

# Creag Riabhach Wind Farm Extension

## Environmental Impact Assessment Report (Volume 2)

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## GLOSSARY

air quality standard	concentration of a pollutant, over a specified period, above which adverse effects on health and/or the environment may occur, and which should not be exceeded
alternatives	different design, layout and technological possibilities that could be considered during project development that have potential to fulfil the project objectives
ambient	of or relating to the immediate surroundings of something (e.g. ambient noise level)
ancient woodland	woodland that has existed continuously since at least AD 1600
appropriate assessment	process whereby projects, either alone or in combination, are considered to see if it can be ascertained that they will not adversely affect the integrity of a European protected site
assessment	process by which information about effects of a proposed plan, project or intervention is collected, assessed and used to inform decision making
baseline conditions	environment as it appears (or would appear) immediately prior to the implementation of the project together with any known or foreseeable future changes that will take place before completion of the project
baseline studies	work done to determine and describe the environmental conditions against which any future changes can be measured or predicted and assessed
bathymetry	representation of natural and artificial features of the seabed
benthic (benthos)	community of organisms that live on, in or near the seabed
biodiversity	variety of life forms; different plants, animals and microorganisms; the genes they contain; and the ecosystems they form
catchment	drainage/basin area within which precipitation drains into a river system and eventually into the sea
committed development	development projects that are either under construction or have valid planning permissions/consents
competent authority	authority responsible for determining the application for consent, permission, licence or other authorisation to proceed with a development
construction phase	period during which the building or assembling of a proposed development and its infrastructure is undertaken
consultation	process by which those organisations or individuals with an interest in the area associated with the proposed scheme are identified and engaged as part of the EIA process
consultation bodies	organisations that the competent authority is required to consult by virtue of the EIA Regulations
Controlled Activities Regulations	Controlled Activities Regulations (CAR), also known as the Water Environment (Controlled Activities) (Scotland) Regulations 2011, apply regulatory controls over activities which may affect Scotland's water environment. SEPA risk assesses the proposed activities before granting an authorisation if it is appropriate. The type of authorisation depends on the environmental risk, and could be General Binding Rules, registration, or a licence.

controlled waters	surface waters, ground waters and coastal waters to which UK pollution legislation applies
culvert	pipe or box-type conduit through which water is carried under a structure
cumulative impact	impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project. A cumulative impact may arise as the result of (a) the combined impact of a number of different environmental topic-specific impacts from a single environmental impact assessment project on a single receptor/resource or (b) the combined impact of a number of different projects within the vicinity (in combination with the environmental impact assessment project) on a single receptor/resource.
decommissioning	period during which a development and its associated infrastructure are removed from active operation
design event	event such as a rainstorm or flood of given magnitude and probability (usually derived from previous records)
do-minimum scenario	also known as the 'do-nothing' scenario: the conditions that would persist in the absence of the implementation of a development
effect	term used to express the consequence of an impact (expressed as the 'significance of effect'), which is determined by correlating the magnitude of the impact with the importance (or sensitivity) of the receptor or resource in accordance with defined significance criteria. For example, land clearing during construction results in habitat loss (impact), the effect of which is the significance of the habitat loss on the ecological resource.
EIA Regulations	collective term for the various statutory instruments through which the Directives on Environmental Assessment have been implemented in the UK
emission standard	maximum amount or concentration of a pollutant allowed to be emitted from a particular source
emissions inventory	collection of data relating to the characteristics of processes or activities that release pollutants into the atmosphere
Energy Consents Unit	part of the Scottish Government's Energy Division, the unit processes and administers energy infrastructure applications for Scottish Ministers under the 1989 Electricity Act; the unit is made up of two teams, the Section 36 team and the Section 37 team,
enhancement	measure that seeks to improve an environmental condition and is over and above what is required to mitigate the adverse effects of a project
environmental assessment	method and a process by which information about environmental effects is collected, assessed and used to inform decision-making. Assessment processes include strategic environmental assessment, assessment of implications on European sites, and environmental impact assessment.
environmental impact assessment	statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. Involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Regulations, including the publication of an EIA report.

