA CMLI BSc PgDip CMLI	20+ 11
Ecology	SLR Duncan Watson Sara Toule Kirstie Hazelwood	BSc (Hons) MSc CEnv MCIEEM BSc (Hons), MRes, ACIEEM BMus (Hons), MSc, PhD, ACIEEM	20+ 14 9
Ornithology	SLR Mike Austin Crona McMonagle	MCIEEM ACCIEM, MSc	30+ 8
Forestry	Crosscut Forestry Cameron Ross	Forestry Diploma	30+
Hydrology, Hydrogeology and Peat	SLR Gordon Robb Katy Rainford Alan Huntridge Ruari Watson	BSc (Hons), MSc, MBA, FCIWEM, BSc (Hons) FGS MCIWEM BSc (Hons) MSc BSc (Hons)	25+ 6 15+ 10+
Cultural Heritage	SLR Beth Gray	MA (Hons) ACIfA	8
Noise	SLR Richard Carter	BEng (Hons) Dip CEng MIOA	15+
Transport	SLR Joanna Read	BSc MSc	20+

Discipline	Specialist Assessor	Qualifications	Years of Experience
Socio-Economics and Land Use	SLR		8
	Katie Shoosmith Ben Wyper	MTCP, MRTPI BSc (hons), MSc	3
Carbon Emissions	SLR Ruari Watson	BSc (Hons)	10+
Aviation	Straten CSL John Van Hoogstraten	BSc MSc	30+
GIS	SLR Anne Altringham	BSc, MSc	12

## Publicity of the EIA Report

- 1.35 The EIA Report will be publicised in accordance with Part 5 of the 2017 Regulations.
- 1.36 A notice will be published as follows:
- on the project website: [www.benscawindfarm.co.uk](http://www.benscawindfarm.co.uk);
  - in the Edinburgh Gazette; and
  - in the West Highland Free Press.
- 1.37 In addition to the statutory requirements for publicising the EIA Report, the Applicant has advised the following local Community Councils and Community Groups of the EIA Report being available:
- Dunvegan Community Council;
  - Dunvegan Community Trust;
  - Edinbane Community Company;
  - Glendale Community Council;
  - Skeabost & District Community Council;
  - Struan Community Council;
  - Struan Community Development Group; and
  - Struan Community Trust.
- 1.38 A hard copy of the EIA Report can be viewed at The Highland Council Offices, Tigh na Sgìre, Park Lane, Portree, IV51 9ER during their opening hours.
- 1.39 The application documents, including the EIA Report, will also be available via THC's planning portal at: <https://wam.highland.gov.uk/wam/>.
- 1.40 A copy of the EIA Report volumes will be made available for download from the project website at: [www.benscawindfarm.co.uk](http://www.benscawindfarm.co.uk).

1.41 Paper copies of the NTS are available free of charge from:

info@wind2.co.uk

07570 948886

Wind2 Limited,

2 Walker Street,

Edinburgh,

EH3 7LB

1.42 Paper copies of the EIA Report may be purchased by arrangement from the above address for £1,400 per copy, or free per disk/USB memory stick copy. The price of the paper copy reflects the cost of producing all of the Landscape and Visual photographs at the recommended size.

## Project Description

### Site Location and Description

- 1.43 The site (centred on OSGB<sup>3</sup> National Grid Reference (NGR) 132800, 848600) is located on moorland, used for shooting game, and commercial forestry production, and is approximately 2.5km to the southwest of the settlement of Edinbane and approximately 7km to the east of the settlement of Dunvegan, located in the northwest of the Isle of Skye on the Coishletter Estate and within THC administrative boundary. The nearest Postcode to the site is IV51 9PW.
- 1.44 The application boundary which measures approximately 429ha, is shown on **Figure 1.1** and wholly includes the previous red line application boundaries for the consented Ben Sca Wind Farm and Ben Sca Wind Farm Extension. No additional land is included in the red line application boundary.
- 1.45 The site boundary includes forestry in the northwest which is consented to be used for peatland restoration and habitat enhancement as part of the consented HMPs for the consented development. This forestry was planted in 1990 and as was confirmed through survey for the consented development (SLR 2020a and SLR 2021) is considered to be poor to very poor quality, due to the soil being unsuitable for tree growth.
- 1.46 Several small tributaries run through the site and eventually join larger watercourses to the north, such as Red Burn and Kerral Burn. Topography ranges from approximately 170m AOD to 283m AOD with the southern extent of the proposed site forming the most elevated section at Ben Sca (283m AOD). To the north of the summit of Ben Sca, a ridgeline extends in a northwest direction (Mullach Ben Sca) and includes a series of smaller summits descending to 200m AOD.
- 1.47 To the southwest of the site, lies the operational Ben Aketil Wind Farm and its extension which comprises 12 turbines (100.5m tip height). Ben Aketil Wind Farm extends in a northwest to southeast orientation and is located to the northwest of the summit of Ben Aketil (266m AOD).
- 1.48 To the east of the site is the operational Edinbane Wind Farm which comprises 18 turbines (100m tip height) extending in a north to south direction between Airgh Neil and Glen Vic Askill at approximately 150m to 160m AOD.
- 1.49 Access to the site remains unchanged from the consented development and would be via the existing Ben Aketil Wind Farm access track from the A850.
- 1.50 There are no known statutory landscape or environmentally designated sites within the site boundary (**Figure 1.3**).

### Planning History

#### Ben Sca Wind Farm

- 1.51 The original planning application for Ben Sca Wind Farm, which was submitted to THC in January 2020, was for the construction and operation of up to nine wind turbines with a

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<sup>3</sup> Ordnance Survey Great Britain



maximum blade tip height of 135m and rotor blade diameter of 115m; and associated infrastructure. The application was accompanied by an EIA Report (SLR, 2020a).

