

# Preliminary Environmental Information Report

## Chapter 17: Other Environmental Topics

**PEIR Chapters [PINS Ref: EN 010171]**

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**Future Energy Llanwern Limited**

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# 17.0 Other Environmental Topics

## 17.1 Introduction

17.1.1 This Chapter includes the preliminary assessment of other environmental topics that do not warrant individual chapters. These technical topics have not been included within an individual chapter either due to the brevity of the assessment or the limited extent of impact associated with the Proposed Development.

17.1.2 This Chapter covers the following technical topics:

- Air Quality (see **Table 17-1**);
- Land Use (see **Table 17-1**);
- Major Accidents or Disasters (see **Table 17-1**);
- Human Health and Population (see **Section 17.5**);
- Telecommunications, Television Reception and Utilities (see **Section 17.6**);
- Electromagnetic Fields (see **Table 17-1**);
- Waste (see **Section 17.7**); and
- Assessment of Heat and Radiation (see **Table 17-1**).

17.1.3 This Chapter describes and assesses the potential effects, where they cannot be scoped out, of the Proposed Development upon the topics described above.

17.1.4 This Chapter signposts to the relevant technical Chapters, where required, where the assessment of a given impact is included. The preliminary assessment is based on information obtained to date. It should be read in conjunction **Chapter 2: Description of the Proposed Development** and with respect to relevant parts of the following chapters:

- **Chapter 6: Greenhouse Gas (GHG);**
- **Chapter 8: Ecology;**
- **Chapter 10: Water Environment;**
- **Chapter 11: Landscape and Visual Amenity;**
- **Chapter 13: Noise and Vibration;**

- **Chapter 14: Socio- Economics, Tourism and Recreation;**
- **Chapter 15: Transport and Access;** and
- **Chapter 16: Ground Conditions.**

17.1.5 Where relevant, the legislation and guidance, baseline conditions, assessment methodology and mitigation measures are outlined in the following sections of this Chapter, for each technical assessment.

17.1.6 This Chapter is supported by the following technical appendices:

- Outline Construction Environmental Management Plan (oCEMP) **(Appendix 2A)**; and
- Outline Decommissioning Environmental Management Plan (oDEMP) **(Appendix 2B)**.
- Outline Landscape and Ecological Management Plan (oLEMP) **(Appendix 8J)**

17.1.7 This Chapter is supported by **Figure 17-1**:

## **17.2 Proposed Development Parameters Assessed**

17.2.1 **Chapter 2: Description of the Proposed Development** provides an overview of the Proposed Development upon which the assessment underpinning this Chapter is based. The worst-case parameters have underpinned the assessment presented; the actual impact may therefore be less than anticipated if the Proposed Development were to be built to a lesser scale or differing design presented in **Chapter 2: Description of the Proposed Development**.

17.2.2 Additionally, for the purpose of this assessment, commencement of construction is anticipated to start in 2028, with an operational period of 40 years meaning that decommissioning is anticipated in 2072. 2028 is considered a worst-case as it compresses the construction programme into a shorter duration and represents the greatest impact.

## **17.3 Methodology**

17.3.1 For the Methodology used to assess this Chapter, see **Chapter 5: EIA Methodology**, or where signposted to other technical Chapters, the methodology

section within each technical chapter.

## 17.4 Scope of the Assessments

17.4.1 A Scoping Report (**Appendix 1C**) for the Proposed Development and a request for an EIA Scoping Opinion from the Planning Inspectorate was submitted in December 2024. **Table 17-1** presents a summary of comments provided by the Planning Inspectorate and consultees (**Appendix 1D**) as part of the scoping process and the Applicant's response, highlighting where relevant how these comments have been addressed within this Chapter.

17.4.2 **Table 17-1** illustrates the topics scoped out of this assessment.