Environmental Impact Assessment Report	otherwise known as an EIA report. Document produced in accordance with the EIA Regulations that reports the outcomes of the EIA process
environmental information	information that must be taken into account by the decision maker (the competent authority) before granting any kind of authorisation in any case where the EIA process applies. It includes the environmental impact assessment report, including any further information, any representations made by any body required by the Regulations to be invited to make representations, and any representations duly made by any other person about the environmental effects of the development
environmental management plan	structured plan that outlines the mitigation, monitoring and management requirements arising from an environmental impact assessment
estuary	downstream part of a river where it widens to enter the sea
European site	sites that make up the European ecological network (also known as Natura 2000 sites). These include sites of community importance (SCIs), special protection areas (SPAs) and potential SPAs (pSPAs), special areas of conservation (SACs) and candidate or possible SACs (cSACs or pSACs), and Ramsar sites.
evaluation	determination of the significance of effects. Evaluation involves making judgements as to the value of the receptor/resource that is being affected and the consequences of the effect on the receptor/resource based on the magnitude of the impact.
existing environment	see 'baseline conditions'
Gatecheck	Procedure adopted by the Energy Consents Unit to review work undertaken by the applicant for a Section 36 or Section 37 development prior to submission of their EIA report and consent application.
Habitats Regulations	The Conservation (Natural Habitats) Regulations 1994 (most recently amended in 2012), is more commonly known as the Habitats Regulations. The Habitats Regulations cover requirements for sites that are internationally important for threatened habitats and species (e.g. Natura sites), species that require strict protection (e.g. European protected species), and other aspects of the Habitats Directive.
Habitats Regulations assessment	assessment of the impacts of implementing a plan or policy on a European site, the purpose being to consider the impacts of a project against conservation objectives of the site and to ascertain whether it would adversely affect the integrity of the site
hydraulics	processes and regimes of water flow (velocities, volumes, duration, frequency etc) in hydrological systems such as surface waters and groundwater
hydrodynamics	mechanical properties of fluids, such as those concerned with flow
impact	change that is caused by an action; for example, land clearing (action) during construction that results in habitat loss (impact)
intertidal	area of land between mean high water and mean low water
invertebrates	animals without backbones
local development	development type identified as local under the Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009

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major development	development type identified as major under the Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009
mean (high/low) water	highest/lowest average level water reaches on an outgoing tide
method statement	document that sets out intended working or survey practices
mitigation	measures intended to avoid, reduce and compensate adverse environmental effects
monitoring	continuing assessment of the performance of the project, including mitigation measures. This determines if effects occur as predicted or if operations remain within acceptable limits, and if mitigation measures are as effective as predicted.
national development	development type identified as national under the Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009
non-statutory consultee	organisations and bodies that may be consulted on relevant planning applications
non-technical summary	information for the non-specialist reader to enable them to understand the main predicted environmental effects of the proposal without reference to the main EIA report
operation	functioning of a development on completion of construction
phase 1 habitat survey	Recognised methodology used for collating information on the habitat structure of a particular site.
photomontage	superimposing of an image onto a photograph to create a realistic representation of proposed or potential changes to a view
piling	installation of bored and driven piles into the ground
planning authority	local authority that is empowered by law to exercise planning functions for a particular area of the United Kingdom
pollution	any increase of matter or energy to a level that is harmful to living organisms of their environment (when it becomes a pollutant)
preferred option	chosen design option that most successfully achieves the project objectives and becomes subject to further design and assessment
programme	series of steps that have been identified by the applicant, or series of projects that are linked by dependency
project	one (or more) aspect of a programme or plan that has been identified by the applicant and usually involves a direct physical intervention
project objectives	objectives of the project, set by the applicant
proposed scheme	also known as the 'proposed development', a plan or project that the applicant or promoter seeks to implement
Ramsar	areas designated by the UK Government under the International Ramsar Convention (the Convention on Wetlands of International Importance)
receptor	defined individual environmental feature usually associated with population, fauna and flora with the potential to be affected by a project
resource	defined but generally collective environmental feature usually associated with soil, water, air, climatic factors, landscape, material assets, including the architectural and archaeological heritage that has potential to be affected by a project