- 1.52 During the consultation process for the Ben Sca Wind Farm application THC's landscape officer raised concerns that the submitted nine turbine scheme created a series of significant visual impacts which could be ameliorated by the removal or relocation of three turbines previously proposed at the highest elevation, close to the summit of Ben Sca (turbines 1 to 3).
- 1.53 In response to the THC landscape officer's consultation response, the Applicant agreed to remove two turbines. The reduced seven turbine scheme was accompanied by the submission of a Supplementary Information Report (SI Report) in August 2020 (SLR, 2020b) which included updated visuals and re-assessed the landscape and visual impacts of the amended scheme. Following submission of the amended scheme THC's landscape officer considered that there were perceptible improvements to the composition of the scheme from the majority of viewpoints and that the adverse effects on the perception of scale and distance in the landscape over which they had previously been concerned had been improved in a number of views. THC's landscape officer also considered that the amended scheme provided improved separation from the existing operational Edinbane turbines in a number of views which benefitted the overall cumulative composition of turbines in the landscape. Consequently, THC's landscape officer removed their objection to the proposals.
- 1.54 The amended seven turbine scheme was granted planning permission (reference 20/00013/FUL) subject to conditions by THC in December 2020. These conditions include the requirement to deliver peatland restoration through the submission and implementation of a Habitat Management Plan (HMP) for the site, the proposed restoration area to be located within the existing commercial forestry to the north of the site. Other pre-commencement conditions attached to this permission included the requirement for the submission of a Construction Environmental Management Plan (CEMP), a Construction Traffic Management Plan (CTMP), a Peat Management Plan (PMP), an Access Management Plan (AMP) and an updated Schedule of Mitigation including all of the mitigation identified in the Ben Sca Wind Farm EIA Report (January 2020) and Ben Sca Wind Farm SI Report (August 2020).
- 1.55 The consented development site layout is shown on **Figure 1.5**.

## Ben Sca Wind Farm Extension

- 1.56 The planning application for Ben Sca Wind Farm Extension was submitted to THC in November 2021 for the construction and operation of two wind turbines with a maximum blade tip height of 149.9m and rotor blade diameter of 115m; and associated infrastructure. The two turbines would be located to the northwest of the string of the seven consented turbines on lower ground. The application was accompanied by an EIA Report (SLR, 2021).
- 1.57 The two turbine scheme was granted planning permission (reference 21/05767/FUL) subject to conditions by THC in April 2022. In accordance with the consent for the Ben Sca Wind Farm (reference 20/00013/FUL) these conditions include the requirement to deliver peatland restoration through the submission and implementation of a Habitat Management Plan (HMP) for the site, the proposed restoration area extending the Ben Sca Wind Farm HMP area up to 38.5ha, located within the existing commercial forestry. Other pre-commencement conditions attached to the permission included the requirement for the submission of a CEMP, a CTMP, a PMP, an AMP and an updated Schedule of

Mitigation including the mitigation identified in the Ben Sca Wind Farm Extension EIA Report (November 2021).

1.58 The consented development site layout is shown on **Figure 1.5**.

## Description of the Development

### Project Overview

1.59 The layout of the Proposed Development is shown on **Figure 1.6**. The key components of the Proposed Development, which would be constructed in accordance with detailed design and relevant Health and Safety requirements, include the following:

- nine variable pitch (three bladed) wind turbines, each with a maximum blade tip height of up to 149.9m and rotor diameter of up to 138m;
- turbine foundations and a crane hardstanding area which includes areas for blade, tower and nacelle storage at each wind turbine;
- up to 4.5km of new onsite access track and associated drainage with a typical 5m running width (wider on bends) and two turning heads;
- underground cabling along access tracks to connect the turbine locations, and the onsite electrical substation;
- one onsite substation which would accommodate 33KV equipment to collect electricity from the site. The substation compound would include a control and metering building;
- up to three borrow pits;
- two construction compounds (one permanent, one temporary); and
- clearance of up to 64.73ha of conifer forest for Habitat Management purposes as described in **Technical Appendix 5.3: Outline HMP**.

1.60 It is proposed that the total installed capacity would be up to 40.8MW.

### Design Principles

1.61 Following on from the constraint led design evolution process identified in Chapter 2: Site Description and Design Evolution of the Ben Sca Wind Farm EIA Report (SLR, 2020a) and Chapter 1: Introduction and Project Description of the Ben Sca Wind Farm Extension EIA Report (SLR, 2020b), the environmental constraints on site were refreshed and updated as follows:

- ornithological surveys (vantage points, breeding birds and raptor surveys) undertaken from January to December 2023;
- vegetation Survey (UKHab and National Vegetation Classification (NVC) survey) undertaken in October 2023;
- additional phase 2 peat data collected in September 2023 and February 2024; and
- protected mammals survey undertaken in January 2024.

1.62 The results of these updated surveys, along with the environmental constraints information collected during data collection for the consented development was analysed to refine the infrastructure alignment for the Proposed Development to ensure a 'best fit'

within the environment of the site. All efforts have been made to avoid significant effects through positioning infrastructure outwith constraints and incorporating appropriate buffer distances from environmental receptors to avoid or reduce effects on the environment. The onsite constraints are shown on **Figure 1.4**.

- 1.63 The Proposed Development turbine layout has aimed to ensure continuity with the linear form of the consented development following the ridgeline of Ben Sca, to ensure that views of the Proposed Development would appear similar to those previously assessed and consented. Their spacing has been designed to be consistent within the turbine array to maximise the wind energy that can be captured. A series of comparative wirelines are presented in **Volumes 3b and 3c** of this EIA Report to show the differences between the consented and Proposed Development from each of the key viewpoints.
- 1.64 The dimensions of the proposed turbines have been made consistent across the site with a 149.9m tip height and up to 138m rotor diameter to provide continuity along the ridgeline. These dimensions are consistent with the adjacent proposed Balmeanach Wind Farm located to the southeast of the site to provide visual consistency.

