

Proposed Solar PV Development

Preliminary Environmental Information Report Glossary and Abbreviations

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Reference: EN010139

Revision 1 | May 2023



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1. Glossary

Term	Description
Abstraction	The removal of water from a source.
Aggregate	Rock that has been mined for the purpose of being a building material.
Agricultural Land Classification (ALC)	The system by which the physical quality of agricultural land is determined and graded on a scale of 1 to 5 with a subdivision of Grade 3 into the subgrades 3a and 3b.
Ancient woodland	An area of woodland that has been wooded continuously since 1600AD or earlier.
Arable	Land suitable for growing crops.
Area of Outstanding Natural Beauty (AONB)	Land protected by the Countryside and Rights of Way Act with the aim of protecting the land to conserve and enhance it's natural beauty.
Aquifer	A body of rock that can hold groundwater.
Battery Energy Storage System (BESS)	Battery storage installation which will allow for the storage, importation and expiration of energy.
Best and Most Versatile Quality (BMV)	Agricultural land that is defined as land that falls in ALC grades 1, 2 or 3a.
Buffer	Specified area or distance surrounding a site or feature of interest.
Cable route	The passage taken by the cables which connect the solar PV modules and the existing National Grid Substation.
Carbon budget	In the context of the UK, a restriction on the amount of greenhouse gases that can be emitted over 5 years.
Catchment	An area where water drains to a common channel such as a river or lake.
Construction Environmental Management Plan (CEMP)	A site-specific plan that ensures that a site will mitigate its potential impacts on the environment during construction.
Construction Traffic Management Plan (CTMP)	A site-specific plan that allows contactors to apply controls to the movement of pedestrians and vehicles.
Chartered Institute of Ecology and Environmental Management (CIEEM)	The professional body for ecologists and environmental managers, many of which are either Chartered Ecologists or Chartered Environmentalists.
Conservation area	An area designated under section 69 of the Planning (Listed Buildings and Conservation Areas) Act 1990 as being of special architectural or historic interest and with a character or appearance which is desirable to preserve or enhance.
Cumulative effects	The additional effects arising from changes caused by a development in conjunction with other past, present or reasonably foreseeable actions.
Decarbonisation	A reduction or removal of carbon dioxide output into the atmosphere.
Deciduous woodland	Woodland dominated by deciduous trees, these being trees which shed their leaves annually.

Term	Description
Decommissioning	To take out of use.
Decommissioning Environmental Management Plan (DEMP)	A site-specific plan that sets out the general principles to be followed in the decommissioning of a development, and ensures that potential impacts on the environment during decommissioning will be mitigated.
Designated heritage asset	A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation.
Development Consent Order (DCO)	An application made to the Planning Inspectorate for consent to carry out a Nationally Significant Infrastructure Project. The Planning Inspectorate makes a recommendation to the Secretary of State who decides on if development consent is granted,
Direct effect	An effect that is directly attributable to the development.
District level licence	An approach whereby a developer can pay a sum to contribute towards the strategic conservation of great crested newts within a given area avoiding the need for survey and mitigation within a development.
Ecological Impact Assessment	The process of assessing the potential impacts on ecology arising from a development or project. This process is undertaken in accordance with guidelines produced by the Chartered Institute of Ecology and Environmental Management.
Embodied carbon	The amount of carbon emitted during the life-cycle of infrastructure or a building.
Environmental Impact Assessment (EIA)	An assessment of the impact of planned activities on the environment.
Environmental Statement (ES)	A publicly available document which sets out the developer's own assessment of the likely environmental effects of the proposed development. It is prepared by the developer and submitted with the planning application
Flood Risk Assessment (FRA)	An assessment of the risk of flooding for a development proposal.
Flood Zone 1	Areas deemed to be in flood zone 1 have been shown to be at less than 0.1% chance of flooding in any year, this is sometimes known as having a 1:1000 year chance.
Flood Zone 2	Areas deemed to be in flood zone 2 have been shown to have between 0.1% – 1% chance of flooding from rivers in any year (between 1:1000 and 1:100 chance) or between 0.1% – 0.5% chance of flooding from the sea in any year (between 1:1000 and 1:200 chance).
Flood Zone 3	Areas within flood zone 3 have been shown to be at a 1% or greater probability of flooding from rivers or 0.5% or greater probability of flooding from the sea.
Fluvial	Relating to a river.
Geomorphology	The study of the physical features of the surface of the earth.
Geophysical survey	The systematic collection of geophysical data for spatial studies. Geophysical surveys are archaeological methods that use ground-based physical sensing techniques to produce a detailed image or map of an area.
Groundwater	Water held underground in rock crevices or soil.