Table 17-1 Topics Scoped Out

Consultee Response	Main matter raised	Applicant Response	Location of response in PEIR
<b>Planning Inspectorate</b>	The Inspectorate agrees that the impact of dust emissions can be scoped out of the ES due to the inclusion of appropriate mitigation measures in line with best practice and Institute of Air Quality Management (IAQM) guidance in the commitments register and outline (oCEMP).	The Proposed Development's construction and decommissioning phases will be subject to air quality mitigation measures associated with dust control which will be incorporated into the detailed CEMP) and are included within the commitments register ( <b>Appendix 19A</b> ). Therefore, a separate ES chapter covering air quality is not considered necessary for the ES.	See: <b>Appendix 2A</b>
<b>Planning Inspectorate</b>	Provided that a commitment is included within the commitments register to providing a drilling fluid breakdown plan, emergency spill response procedure appropriate buffers/construction management measures and best practice measures during each phase to reduce risk of contaminant mobilisation, and a soil management plan is produced to detail measures to reduce or avoid damage to soils, land quality can be included in the ground conditions chapter rather than a standalone ES chapter.	The physical effects of the Proposed Development on existing land-use patterns have been considered in <b>Chapter 16: Ground Conditions</b> .	See: <b>Section 16.8 of Chapter 16: Ground Conditions</b> .
<b>Planning Inspectorate</b>	The Inspectorate agrees that Major Accidents and Disasters does not require a standalone chapter. The ES should clearly signpost where impacts relating to Major Accidents and Disasters have been considered in the relevant technical chapters.	The impacts relevant to Major Accidents and Disasters has been signposted to the relevant technical chapters in <b>Section 17.8</b> ..	See <b>Table 17-6, Section 17.8</b> .
<b>Planning Inspectorate</b>	The Inspectorate considers that an Electromagnetic Field (EMF) assessment should be provided in an appendix to the ES for any cables with voltages over 132kV. This should include the location, routing, and	For any cables with voltages over 132kV, an EMF assessment will be presented as an Appendix to the ES and will include the location, routing, and voltages of any cables	This will be considered in the ES stage.

Consultee Response	Main matter raised	Applicant Response	Location of response in PEIR
	voltages of any cables over 132kV and a risk assessment to any human and ecological sensitive receptors within the Zone of Influence (Zol).	over 132kV and a risk assessment to any human and ecological sensitive receptors within the Zol.	
<b>Planning Inspectorate</b>	The ES should consider the potential for EMF effects to occur to ecological receptors including those within affected watercourses. The ES should also clarify the cabling method required to cross relevant watercourses and describe any design measures in place which would limit the potential for EMF effects. The Inspectorate considers there is the potential for soil heating from cables and EMF effects to occur to ecological receptors including those within watercourses such as fish.	The potential for EMF effects to occur to ecological receptors including those within affected watercourses has been presented in <b>Chapter 8: Ecology</b> and <b>Chapter 10: Water Environment</b> .	Potential EMF impacts on ecological receptors have been considered within <b>Chapter 8: Ecology</b> and <b>Chapter 10: Water Environment</b> . to be assessed in the ES
<b>Planning Inspectorate</b>	The Inspectorate agrees that human health and population does not require a standalone chapter provided the ES should clearly signpost where impacts relating to human health have been considered in the relevant technical chapters.	The PEIR takes into account human health and population The respective technical chapters underpinning this PEIR have considered all relevant aspects of human health and population as described in <b>Table 17-3</b> .	See; <b>Table 17-3, Section 17.5 Table 17-3, Section 17.517.4</b> ).
<b>Planning Inspectorate</b>	The Inspectorate is content to scope out telecommunications, television reception and utilities provided the ES sets out the findings of the desk-based assessment and how this has been taken into account in the design to mitigate potential impacts.	The design of the Proposed Development has taken into account a number of constraints. In addition to this, ongoing consultation will be undertaken with relevant organisations to ensure the iterative design process continually	see: <b>Section 17.6, Figure 17-1 and Appendix 2A</b>