## Design Rationale

- 1.65 The rationale for the amendment to the consented development is to:
- maximise the renewable energy yield, to reach an estimated annual output of 145,000 Mega Watt hours (MWh), (approximately an additional 20,000MWh generated each year). This represents an increase of circa 16% in output over the consented development. This increased output will provide enough carbon-free electricity to meet the needs of around 45,000 UK homes and offset approximately 2.46 tonnes of CO<sub>2</sub> over the lifetime of the Proposed Development. For reference this is approximately 6,500 more UK homes powered and 0.69 million tonnes of CO<sub>2</sub> offset over its lifetime more than the consented development (when compared to fossil fuels); and 0.21 million tonnes of CO<sub>2</sub> offset over its lifetime more than the consented development (when compared to a grid mix).
  - maximise the use of the secured grid capacity contributing further to Scottish Government net-zero emission targets<sup>4</sup>;
  - ensure that the candidate turbine can be sourced and installed; and
  - to reduce distance to the connection point to the national electricity grid network, following change dictated by SSEN (connection point changed from Dunvegan Grid Supply Point (GSP) to Edinbane GSP).

## Amendments to Consented Development

- 1.66 The changes to the consented development are as follows:
- increase blade tip height for seven turbines by up to 14.9m (from 135m to 149.9m);
  - increase the rotor size for all nine turbines by up to 23m (from 115m to 138m);
  - increase spacing to improve yield and efficiency, minor adjustment to turbine locations, maximum up to 132m movement from consented positions (Ben Sca Extension turbines remain in same locations as consented) with associated

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<sup>4</sup> Net zero emissions of all greenhouse gases by 2045 ('Securing a green recovery on a path to net zero: climate change plan 2018–2032 – update')

adjustments to the access tracks and crane hardstanding to accommodate the new locations;

- re-location of the onsite substation to the southern area of the site;
- addition of second temporary construction compound adjacent to Ben Aketil Wind Farm track;
- increase of net generation capacity from consented 37.8MW to up to 40.8MW to maximise use of the available grid connection (increasing from output of 125,000MWh to 145,000MWh); and
- increase operational life from 30 years to 40 years.

1.67 The difference between the consented and Proposed Development site layouts is shown on **Figure 1.7**.

## Wind Turbines

1.68 The proposed wind turbines would be up to 149.9m to blade tip. The rotor diameter of the proposed candidate wind turbines would be up to 138m. A typical turbine is shown on **Figure 1.9**.

1.69 **Table 1-4** shows the proposed distance of relocation for each turbine, and the approximate direction from the consented turbine location. The consented development site layout is shown on **Figure 1.5**. The Proposed Development turbine layout is illustrated on **Figure 1.6**; and the difference between the two layouts is shown on **Figure 1.7**.

1.70 The proposed coordinates for each wind turbine are provided in **Table 1-4**.

**Table 1-4: Turbine Coordinates**

Turbine	X	Y	Elevation (m)	Distance from consented location (m)	Direction from consented location
T1 (BS-01)	133475	847759	251	No change	No change
T2 (BS-02)	133368	848019	230	94	East
T3 (BS-03)	133215	848259	217	132	Northeast
T4 (BS-04)	132964	848403	200	47	Southeast
T5 (BS-05)	132723	848561	210	124	South
T6 (BS-06)	132591	848852	193	111	South
T7 (BS-07)	132453	849123	155	122	South
T8 (BSX-01)	132262	849473	128	No change	No change
T9 (BSX-02)	132046	849718	110	No change	No change

Where: BS = Ben Sca; BSX = Ben Sca Extension.

1.71 A range of wind turbine models may be suitable for the Proposed Development, and the final choice of turbine model would be selected through a competitive procurement process. An example of an indicative turbine model is shown on **Figure 1.9**, provided to illustrate a similar turbine to that proposed.

1.72 Based upon a maximum blade tip height of 149.9m, it is anticipated that the total installed capacity of the Proposed Development would be up to 40.8MW.

- 1.73 The turbines would each incorporate a tapered tubular tower and three blades attached to a nacelle that would house a turbine generator and other operating equipment e.g. a gear box. The turbines would be semi-matt pale grey (in line with RAL 7038) or a finish agreed with THC.
- 1.74 For the purposes of assessment, it is assumed that each turbine would be served by an electrical transformer that would be located internally.

## Turbine Foundations and Crane Hardstandings

- 1.75 Turbine foundations would be designed to accommodate the final choice of turbines and to suit site specific ground conditions. The final design specification for each foundation would depend on the findings of detailed ground investigation of the land on which each turbine would be located.
- 1.76 The proposed wind turbines would typically have gravity foundations laid using reinforced concrete and would have a diameter of up to 23m. Depth of the excavation would depend on the need to reach suitable ground. Excavations would be on average approximately 3m deep. A typical turbine foundation design is shown on **Figure 1.10**. The sides would be graded back, from the foundation and battered to ensure that they remain stable during construction.
- 1.77 The turbines would be erected using mobile cranes or similar technically capable cranes brought on to the site for the construction phase. A crane hardstanding would be built adjacent to each wind turbine and is likely to have a footprint of approximately 36m x 22m and would be approximately 1m in depth, comprising:
- a main crane area – approximately 22m (L) x 22m (W); and
  - an auxiliary crane area – approximately 14m (L) x 22m (W).
- 1.78 Additional blade, nacelle and tower storage areas would also be required and are likely to comprise:
- a tower storage area – approximately 36m (L) x 20m (W) adjacent to the crane hardstanding;
  - a nacelle storage area – approximately 22m (L) x 6m (W) adjacent to the crane hardstanding; and
  - a blade storage area – approximately 74m (L) x 15m (W) on the opposite side of the track to the crane hardstanding.
- 1.79 A crane assembly area (approximately 76m x 8m) and the blade storage area would be temporary areas used for construction with land reinstated post construction (**Figure 1.12**).
- 1.80 The main crane hardstanding areas would remain in situ for the duration of the operational phase of the Proposed Development in order to enable maintenance activities to take place.
- 1.81 Soils that are excavated during construction would be set aside for backfilling the batter areas around turbine bases and hardstandings and use of small bankings either side of access tracks. Further details of soil storage are contained in **Technical Appendix 6.1: Peat Management Plan**.
- 1.82 The actual crane hardstanding design and layout would be determined prior to construction through the detailed design process according to the turbine supplier specifications, the preferred erection method and the lifting studies. An indicative crane

hardstanding design including the various adjacent laydown areas is shown on **Figure 1.12**.