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roosting site (birds)	place where birds rest or sleep
roosting site (bats)	place where bats live (e.g. built structures and trees)
run-off	precipitation that flows as surface water from a site, catchment or region to the sea
Section 36 Application	in Scotland, the construction and operation of power stations of a certain capacity requires an application to be made to Scottish Ministers under section 36 of the Electricity Act 1989. Applications to the Scottish Ministers need to be accompanied by an EIA report. The Energy Consents Unit's Section 36 team will process applications for on-shore power station applications, including wind farms over 50MW and hydro developments over 1MW.
Section 37 Application	in Scotland, applications for powerlines and wayleaves should be made to Scottish Ministers under section 37 of the Electricity Act 1989. Applications to the Scottish Ministers need to be accompanied by an EIA report. The Energy Consents Unit's Section 37 team will process applications for off-shore power station applications, transmission lines, necessary wayleaves, and compulsory purchase orders for electricity lines and gas pipelines.
Schedule 1 project	plans or projects listed in Schedule 1 of the EIA Regulations
Schedule 2 project	plans or projects listed in Schedule 2 of the EIA Regulations
Scoping	process of identifying the issues to be addressed by the environmental impact assessment process. It is a method of ensuring that an assessment focuses on the important issues and avoids those that are considered not significant.
scoping opinion	opinion provided by a competent authority that indicates the issues an environmental impact assessment of a proposed development should consider
screening	formal process undertaken to determine whether it is necessary to carry out a statutory environmental impact assessment and publish an Environmental Impact Assessment Report in accordance with the EIA Regulations
sediment	organic and inorganic material that has precipitated from water to accumulate on the floor of a water body, watercourse or trap
semi-natural	habitat, ecosystem, community, vegetation type or landscape that has been modified by human activity but consists largely of native species and appears to have similar structure and functioning to a natural type
significance	see 'significance of effect'
significance of effect	measure of the importance or gravity of the environmental effect, defined by either generic significance criteria or criteria specific to the environmental topic
significant environmental effect	environmental effect considered material to the decision-making process
site of special scientific interest	main national conservation site protection measure in Britain designated under the Wildlife and Countryside Act 1981
special area of conservation	international designation implemented under the Habitats Regulations for the protection of habitats and (non bird) species
special protection area	sites designated under EU Directive (79/409/EEC) for the conservation of wild birds

spring tide	spring tides happen just after every full and new moon, when the sun, moon and earth are in line
stakeholder	organisation or individual with a particular interest in the project
study area	spatial area within which environmental effects are assessed (i.e. extending a distance from the project footprint in which significant environmental effects are anticipated to occur). This may vary between the topic areas.
threshold	specified level in grading effects (e.g. the order of significance)
visual amenity	value of a particular view or area in terms of what is seen
wildlife corridor	linear habitats/landscape features such as hedgerows that may increase connectivity by acting as routes between habitat patches
worst case	principle applied where environmental effects may vary (e.g. owing to seasonal variations) to ensure the most severe effect is assessed

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## ABBREVIATIONS

ADLS	aircraft detection light system
AGL	above ground level
AIL	abnormal indivisible loads
ARLA	abnormal route load assessment
AOD	above Ordnance Datum
ATC	air traffic control
AWI	ancient woodland inventory
BAP	biodiversity action plan
BCT	Bat Conservation Trust
BESS	battery energy storage system
BFI	Base Flow Index
BGS	British Geological Survey
BoCC	Birds of Conservation Concern
BS	British Standard
CA	competent authority
CAA	Civil Aviation Authority
CAR	Controlled Activities Regulations
CBD	Convention on Biological Diversity
CCoP	construction code of practice
cd	candela
CDM	construction design and management
CEH	Centre for Ecology and Hydrology
CEMP	construction (or contract) environmental management plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CifA	Chartered Institute for Archaeologists
CHVP	cultural heritage viewpoint
CIRIA	Construction Industry Research and Information Association
CMS	construction method statement
COSHH	control of substances hazardous to health
CRTN	calculation of road traffic noise
CSRSG	Central Scotland Raptor Study Group
CTMP	construction traffic management plan
dB(A)	decibel (A-weighted), a unit of noise measurement
DBA	desk-based assessment