Consultee Response	Main matter raised	Applicant Response	Location of response in PEIR
		<p>accounts for utility infrastructure (see <b>Figure 17-1</b> and <b>Section 17.6</b>)</p> <p>A detailed CEMP (produced by an appointed contractor) will include the measures described in <b>paragraphs 17.6.18 to 17.6.20</b>.</p> <p>Due to the nature of the Proposed Development and given the processes and measures that are in place, it is unlikely there are relevant pathway or receptors that could lead to significant effects from telecommunications, television reception and utilities. (see: <b>Section 17.6</b>)</p>	
<p><b>Planning Inspectorate</b></p>	<p>The Inspectorate agrees that waste does not require a standalone chapter, provided that a description of the potential waste streams of construction and decommissioning, and include estimated volumes, by type and quantity, of expected residues and emissions and quantities and types of waste produced, and an assessment of the likely significant effects is included in the ES.</p> <p>If off-site disposal is required, an assessment of likely significant effects including cumulative effects should be included within the ES.</p> <p>The ES should provide a waste management plan and describe any measures implemented to minimise waste and demonstrate how the waste hierarchy will be applied.</p>	<p>A Waste assessment has been covered in this Chapter. <b>Section 17.7</b> sets out the potential waste streams associated with the construction, operation and decommissioning of the Proposed Development.</p> <p>The construction and decommissioning phases will be subject to waste mitigation measures defined in <b>Section 17.7</b> which will be incorporated into the detailed CEMP and are included within the commitments register (<b>Appendix 19A</b>). Therefore, a separate ES chapter covering waste is not considered necessary for the ES. Estimated volumes of waste (by type and quality, of expected</p>	<p>Mitigation measures, waste streams and waste hierarchy - <b>Section 17.7</b> of this Chapter. Waste emissions - <b>Chapter 6: Greenhouse Gas</b></p>

Consultee Response	Main matter raised	Applicant Response	Location of response in PEIR
		residues) as well as an outline Site Waste Management Plan will be provided for the ES.	
<b>Planning Inspectorate</b>	The Inspectorate is content to scope out heat and radiation provided the ES signposts any identified sources of heat and radiation and how this has been considered with respect to site selection, site layout and mitigation design, heat.	<p>Due to the nature of the Proposed Development and given the processes and measures that are in place it is unlikely that there are relevant pathway or receptors that could lead to significant effects from heat and radiation.</p> <p>The ES will signpost and present any identified sources of heat and radiation and how this has been considered with respect to site selection, site layout and mitigation design, heat.</p>	See <b>Section 17.9</b>
<b>Wales &amp; West Utilities</b>	Referenced the three high pressure gas pipelines in the vicinity of the Proposed Development. Pipeline to the north is owned and operated by Seabank Power Ltd and maintained by Wales and West Utilities Ltd Two pipelines to the south are owned and operated by Wales and West Utilities. Strict guidelines apply to any works in close proximity to these pipelines owing to the extreme pressures involved (WW/SP/SSW/22) Please review this information and contact Wales and West Utilities Ltd to detail what the of work is required and whether any excavation work is involved.	<p>The design of the Proposed Development has taken into account a number of constraints. In addition to this, ongoing consultation will be undertaken with relevant organisations to ensure the iterative design process continually accounts for utility infrastructure (see <b>Figure 17-1 and Section 17.6</b>)</p> <p>A detailed CEMP (produced by an appointed contractor) will include the measures described in <b>paragraphs 17.6.14 to 17.6.16</b>.</p>	See <b>Figure 17-1, Section 17.6 and Appendix 2A</b>
<b>UK Health Security Agency</b>	Believe the summation of relevant issues into a specific section of the report provides a focus which ensures that public health is given adequate consideration.	The PEIR takes into account human health and population The respective technical chapters underpinning this PEIR have considered all relevant aspects of human	See; <b>Table 17-3, Section 17.5.</b>