## Construction Compounds

1.83 Two construction compounds would be required for the duration of the construction phase, the locations of which are shown on **Figure 1.6**:

- Compound 1 (NGR 132370, 850730) is the same location as the compound utilised for the construction of the Ben Aketil Wind Farm and as per the consented development, to the east of the Ben Aketil access track close to the site entrance. The ground at this location already consists of a hardcore base and therefore it is considered that this area would be retained post construction for maintenance purposes. It would have a footprint of 100m x 50m (approx. 5,000m<sup>2</sup>) and would be likely to contain the following:
  - temporary modular building(s) to be used as a site office;
  - welfare facilities;
  - parking for construction staff and visitors;
  - reception area;
  - fuelling point or mobile fuel bowser;
  - secure storage areas for tools; and
  - waste storage facilities.
- Compound 2 (NGR 132131, 849437) is proposed to the west of proposed turbine 8 (BSX-01), close to the junction with the Ben Aketil access track. The land would be reinstated at the end of the construction phase. It would have a footprint of approximately 3,000m<sup>2</sup> and would be likely to contain the following:
  - temporary modular building(s) to be used as a site office;
  - welfare facilities;
  - parking for construction staff and visitors; and
  - secure storage areas for tools and materials.

1.84 **Figure 1.16** illustrates a typical construction compound although the layout may differ depending on site topography and contractor requirements. Crane hardstanding areas, along with the construction compound, would be used for laydown during construction.

## Onsite Substation and Electrical Cabling

1.85 The Proposed Development would be connected to the electricity network via an onsite substation building measuring approximately 15m x 25m and located within the substation compound (approximately 30m x 35m) at NGR 133350, 847485 (**Figure 1.6**). This proposed location is relocated from the northern part of the site (for the consented development) to the southern area of the site to reduce distance to the connection point to the national electricity grid network at the new Edinbane GSP. This is proposed following a change dictated by SSEN who has changed the connection point for the wind farm from Dunvegan GSP to Edinbane GSP. Edinbane GSP will be delivered by SSEN as part of reinforcement works to the electricity grid from Fort Augustus to the Isle of Skye, currently in progress.



- 1.86 It should be noted that the proposed substation compound location is the same as that proposed for the adjacent proposed Balmeanach Wind Farm; which should it gain consent, would share the connection point.
- 1.87 The location of the substation compound has been reviewed to minimise landscape and visual effects. In order to position the substation in an area which would not be visible to the local communities of Balmeanach and Edinbane, a Zone of Theoretical Visibility (ZTV) was generated to determine where within the site a building 5m high would not be seen. This principle, as shown on **Figure 1.18** clearly shows that the substation would be hidden from view from these local settlements as well as Struan.
- 1.88 The compound would include an area for car parking and High Voltage (HV) equipment, such as transformers and circuit breakers as well as a control building. An indicative onsite substation compound is shown on **Figure 1.14**.
- 1.89 The main control building would be single storey, built on a pre-cast concrete base and would measure approximately 15m x 25m and 5m high. It is proposed that the buildings would have a rendered finish; the final external finishes would be agreed with THC. A typical control building elevation is shown on **Figure 1.15**.
- 1.90 Underground power cables would run along the side of the access tracks in trenches from each of the turbines to the substation control building. Typical cable trench arrangements are shown on **Figure 1.13**.

## Access

### Access to Site

- 1.91 As for the consented development, access to the site for turbine deliveries would be via the A87 and A850. The main site entrance from the A850 would then utilise the existing access and onsite access track for the operational Ben Aketil Wind Farm. All other HGV and wind farm construction traffic would also use the entrance off the A850 (**Figure 1.8a**).
- 1.92 The proposed abnormal load route required to transport turbine components to the site is shown on **Figure 1.8b** and is based on an assessment from the port at Kyle of Lochalsh via the A87, then along the A850 to site. The proposed abnormal load route was assessed and verified for up to 66.77m blades, identifying where permanent or temporary road upgrades would be required for the adjacent proposed Balmeanach Wind Farm (and reported in The Balmeanach Wind Farm EIA Report Volume 4b, Technical Appendix 12.1: Abnormal Indivisible Load Route Survey, SLR 2023), included as Annex 9.1B to **Technical Appendix 9.1: Transport Statement** of this EIA Report. The same route would be used for the Proposed Development.
- 1.93 Full detail of the assessment of effects on the road network is provided in **Chapter 9: Other Considerations** and **Technical Appendix 9.1** of this EIA Report.

### Onsite Access

- 1.94 Up to 6.3km of onsite access tracks would be required to provide access to the wind turbines, substation and the two construction compounds (**Figure 1.6**). Where possible the location of the access tracks follows existing tracks and forest rides. A total of 4.5km of new track would be created and 1.8km of existing track would be used.
- 1.95 Tracks would be unpaved, constructed of a graded local stone and would comply with the turbine supplier requirements, typically with a running width of 5m in straight sections, increasing at bends, passing places and junctions to accommodate the safe passing of



traffic including the turbine delivery vehicles, construction traffic and traffic anticipated due to the operation of Ben Aketil existing turbines and Balmeanach Wind Farm (if consented). The track corridor would include suitable earthworks (including cutting slopes and embankments), drainage and cabling electrical infrastructure. Additionally, two turning heads would be constructed. Subject to further analysis and assessment following technical surveys, the detailed design will aim to maximise the use of stone extracted from the identified borrow pits for the Proposed Development.