Term	Description
Habitat regulations	Also known as the Conservation of Habitats and Species Regulations 2017, the habitats regulations protect sites which are internationally important for threatened habitats and species and is a legal framework for species requiring strict protection.
Habitats Regulations Assessment (HRA)	A HRA is carried out to test if a plan or project proposal could significantly harm the designated features of a European site. You must consult the relevant SNCB at the appropriate assessment stage of the HRA process.
Health and Safety Plan (H&SP)	A document which outlines health and safety procedures.
Heavy Goods Vehicle (HGV)	A motor vehicle with a maximum allowed mass or gross combination mass of over 3,500 kilograms
Heritage asset	A building, monument, site, place, area or landscape of historic value.
Historic England	Statutory body responsible for advising local and national government on matters relating to designated heritage assets
Historic Environment Record (HER)	A record of known archaeological finds and features and historic buildings and historic /landscape features, relating to all periods from the earliest human activity to the present day; maintained by each County and Unitary Authority in the United Kingdom.
Indirect effect	An effect that results indirectly from the proposed project as a consequence of the direct effect, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects. ¹
Infiltration	The process by which surface water enters soil.
Invasive species	A non-native species that has been introduced into an area and becomes overpopulated and causes harm to the environment.
Inverter	Inverters convert the direct current (DC) electricity collected by the solar PV modules into alternating current (AC), which allows the electricity generated to be exported to the National Grid.
Key characteristics	Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
Landscape character	The distinct and recognisable pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.
Landscape Character Areas (LCA)	These are single unique areas which are the discrete geographical areas of a particular landscape type.
Landscape Fabric/Elements	The individual features of the landscape, such as hills, valleys, woods, hedges, tree cover, vegetation, buildings and roads for example which can usually be described and quantified.
Landscape value	The importance attached to a landscape, often used as a basis for designation or recognition which expresses national or local authority consensus, because of its special qualities/attributes.
Level of effect	Determined through the combination of sensitivity of the receptor and the proposed magnitude of change brought about by the development.
Listed building	A building which is considered to be of special architectural or historic interest and listed in accordance with the Town and Country Planning (Listed Buildings and Conservation Areas) Act 1990.

¹ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Sporn; 2013; p156

Term	Description
Light Detection and Ranging (LiDAR)	Data gathered from aircraft which can provide highly detailed and accurate models of the land surface at metre and sub-metre resolution, including within woodland.
Local plan	Used to help decide on planning related decisions such as planning applications.
Local Wildlife Site	Areas of land that are especially important for their wildlife. They are some of our most valuable wildlife areas. Local Wildlife Sites are identified and selected locally using scientifically determined criteria and surveys.
Magnitude (of effect)	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration.
Materials Management Plan (MMP)	A plan that allows for the reuse of soil and other materials.
Mineral Safeguarding Area (MSA)	An area designated by Minerals Planning Authorities which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development.
Mitigation	Measures including any process, activity or design to avoid, reduce, remedy or compensate for adverse environmental impact or effects of a development.
National Park	Designation as a National Park means that the area has been identified as being of importance to the national heritage and as such is worthy of special protection and attention
National Grid	The system operator of electricity and gas supply in Great Britain.
National Nature Reserve (NNR)	Areas designated by Natural England to protect important habitats, species, and geology.
National Planning Policy Framework (NPPF)	Sets out government planning policies and expectations for application in England.
National Policy Statement (NPS)	A national policy statement is a statutory document designated to set out national policy in relation to specific types of nationally significant infrastructure projects (NSIPs). Where an NPS is in effect for an NSIP development, it is the primary policy basis for determining a DCO application.
Nationally Significant Infrastructure Project (NSIP)	Large-scale infrastructure developments as defined by the Planning Act 2008. They require development consent via application made to, and determined by, the relevant Secretary of State.
Natura 2000 sites	A network of protected areas covering Europe's most valuable and threatened species and habitats. It is the largest coordinated network of protected areas in the world, extending across all 27 European Union countries.
Nature Improvement Areas (NIAs)	Established to create joined up ecological networks.
Net zero strategy	Plan to reduce emissions and decarbonise.
Percolation	The movement of water through the soil.
Photomontage	A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs.
Pollution Response Plan	Outlines actions that should be taken to reduce pollution from an incident.
Potable water	Water considered safe for consumption.
Preliminary Ecological Appraisal (PEA)	An initial ecological survey designed to identify the likely ecological constraints to development and scope the requirement for further detailed species or habitat specific surveys.