Consultee Response	Main matter raised	Applicant Response	Location of response in PEIR
	<p>Requested for key information, risk assessments, proposed mitigation measures, conclusions, and residual impacts, relating to human health must be summarised.</p> <p>Compliance with the requirements of National Policy Statements and relevant guidance and standards should also be highlighted</p> <p>Advice on the content of Environmental Statements accompanying an application under the NSIP Regime', setting out aspects to be addressed within the Environmental Statement should be considered when preparing an ES.</p> <p>Where impacts relating to health and/or further assessments are scoped out, promoters should fully explain and justify this within the submitted documentation.</p> <p>Requested a clear statement clarifying the used of 132kV cables and why sources of 132 kV have been scoped out from the assessment.</p>	<p>health and population as described <b>Table 17-3</b>.</p> <p>For any cables with voltages over 132kV, an EMF assessment will be presented as an Appendix to the ES and will include the location, routing, and voltages of any cables over 132kV and a risk assessment to any human and ecological sensitive receptors within the Zol.</p>	
<p><b>Public Health Wales</b></p>	<p>Noted that consideration should be made of the impacts upon receptors nearest the site, including noise and air pollution during both the construction and operational phases.</p> <p>Proposal should include consideration of any environmental impacts on the health of the local community.</p> <p>Supportive of the embedded environmental design measured outlined in the Scoping Report and noted that mitigation strategies should be implemented to</p>	<p>Consideration has been given to the noise and air quality impacts that have the potential to arise during the construction, operational and decommissioning phases of the Proposed Development.</p> <p>Mitigations measures to avoid chemical spillages, noise and or other pollution will be managed by the detailed CEMP and DEMP produced by the appointed contractor during</p>	<p>See <b>Table 17-1, Chapter 13: Noise and Vibration, Appendix 2A and Appendix 2B</b>.</p>

Consultee Response	Main matter raised	Applicant Response	Location of response in PEIR
	<p>avoid chemical spillages, noise and or other pollution to the environment during the construction, operation and decommissioning of the Proposed Development.</p>	<p>the construction and decommissioning phases. An outline CEMP (oCEMP) (<b>Appendix 2A</b>) and outline DEMP (oDEMP) (<b>Appendix 2B</b>) have been produced to support this PEIR. A CEMP and DEMP will be produced for the ES.</p>	
<p><b>Natural Resources Wales</b></p>	<p>Noted the following should also be considered as part of the submitted ES:</p> <ul style="list-style-type: none"> <li>• Assessment of the potential for the release of hazardous chemicals via component degradation and leaching from the solar farm infrastructure over the decades of operation into the local environment resulting in pollution of soils and groundwater.</li> <li>• If infrastructure is left in the ground in perpetuity as part of decommissioning, such as buried cables installed within groundwater, that the potential for that infrastructure to slowly degrade and release hazardous chemicals into the environment is considered. Release of hazardous chemicals from buried cabling may take place through component degradation and chemical leaching over time. A Decommissioning Assessment should be drafted with estimated costs for various decommissioning actions/activities and estimated durations. The fate of the solar panels should also be considered, and alternatives found to landfilling the solar panels as this will likely result in the release of</li> </ul>	<p>The Assessment of the potential for the release of hazardous chemicals via component degradation and leaching from the solar farm infrastructure over the decades of operation into the local environment resulting in pollution of soils and groundwater has been explored in <b>Chapter 16: Ground Conditions</b>.</p>	<p><b>Appendix 2A and Appendix 2B.</b></p>