- 1.96 Site visits including extensive phase 1 and 2 peat probing surveys have confirmed the presence of peat, of variable condition and depth across the site area. This information will be used to optimise the design together with further ground investigation works. Where possible the turbines and tracks have been positioned to avoid areas of deepest peat. Where this has not been possible, floating tracks would be required to be constructed. It is anticipated that approximately 167m of floating track would be required where peat has been consistently identified onsite in depths from 1m to 1.5m or greater along with shallow topography in the area (below 5%). The use of floating track will be assessed once the intrusive ground investigation is concluded during the detailed construction design phase, taking into account the extensive peat probing undertaken as part of this EIA. The use of floating tracks will be limited and the track construction would be mainly characterised by cut and fill or by a cut operation where there is a slope. Where the peat layer is more than 1m in depth and where there is a side slope the peat would be removed to an appropriate horizon.
- 1.97 Floating road construction is described in the Outline CEMP (**Technical Appendix 1.1**). The construction comprises the laying of a geosynthetic (geotextile mat or geogrid reinforcement) across the soils prior to constructing the road. Where required, risk from run-off would be mitigated by directing drainage to settlement ponds. Erosion processes on the roadside embankments and cuttings would be mitigated by ensuring that gradients are below stability thresholds, which would also enable effective regeneration of vegetation. Sediment traps would be required in the early years following construction until natural regeneration is established.
- 1.98 Site access tracks require suitable drainage designed to control and dissipate the flow of surface water along and under them to allow self-drainage. The drainage system would accommodate the design storm water runoff and the maximum expected axle loads for the construction and the maintenance traffic. Subject to detailed design, run-off from the access tracks would be shed via a crossfall into track side ditches and settlement lagoons / ponds to attenuate flows and remove sediments before discharging to land. Where practical, interceptor (cut-off) ditches would be formed on the upslope side of the track to collect and divert clean water away from the access tracks. Cross drains would be installed at regular intervals to prevent flooding / surcharging of trackside drainage and maintain hydraulic pathways. As far as possible, these would coincide with naturally occurring drainage channels. Existing drainage infrastructure would be utilised where possible.
- 1.99 **Figure 1.11** provides a typical illustration of the design of an onsite track. The design of tracks would take account of recognised good practice guidance as noted in **Technical Appendix 1.1: Outline CEMP**.
- 1.100 Following construction, the tracks would be retained permanently throughout the full operational life of the Proposed Development to provide access for maintenance, repairs and decommissioning activities. Where appropriate, peat and soil from excavations on site would be utilised for reinstatement along both sides of the track verges and allowed to regenerate naturally as per relevant guidance from SEPA on reuse of excavated peat and

the minimisation of waste in accordance with the Peat Management Plan (PMP) (an outline of which is provided in **Technical Appendix 6.1**).

## Watercourse Crossings

- 1.101 There is one existing watercourse crossing (WX01) on the section of the existing Ben Aketil access track that would be used as part of the Proposed Development. Whilst it is not proposed to upgrade this watercourse crossing, some sediment clearance work is proposed as mitigation in **Chapter 6**. Details of the watercourse crossing within the site is provided in **Table 1-5** and shown on **Figure 6.1**. **Chapter 6** of the EIA Report provides further detail.

**Table 1-5: Watercourse Crossings**

Watercourse Crossing	Easting	Northing	Crossing Type
WX01	132003	849956	Existing

- 1.102 Additionally, a new spur would be taken from the existing access track for the Ben Aketil Wind Farm to provide access to turbine 9 (BSX-02). This would require the crossing of an existing drainage ditch located on the western side of the Ben Aketil access track. A new pipe culvert is proposed to be installed to ensure drainage is maintained.

## Borrow Pits

- 1.103 Three borrow pit search areas have been identified onsite, which are the same locations as those previously assessed and consented, to provide a proportion of aggregate to construct the Proposed Development. Quarrying all of these borrow pits would allow for the current uncertainty of the quality of the rock at these locations. A proportion of aggregate for track formations and subbases is assumed to be sourced from the proposed three onsite borrow pits with all higher grade aggregate assumed to be sourced offsite. Between 20-40% of the aggregate required on site would be required to be a higher quality and grade, which the material from the borrow pits may not provide. It is the aim of the Applicant to source as much of the rock as possible from onsite, as this would minimise the need to transport large quantities of aggregate across the Isle of Skye.
- 1.104 The current preference would be for borrow pit number 1 (**Figure 1.17a**) to be used first, then borrow pit 2 (**Figure 1.17b**) if additional rock required and finally borrow pit 3 (**Figure 1.17c**).
- 1.105 It is likely that only some of the three borrow pits would be required, however for the purposes of the assessment all three borrow pits are assessed.

## Habitat Management and Forestry Felling

- 1.106 A habitat management area has already been approved for the consented development. This habitat management area (38.53ha) is located in the forestry to the northwest of the site (**Figure 5.3.1**). The HMP for this area will focus upon restoration of this conifer forest to blanket bog habitat. Two previous forestry assessments (Technical Appendix 3.2 of the Ben Sca Wind Farm EIA Report, SLR 2020a; and Technical Appendix H of the Ben Sca Wind Farm Extension EIA Report, SLR 2021) were undertaken for the consented HMP forested area which demonstrated the low yield class and poor growth quality of the existing trees which would be removed.