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DEFRA	Department of Environmental, Farming and Rural Affairs
DIO	Defence Infrastructure Organisation
DMP	deer monitoring plan
DMRB	Design Manual for Roads and Bridges
ECoW	environmental clerk of works
eECU	Energy Consents Unit
EclA	ecological impact assessment
EHO	environmental health officer
EIA	environmental impact assessment
EIAR	Environmental impact assessment report or EIA report
EPR	Environmental Permitting Regulations
EPS	European protected species
EQS	Environmental Quality Standards
EU	European Union
FBA	Freshwater Biological Association
FDSFB	Forth District Salmon Fisheries Board
FEH	Flood Estimation Handbook
FMP	fish monitoring plan
FRA	flood risk assessment
FRT	Forth Rivers Trust
GDL	garden and designed landscapes
GIS	geographic information system
GPP	Guidance for Pollution Prevention
GPS	global positioning system
GWDTE	ground water dependent terrestrial ecosystems
ha	hectare
HA	heritage asset
HAP	habitat action plan
HAZID	hazard identification
HDV	heavy duty vehicle
HEPS	Historical Environment Policy for Scotland
HER	Historic Environment Record
HGV	heavy goods vehicle
HIA	health impact assessment
HRA	Habitats Regulations assessment
HES	Historic Environment Scotland
HSE	Health and Safety Executive

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IEF	important ecological feature
IFP	instrumental flight procedure
IEMA	Institute of Environmental Management and Assessment
ILP	Institute of Lighting Professionals
IOA	Institute of Acoustics
IOF	important ornithological feature
IoH	Institute of Hydrology
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
JHI	James Hutton Institute
JNCC	Joint Nature Conservation Committee
km	kilometre
LBAP	local biodiversity action plans
LCA	landscape character area
LCT	landscape character type
LAQM	local air quality management
LB	listed building
LBAP	local biodiversity action plan
LDP	local development plan
LGV	light goods vehicle
LI	landscape Institute
LLA	local landscape area
LLTNP	Loch Lomond and the Trossachs National Park
LNCS	local nature conservation site
LNR	local nature reserve
LTP	local transport plan
LUPS	land use planning system
LVIA	landscape and visual impact assessment
MAGIC	Multi-Agency Geographic Information for the Countryside
MOD	Ministry of Defence
MSS	Marine Science Scotland
NATS	National Air Traffic Control Services
NBN	national biodiversity network
NCAP	national collection of aerial photography
NERL	National Air Traffic Services En Route Ltd
NHZ	natural heritage zone
NID	National Infrastructure Directorate

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NNR	national nature reserve
NO <sub>x</sub>	oxides of nitrogen
NPF	national planning framework
NRHE	national record of historical environment
NRTF	national road traffic forecast
NS	NatureScot
NSA	national scenic area
NTS	non-technical summary
NVC	national vegetation classification
ONS	Office for National Statistics
OS	ordnance survey
PA	planning authority
PAC	pre-application consultation
PAN	proposal of application notice
PM <sub>10</sub>	particulate matter (with an aerodynamic diameter below 10 µm)
PMP	peat management plan
PPG	Pollution Prevention Guidelines
PPP	pollution prevention plan
PWS	private water supplies
RCS	river corridor survey
RHS	river habitat survey
RIGS	regionally important geological and geomorphological site
RSPB	Royal Society for the Protection of Birds
RSS	regional spatial strategy
RVAA	residential visual amenity assessment
SAAR	Standard Average Annual Rainfall
SAC	special area of conservation
SBS	Scottish biodiversity strategy
SC	Stirling Council
SCADA	Supervisory Control and Data Acquisition
SEPA	Scottish Environment Protection Agency
SI	site investigation
SIFSS	Soil Information for Scottish Soils
SINC	site of importance for nature conservation
SLA	sensitive landscape area
SM	scheduled monument
SNH	Scottish Natural Heritage

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SoS	Secretary of State
SPA	special protection area
SPP	Scottish Planning Policy
SPR	Standard Percentage Runoff
SSSI	site of special scientific interest
SuDS	sustainable drainage system
SWMP	site waste management plan
SWT	Scottish Wildlife Trust
TA	transport assessment
THC	The Highland Council
TIA	traffic impact assessment
TMP	traffic management plan
TPO	tree preservation order
TRICS	trip rate information computer system
TWI	Topographic Wetness Index
TWIC	The Wildlife Information Centre
UK	United Kingdom
VEC	valued ecological component
VER	valued ecological receptor
VP	vantage point
WCA	Wildlife and Country Act (1981)
WEBS	wetland bird survey
WHS	world heritage site
WLA	wild land areas
WFD	Water Framework Directive
WTW	Water Treatment Works
ZTV	zone of theoretical visibility

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