Term	Description
Preliminary Environmental Information Report (PEIR)	A report that provides information to the community and stakeholders and aids consultees in developing an informed view on the environmental impacts of a project.
Preliminary Risk Assessment (PRA)	A Preliminary Risk Assessment is a Phase I Desk Study which focuses on potential risks to human health, controlled waters and the wider environment. It can also be called a Phase I contamination survey and is often a pre-requisite for planning applications.
Priority habitat	Habitats deemed to be of principal importance for conserving biodiversity. Priority habitats are listed in the UK Biodiversity Action Plan.
Ramsar sites	Ramsar sites are wetlands of international importance that have been designated under the criteria of the Ramsar Convention on Wetlands for containing representative, rare or unique wetland types or for their importance in conserving biological diversity.
Receptor	A receptor is who or what will be, or can be, affected by pollution.
Registered Park and Garden	Parks and gardens of particular historic significance.
Residential visual amenity	A collective term describing the views and visual amenity from a residential property, relating to the type, nature, extent and quality of views that may be experienced from the property and its 'domestic curtilage' including gardens and access driveway. Residential Visual Amenity is only one component of the overall Residential Amenity, others being for example noise, shadow flicker and access amongst others.
Residual effects	Potential environmental effects remaining after mitigation.
Scheduled Monument	Nationally important historic sites, buildings or monuments identified by Historic England and designated by the Secretary of State for Culture, Media and Sport. Any work affecting a scheduled monument must gain consent from Historic England under the Ancient Monuments and Archaeological Areas Act (1979).
Scoping	Scoping determines a project's possible impacts and determines what an EIA will include.
Sense of place	The essential character and spirit of an area: <i>genius loci</i> literally means 'spirit of the place'.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor. ²
Setting	The surroundings in which a heritage asset is experienced.
Significant effects	It is a requirement of the EIA Regulations to determine the likely significant effects of development on the environment which should relate to the level of an effect and the type of effect. Where possible significant effects should be mitigated. The significance of an effect gives an indication as to the degree of importance (based on the magnitude of the effect and sensitivity of the receptor) that should be attached to the impact described. Whether an effect should be considered significant is not absolute and requires the application of professional judgement.

² The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p157

Term	Description
Silt	Fine material such as clay or sand which is carried by running water and deposited as a sediment.
Site Area	The planning boundary for the Proposed Development.
Site of Special Scientific Interest (SSSI)	A Site of Special Scientific Interest (SSSI) is a formal conservation designation. Usually, it describes an area that's of particular interest to science due to the rare species of fauna or flora it contains.
Site Waste Management Plan (SWMP)	A document which describes the amount and type of waste and how it will be disposed of.
Soil erosion	The wearing away of the upper layer of soil. Soil erosion can be caused by water, wind, ice etc.
Solar Photovoltaic (PV) modules	Solar PV modules, or 'solar panels, use sunlight as a source of energy to generate direct current electricity.
Source Protection Zone (SPZ)	An area that is protected as a source of drinking water determined by geo – hydrology and designed to protect groundwater aquifers from development or pollution
Special Area of Conservation (SAC)	Special Areas of Conservation (SAC) are designated according to the Habitats Directive and are areas that require conservation measures to maintain ecological value.
Special Protection Area (SPA)	Special Protection Areas (SPAs) are protected areas for birds in the UK classified under: the Wildlife & Countryside Act 1981 (as amended) and the Conservation (Natural Habitats, & c.) Regulations 2010 (as amended) in England, Scotland and Wales.
Stakeholder	A person or group of people with a particular interest in a project.
Study area	The spatial area within which environmental effects are assessed (i.e. extending a distance from the scheme footprint in which significant environmental effects are anticipated to occur).
Sub-station	A set of equipment reducing the high voltage of electrical power transmission to that suitable for supply to consumers.
Sustainable Drainage System (SuDS)	SuDS are water management practices aiming to protect against water pollution, minimise flood risk and promote biodiversity.
Switchgear	Switchgears allow parts of the solar PV system to be de-energised safely.
Topography	The natural features of land.
Topsoil	The top layer of soil.
Tracking array	Tracking arrays adjust the position of the solar PV modules to track the sun throughout the day.
Transformer	A transformer monitors, increases and controls the voltage of the electricity produced.
Visual amenity	Whether an effect is direct, indirect, temporary or permanent, positive (beneficial), neutral or negative (adverse) or cumulative.
Visual effect	Value of a particular place in terms of what is seen by visual receptors taking account of all available views and the total visual experience.
Visual receptors	Effects on specific views and on the general visual amenity experienced by people.

³ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p158

Term	Description
Visualisation	Individuals and/or defined groups of people who have the potential to be affected by a proposal.
Wetness Class (WC)	The soil moisture regime defined in terms of the depth and duration of waterlogging in most years, ranging from I (freely draining) to VI (permanently waterlogged).
Wireframe or Wireline	Computer simulation, photomontage or other technique to illustrate the appearance of a development.
Zone of Theoretical Visibility (ZTV)	Area within which a proposed development may have an influence or an effect on visual amenity.