- 1.107 The Proposed Development would extend the HMP area already consented, from 38.53ha to 64.73ha, including additional felling up to 26.20ha of conifer forest for the purposes of restoring this area to blanket bog habitat, as part of the HMP, an outline of which is provided in **Technical Appendix 5.3**. It is noted that the proposed Peatland Restoration Area for the Proposed Development is situated directly adjacent to the proposed peatland restoration area for the proposed Balmeanach Wind Farm (approximately 77.75ha), which would result in a total area of 142.48ha of peatland restoration, which constitutes a significant positive cumulative benefit due to habitat connectivity. This would create a wider area of habitat enhancement and ensure that the project delivers improved habitat quality and biodiversity enhancement to meet the requirements of NPF4 Policy 3(b). A report on the additional forest area to be felled was prepared by Crosscut Forestry and is provided in **Technical Appendix 5.4**.
- 1.108 **Technical Appendix 5.4** states that the quality of the trees in this area is poor to very poor (commercial forestry planted in former peat areas with low yield).
- 1.109 Forest to bog restoration is in effect woodland removal and as such must be assessed against the requirements of the Scottish Governments Control of Woodland Removal Policy (2009) (CoWRP) and Forestry Commission guidance 'Deciding future management options for afforested deep peatland' (2015).
- 1.110 It is considered that the very low yield class, the depth of peat on site and the clear benefits of restoration, indicate that the proposal to fell without the need for restocking is appropriate at this site, as was confirmed acceptable by Scottish Forestry previously in their responses to the consented development planning applications. As a result, the requirements of CoWRP are met, as the deforested area is to be restored to peatland and integrated into the wider site HMP therefore 'significantly enhancing priority habitats (in this particular case – blanket bog) and their connectivity'.

## Micrositing

- 1.111 During the construction process there may be a requirement to microsite elements of the Proposed Development infrastructure. This is an important measure which allows for further minimisation of environmental effects, under the supervision of the Environmental Clerk of Works (EnvCoW) who is responsible for overseeing and managing the implementation of environmental policies and procedures on a construction site, and for ensuring that the construction activities comply with relevant environmental legislation, regulations, and best practices. The EnvCoW would be onsite during construction in certain areas / months to be agreed with THC and NatureScot and in line with proposals set out in the Outline CEMP (**Technical Appendix 1.1**).
- 1.112 It is proposed that a 50m micrositing tolerance of turbines and all other infrastructure would be applied to the Proposed Development (so long as infrastructure does not move into the watercourse buffers, encroach on heritage features or telecommunication links and buffers). Within this distance any changes from the consented locations would be subject to approval of the EnvCoW as required and in consideration of other known constraints. It is anticipated that the agreed micrositing distance may form a planning condition accompanying consent for the Proposed Development. The assessment of the Proposed Development has assumed a 50m horizontal micrositing allowance.

## Grid Connection

- 1.113 Grid connection is dependent on the transmission network reinforcement, which is being progressed by SSEN, and the connection point will be the new Edinbane Grid Supply Point (GSP), to the southeast of the site, which is proposed to be delivered as part of the

grid reinforcement. Significant upgrades to the electricity grid from Fort Augustus to the Isle of Skye (known as the Skye Reinforcement Project, Energy Consents Unit Application Ref: ECU00003395) have been delayed from the original programme and are now expected to be completed by 2028, allowing the Proposed Development to be connected to the grid in April 2028 at the earliest.

- 1.114 The grid connection is likely to require consent under Section 37 of the Electricity Act 1989 which is the subject of a separate consenting process to the planning application for the Proposed Development. The grid connection application would be made by SSEN who are responsible for the National Grid in the area of the Proposed Development and who would own assets beyond the site substation.

## Construction Phase

### Construction Timetable

- 1.115 It is anticipated that construction of the Proposed Development would commence in 2026 and would last approximately 18 months. Construction would include the principal activities listed within the indicative construction programme as provided in **Table 1-6**.

**Table 1-6: Indicative Construction Programme**

Construction Activity	Months																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Site establishment	■																	
Access Road Improvements		■	■															
Forest clearance	■	■	■	■														
Construction of Haul Road & Site Access to Borrow Pits			■	■	■													
Construction of access tracks, crane pad and building compounds						■	■	■	■									
Turbine Foundation Construction							■	■	■	■	■							
Substation/storage - civil and electrical							■	■	■	■								
Cable Delivery and Installation										■	■	■						
Crane delivery and demobilisation												■					■	
Turbine Delivery and Erection													■	■	■	■		
Wind Farm Commissioning																	■	■
Reinstatement / Restoration																	■	■

## Cumulative Wind Farm Construction

- 1.116 The proposed Balmeanach Wind Farm would be located directly to the southeast of the Proposed Development. It is anticipated that the consented or the proposed access track would also be used to access the Balmeanach Wind Farm site and therefore would likely be constructed within a similar timescale or shortly after the Proposed Development being built. There is a possibility that the construction periods could overlap once the access tracks are in place.
- 1.117 The consented Glen Ullinish Wind Farm will be located approximately 5.5km to the southeast of the proposed turbines. An application for the proposed Glen Ullinish II Wind Farm was submitted to the ECU in July 2023 and comprises a much larger development which, if consented, would replace the already consented Glen Ullinish Wind Farm. Access to these sites is currently anticipated on roads from the south (and may potentially use a new coastal delivery facility proposed at Loch Caroy to land turbine components, currently undergoing scoping consultation with THC (Ref: 24/00606/SCOP), rather than from the A850.
- 1.118 The proposed Ben Aketil Repowering Wind Farm was submitted to the ECU in May 2023 and would replace the existing Ben Aketil and Extension Wind Farm. If consented, the A850 may be used as their main haulage routes for construction, although a route from the south has also been considered.
- 1.119 The proposed Waternish Wind Farm (at scoping stage 31 January 2024 although anticipated to be submitted to ECU in Spring 2024) would be located 2.5km to the north of the Proposed Development, which, if consented, may also use the A850 as the main haulage routes for construction.
- 1.120 Edinbane Repowering Wind Farm (at scoping stage 31 January 2024) would be located to the east of the Proposed Development (replacing the existing Edinbane Wind Farm) and may also use the A850 for access, however access options for this project also include access from the south.
- 1.121 There is a possibility that all these projects could be undergoing construction at approximately the same time as the Proposed Development. It is acknowledged that this would have a potentially detrimental effect on traffic from the port at Kyle of Lochalsh and that coordination between developers and contractors would be required to mitigate these effects. Mitigation measures for this eventuality would be contained within the Construction Traffic Management Plan (CTMP), expected to be agreed with THC and Transport Scotland prior to the commencement of construction. A Framework CTMP is provided in **Technical Appendix 9.2**.