Consultee Response	Main matter raised	Applicant Response	Location of response in PEIR
	<p>hazardous substances to the local environment.</p> <ul style="list-style-type: none"> <li>• Consideration of the chemical composition of the different components proposed for the solar farm and choose those components that possess the least potential to cause environmental impacts either through a fire event or through component degradation and chemical leaching.</li> </ul>		
<b>Natural Resources Wales</b>	<p>Land use surveys should be used to inform whether appropriate management will enable re-establishment of floristic diversity on site without seeding, or whether a combination of a trial of seeding on some fields and others to be managed for natural recovery of floristic diversity. The preference would be locally sourced seed.</p>	<p>The assessment of Land use and proposals for ecological mitigation are set out in <b>Chapter 8: Ecology</b>.</p>	<p><b>Chapter 8: Ecology</b></p>
<b>Natural Resources Wales</b>	<p>The fate of the solar panels should be considered and alternatives to landfill should be found as this will likely result in chemical leaching into the local environment.</p>	<p>The potential waste streams associated with the construction and decommissioning phases are described in <b>Table 17-5</b> in <b>Section 17.7</b>. Recycling plants have been identified where appropriate.</p> <p>The waste streams presented in <b>Table 17-5</b> will be subject to waste mitigation measures defined in <b>Section 17.7</b> which will be incorporated into the detailed CEMP and are included within the commitments register (<b>Appendix 19A</b>).</p>	<p>See <b>Table 17-5, Section 17.7</b></p>

Consultee Response	Main matter raised	Applicant Response	Location of response in PEIR
<p><b>National Highways</b></p>	<p>Adverse changes to noise and air quality should be considered, including in relation to compliance with the European air quality Limit Values and/or Local Authority designated AQMAs and World Health Organisation (WHO) criteria.</p>	<p>Consideration has been given to the noise and air quality impacts that have the potential to arise during the construction, operational and decommissioning phases of the Proposed Development.</p> <p>Mitigations measures including compliance to avoid European air quality Limit Values and/or Local Authority designated AQMAs and WHO criteria will be managed by the detailed CEMP and DEMP produced by the appointed contractor during the construction and decommissioning phases. An oCEMP (<b>Appendix 2A</b>) and oDEMP (<b>Appendix 2B</b>) have been produced to support this PEIR. A CEMP and DEMP will be produced for the ES.</p>	<p>See <b>Table 17-1, Chapter 13: Noise and Vibration, Appendix 2A and Appendix 2B</b></p>

## 17.5 Human Health and Population

17.5.1 The Proposed Development has been designed to minimise any risk to human health resulting from its construction, operation and decommissioning. Additionally, all related infrastructure and equipment will be maintained to ensure no risk to human health arises as a result of the operation of the Proposed Development. The Proposed Development will be constructed in accordance with the relevant best practice guidelines and will be subject to routine monitoring, maintenance and servicing by staff during its operation.

### Stakeholder Engagement

17.5.2 As detailed in **Section 17.4**, a request for an EIA Scoping Opinion from the Planning Inspectorate was submitted in December 2024. Following the consultation response received by the Planning Inspectorate (**Appendix 1D**), the relevant technical topics which have relevance to human health and population have been clearly signposted and summarised in **Table 17-2**.

*Table 17-2 Consultation matters and responses for Human Health and Population*

Element	Phase	Location
<b>Landscape elements within the Study Area.</b>	Construction and Operation	Please refer to <b>Section 11.8 of Chapter 11: Landscape and Visual Amenity</b>
<b>Visual Receptors within the Study Area: nearby settlements (residents); transport routes (primarily minor roads); recreational routes (including PRoW, Wales Coast Path, Sustrans Cycle Route 4); and recreational and tourist destinations.</b>	Construction, Operation and Decommissioning	Please refer to <b>Section 11.8 of Chapter 11: Landscape and Visual Amenity</b>
<b>Water Pollution / Siltation</b>	Construction, Operation and Decommissioning	Please refer to <b>Section 10.8 of Chapter 10: Water Environment,</b>
<b>Effects on soils</b>	Construction, Operation and Decommissioning	Please refer to <b>Section 16.8 of Chapter 16: Ground Conditions,</b>
<b>Effects on agricultural land (agricultural as land national / regional / local resource)</b>	Construction, Operation and Decommissioning	Please refer to <b>Section 14.8 of Chapter 14:</b>