⁴ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p158

⁵ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p158

2. Abbreviations

Term	Description
AC	Alternating Current
AEP	Annual Exceedance Probability
AIA	Arboricultural Impact Assessment
ALC	Agricultural Land Classification
AMS	Arboricultural Method Statement
AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
ATC	Automatic Traffic Count
BDS	Background Data Search
BEIS	Department for Business, Energy and Industrial Strategy
BESS	Battery Energy Storage System
BGS	British Geological Survey
BMV	Best and Most Versatile Quality
BSG	Bird Survey Guidelines
BTO	British Trust for Ornithology
CCRA	Climate Change Resilience Assessment
CCTV	Closed-circuit Television
CEA	Cumulative Effects Assessment
CEMP	Construction Environmental Management Plan
CIEM	Chartered Institute of Ecology and Environmental Management
COPA	Control Pollution Act
CTMP	Construction Traffic Management Plan
DBA	Desk-Based Assessment
DC	Direct Current

Term	Description
DCO	Development Consent Order
DEFRA	Department for Environment, Food, and Rural Affairs
DEMP	Decommissioning Environmental Management Plan
DHER	Durham Historic Environment Record
DLL	District Level Licence
DNO	Distribution Network Operator
EA	Environment Agency
EC	European Commission
EcIA	Ecological Impact Assessment
ECoW	Ecological Clerk of Works
EIA	Environmental Impact Assessment
EMF	Electric, Magnetic and Electromagnetic Fields
EMP	Environmental Management Plan
ERIC	Environmental Records Information Centre
ERP	Emergency Response Plan
ES	Environmental Statement
ESA	Environmentally Sensitive Area
FRA	Flood Risk Assessment
GCN	Great Crested Newt
GHG	Greenhouse Gas
GIS	Geographic Information Systems
GLTA	Ground Level Tree Assessment
GVLIA	Guidelines for Landscape and Visual Impact Assessment
GW	Gigawatt
ha	Hectares
HDD	Horizontal Directional Drilling

Term	Description
HER	Historic Environment Record
HGV	Heavy Goods Vehicle
HRA	Habitats Regulation Assessment
H&SP	Health & Safety Plan
HVAC	Heating, Ventilation and Cooling
IACPC	Impact Assessment and Conservation Payment Certificate
IAQM	Institute of Air Quality Management
ICCI	In-combination Climate Change Impact
ICE	Institution of Civil Engineers
IEMA	Institute of Environmental Management and Assessment
INNPS	Invasive Non-native Plant Species
INNS	Invasive Non-native Species
IPC	Infrastructure Planning Commission
km	Kilometres
kv	Kilovolt
LCA	Landscape Character Area
LEMP	Landscape and Ecology Management Plan
LiDAR	Light Detection and Ranging
LLFA	Lead Local Flood Authority
LNR	Local Nature Reserve
LPA	Local Planning Authority
LRN	Local Road Network
LVIA	Landscape and Visual Impact Assessment
LWS	Local Wildlife Site
MMP	Materials Management Plan
mW	Megawatt

Term	Description
NAP	National Adaptation Programme
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
NPPG	National Planning Policy Guidance
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
NTS	Non-Technical Summary
NVC	National Vegetation Classification
NVZ	Nitrate Vulnerable Zones
oBSMP	Outline Battery Safety Management Plan
OEMP	Operational Environmental Management Plan
PEA	Preliminary Ecological Appraisal
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
PRA	Preliminary Risk Assessment
PRoW	Public Right of Way
PV	Photovoltaic
PWS	Private Water Supply
RBMP	River Basin Management Plan
RPA	Root Protection Area
RSPB	Royal Society for Protection of Birds
RVAA	Residential Visual Amenity Assessment
SAC	Special Area of Conservation
SMS	Soil Management Strategy
SoCC	Statement of Community Consultation
SoS	Secretary of State

Term	Description
SPA	Special Protection Area
SPZ	Source Protection Zone
SRMP	Soil Resources Management Plan
SRN	Strategic Road Network
SSSI	Site of Special Scientific Interest
STP	Strategic Transport Plan
SuDS	Sustainable Drainage System
SWMP	Site Waste Management Plan
TS	Transport Statement
TWAO	Transport and Works Act Order
UNFCCC	United Nations Framework Convention on Climate Change
WC	Wetness Class
WEEE	Waste Electrical and Electronic Equipment
WFD	Water Framework Directive
WSI	Written Scheme of Investigation
ZoI	Zone of Influence
ZTV	Zone of Theoretical Visibility