## Construction Employment

- 1.122 The number of people employed during the construction period would vary depending on the stage of construction and the activities ongoing on site. Staff numbers would start relatively low as site enabling works progress. Numbers would ramp up quickly as tracks reach turbine locations and foundations start to get built out. It is anticipated that the peak workforce requirement would be up to 39 construction staff, at a point where the civils and electrical balance of plant works are overlapping with turbine erection teams. Staff numbers would then drop as civils teams demobilise and turbine erection and testing is completed.



## Construction Working Hours

- 1.123 The construction working hours for the Proposed Development would be 07:00 to 19:00 Monday to Friday and 07:00 to 16:00 on Saturdays. It should be noted that out of necessity some activities, for example abnormal load deliveries, concrete deliveries during foundation pours and also the lifting of the turbine components, may occur outside the specified hours stated. These activities would not be undertaken without prior consultation with THC. The principal contractor would keep local residents informed of the proposed working schedule, where appropriate, including the times and duration of any abnormally noisy activity that may cause concern, all under the terms of a traffic management plan as set out in **Technical Appendix 9.2**.

## Operation and Maintenance Phase

### Operational Life

- 1.124 It is anticipated that the Proposed Development would have an operational life of up to 40 years. At the end of the operational life, the Proposed Development would be decommissioned, or an application may be submitted to repower the site. Details of infrastructure removal and restoration are provided in summary in **Table 1-7**.

### Electricity Generation

- 1.125 The proposed turbines would start to generate electricity at wind speeds of around 2.5m/s (4.5mph). Electricity output would increase as the wind speeds increase up to a maximum of around 15m/s (33.5mph), when the wind turbines would reach their maximum capacity. The turbines would continue to operate at maximum capacity up to wind speeds of around 25m/s (55.9mph). Above 25m/s the turbines would operate at a reduced output under a storm-control mode up to a wind speed of 34m/s (76mph).
- 1.126 The Proposed Development would produce an average of approximately 145,000MWh of electricity annually (which corresponds to a capacity factor of 40.6%) (approximately 20,000MWh more than the consented development). This equates to the power consumed by approximately 45,000 average UK households<sup>5</sup>, which would be well above the energy requirements of the 13,143 homes on the Isle of Skye<sup>6</sup>; and approximately 6,500 more homes than for the consented development.

### Maintenance

- 1.127 The proposed wind farm would largely be controlled and managed remotely, however there would be technicians on site regularly and it would be maintained throughout its operational life via servicing at regular intervals. It is anticipated that there would be approximately four annual service visits per turbine by a service team of up to three people. Inspections of high-voltage equipment and general site safety are expected to be carried out monthly. Faults would be responded to as required, most likely by a team of two technicians.

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<sup>5</sup> Calculated using the most recent statistics from DESNZ showing that annual GB average domestic household consumption is 3,509kWh (as of December 2022, updated annually).

<sup>6</sup> Taken from estimated 2017 data, source: Skye and Lochalsh Population and demography, Paper 1 of a population needs assessment for Skye and Lochalsh NHS Highland April 2019.

- 1.128 This team would either be employed directly by the developer or by the turbine manufacturer. Management of the wind farm would typically include turbine maintenance, health and safety inspections and annual civil assessment of tracks, drainage and buildings for required maintenance. Turbine maintenance includes the following:
- annual civil assessment of tracks and drainage and subsequent maintenance identified as part of the assessment;
  - scheduled routine maintenance and servicing;
  - unplanned maintenance or call outs;
  - HV and electrical maintenance as appropriate; and
  - blade inspections.

## Decommissioning Phase

- 1.129 At the end of its operational life, which would be defined by condition on the grant of any consent, the Proposed Development would be decommissioned unless an application is submitted and approved to extend the operational period or to repower the site. The decommissioning period would be expected to take up to one year.
- 1.130 The ultimate decommissioning protocol would be agreed with THC and other appropriate regulatory authorities in line with best practice guidance and requirements of the time. This would be done through the preparation and agreement of a Decommissioning and Restoration Plan (DRP). Financial provision for the decommissioning would be provided. It is anticipated that the DRP would be the subject of a planning condition.
- 1.131 The final, detailed, DRP would reflect the relevant legislation, and best practice current at the time of decommissioning and restoration.
- 1.132 **Table 1-7** sets out the potential decommissioning requirements for each element of the Proposed Development. These would be outlined further in the outline DRP and then updated in the detailed DRP.



**Table 1-7: Decommissioning Requirements for Infrastructure**

Element	Decommissioning Requirement
Turbines	Turbines would be dismantled and removed from site. Turbine components would be dismantled onsite using standard engineering techniques similar to those used for the original installation. The re-use or recycling of components would be prioritised, this would include exploration of any viable second hand turbine market. Turbine oils or any other oils would be removed from the site and disposed of appropriately.
Turbine Foundations	Top soil material that has revegetated the foundations would be excavated first and temporarily stored for re-use following partial removal of foundations. The top 1m of the turbine foundation would be removed and disposed of appropriately. This is considered preferential to removing all infrastructure, due to the potentially lower environmental impacts associated with excavating, processing and removing concrete from the site. The excavated foundation would be reprofiled with soil and reseeded.
Crane Hardstandings	It is considered most environmentally friendly to allow the crane hardstandings to remain in situ and not disturb the ground further at the end of the project's life, allowing natural revegetation of the areas. This is considered preferential to removing all infrastructure, due to the potentially lower environmental impacts associated with excavating, processing and removing aggregate from the site. The hardstanding areas could then be used by the landowner.
Access Tracks	Access tracks would be left in-situ, which would reduce potential environmental impacts associated with potential sediment migration into watercourses as a result of removing all tracks.
Underground Cabling	These are underground and therefore all cables would be made safe and left in-situ. This is considered preferential to extracting cables from the cable trenches due to the potentially greater environmental impacts associated with excavating, processing and removing the cable from the site.
Substation compound	All equipment from within the substation compound would be removed in agreement with the grid operator and either reused, recycled or disposed of appropriately. Oils or lubricants from the compound would be removed and disposed of appropriately. If agreed, the control building, and related infrastructure, would then be demolished and all materials would be reused, recycled or disposed of appropriately.
Substation compound foundation	The top 1m of the compound foundations would be removed and disposed of appropriately. The excavated hardstandings would be reprofiled with soil and reseeded.

## Community Benefit and Shared Ownership

- 1.133 In line with industry good practice (including the Scottish Onshore Wind Sector Deal, 2023 and Scottish Government's Good Practice Principles, 2018), the Proposed Development is being brought forward with the opportunity for community shared ownership. The preferred model is currently being developed together with the local communities. Discussions have progressed with representative community groups on Skye, specifically regarding the opportunity for the communities investing in the consented development. The community of interest and reasons for selection of the area for the shared ownership opportunity is illustrated in the **PAC Report**, accompanying the application.
- 1.134 An 'Agreement of Intent' has been developed with the local Community Trusts to formalise the intention to work together towards implementing a shared ownership scheme for the consented development. Local Energy Scotland has been providing independent advice and support to communities interested in the shared ownership opportunity. It is proposed that the community shared ownership opportunity which is developed for the consented development will apply to the Proposed Development, amended to suit the revised installed capacity and increased yield. Further details of the consultation effort associated with and response from communities is provided in the **PAC Report** accompanying the application. Discussion relating to the shared ownership offering is also provided in the **Planning, Sustainable Design and Access Statement**.
- 1.135 In addition to the shared ownership opportunity, should the Proposed Development gain consent, a Community Benefit Fund would be made available to the community of interest illustrated within the **PAC Report**. This is offered on the basis of a payment per MW of installed capacity at the Scottish Government recommended rate at the time of commissioning the proposed wind farm. At present the recommended rate is £5,000 per MW. It is estimated that, depending on the type of investment selected, the community benefit fund alone would accrue benefits to the local economy of approximately £8.16 million over the 40 year life of the wind farm; which is £2.49 million greater than for the consented development.
- 1.136 Consultation with the local community has highlighted concern over the relatively high cost of electricity on Skye, despite several wind farms now in operation. As part of its Community Benefit package and subject to agreement with the local communities, a contribution to electricity bills to residents within a distance of the turbines to be agreed could be considered over the 40 year life of the wind farm. Part of this offer also looks to encourage properties and communities to increase their energy efficiency and reduce their carbon emissions by offering a capitalised lump sum to enable this.

## References

Forestry Commission (2015). Deciding future management options for afforested deep peatland (2015).

Scottish Government (2009). Scottish Governments Control of Woodland Removal Policy (CoWRP)

Scottish Government (2018). Scottish Government's Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments. Available at: [https://consult.gov.scot/energy-and-climate-change-directorate/onshore-renewable-energy-developments/user\\_uploads/community-benefits-onshore-revised-gpp.pdf](https://consult.gov.scot/energy-and-climate-change-directorate/onshore-renewable-energy-developments/user_uploads/community-benefits-onshore-revised-gpp.pdf) [accessed 29 February 2024]

Scottish Government (2020). 'Securing a green recovery on a path to net zero: climate change plan 2018–2032 – update'. Available at: <https://www.gov.scot/publications/securing-green-recovery-path-net-zero-update-climate-change-plan-20182032/> [accessed 29 February 2024]

Scottish Government (2023). Onshore Wind Sector Deal. Published 21 September 2023 Available at: <https://www.gov.scot/publications/onshore-wind-sector-deal-scotland/> [accessed 29 February 2024]

SLR Consulting Ltd (2020a). Ben Sca Wind Farm EIA Report, January 2020.

SLR Consulting Ltd (2020b). Ben Sca Wind Farm Supplementary Information (SI) Report, August 2020.

SLR Consulting Ltd (2021). Ben Sca Wind Farm Extension EIA Report, November 2021.

## Figures

**Figure 1.1: Site Location**

**Figure 1.2: Application Boundary**

**Figure 1.3: Environmental Designations**

**Figure 1.4: Onsite Constraints**

**Figure 1.5: Consented Site Layout**

**Figure 1.6: Proposed Site Layout**

**Figure 1.7: Comparative Site Layout**

**Figure 1.8a: Site Access**

**Figure 1.8b: Proposed Abnormal Load Route**

**Figure 1.9: Typical Turbine Elevation**

**Figure 1.10: Indicative Turbine Foundations**

**Figure 1.11: Indicative Track Detail**

**Figure 1.12: Indicative Crane Hardstanding**

**Figure 1.13: Indicative Cable Trench Detail**

**Figure 1.14: Indicative Substation Compound**

**Figure 1.15: Typical Control Building Elevations**

**Figure 1.16: Indicative Construction Compound**

**Figure 1.17a-c: Borrow Pit Profiles**

**Figure 1.18: Predicted Visibility of Substation Compound**

**Figure 1.19: Cumulative Developments with 10km of Site**

**Figure 1.20: Cumulative Developments at Scoping Stage with 10km of Site**

## Appendices

**Technical Appendix 1.1: Outline Construction Environmental Management Plan (CEMP)**