		<b>Socio-economics, Tourism and Recreation,</b>
<b>Effects on land contamination</b>	Construction, Operation and Decommissioning	Please refer to <b>Section 16.8 of Chapter 16: Ground Conditions,</b>
<b>Highway Network and receptors</b>	Construction and Decommissioning	Please refer to <b>Section 15.8 of Chapter 15: Transport and Access</b>
<b>Active Travel Links</b>	Construction, Operation and Decommissioning	Please refer to <b>Section 13.9 of Chapter 13: Noise and Vibration</b>
<b>Construction/decommissioning activity noise</b>	Construction and Decommissioning	Please refer to <b>Section 13.9 of Chapter 13: Noise and Vibration,</b>
<b>Construction/decommissioning activity vibration</b>	Construction and Decommissioning	Please refer to <b>Section 13.9 of Chapter 13: Noise and Vibration</b>
<b>Construction/decommissioning road traffic noise</b>	Construction and Decommissioning	Please refer to <b>Section 13.9 of Chapter 13: Noise and Vibration,</b>
<b>Operational Noise</b>	Operation	Please refer to <b>Section 13.9 of Chapter 13: Noise and Vibration,</b>

## **17.6 Telecommunications, Television Reception and Utilities**

### **Introduction**

- 17.6.1 This Section provides an explanation as to how all impacts on Telecommunications, Television Reception and Utilities receptors have been minimised via design evolution. Owing to the nature of the Proposed Development, there is a limited ability to affect above ground telecommunications including telecommunication links and Television Reception, any potential effects would be limited spatially and temporally. Below ground utilities, however, were considered from the Scoping stage during the iterative design process so as to avoid any potential effects.
- 17.6.2 Effects associated with existing infrastructure do not constitute environmental effects and, therefore, are not required to be assessed under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations 2017). (Ref 17-1). However, due to the nature of the Proposed Development, there is potential for effects on existing below ground infrastructure.

## Stakeholder Engagement

- 17.6.3 As detailed in **Section 17.4**, a request for an EIA Scoping Opinion from the Planning Inspectorate was submitted in December 2024.
- 17.6.4 Prior to the scoping submission, a Utilities Report was commissioned from the Landmark Information Group (**Appendix 17A**) in accordance with the standards defined under Survey Category D of PAS128 (Ref 17-2), a Publicly Available Specification for underground utility detection, verification and location published by the British Standards Institution. The Utilities Report consisted of a desk-based assessment as well as consultation with relevant organisations (see **Table 17-3**).

### Telecommunications

- 17.6.5 In the Utilities Report (**Appendix 17A**) British Telecommunications were consulted and provided the following list of receptors within the PEIR Assessment Boundary:
- Two buildings connected by ducts; and
  - A series of poles (masts) connected by overhead line.
- 17.6.6 The standard advice from British Telecommunications (BT) is to avoid damage and ensure that mechanical excavators or borers are not used within 600mm of BT apparatus. The Proposed Development will not interfere with the two receptors identified above.

### Summary of significant effects

- 17.6.7 The Proposed Development is unlikely to interfere with telecommunications infrastructure. As such no effects are anticipated during the construction, operation and decommissioning phases of the Proposed Development.

## Television Reception

- 17.6.8 The Proposed Development and surrounding area is served by the following transmitters:
- Wenvoe transmitter which is located approximately 28 kilometres (km) south west of the PEIR Assessment Boundary (Grid Reference ST 11045 74164)

- Mendip transmitter which is located approximately 38km south east of the PEIR Assessment Boundary (Grid Reference ST 56402 48864)

17.6.9 The area to the north west of the PEIR Assessment Boundary is served by Pontypool transmitter, which is located approximately 29km north west of the PEIR Assessment Boundary (Grid Reference ST 08453 90478)

### Summary of significant effects

17.6.10 The Proposed Development consist of fixed low-lying infrastructure, as such it is considered unlikely to interfere with digital television signals. As such, no effects are anticipated during the construction, operation and decommissioning phases of the Proposed Development.

### Utilities

17.6.11 Utilities have the potential to include water, sewers, gas or oil pipelines and electrical cables. Identifying their location during design and construction are key to ensuring any effects are negated through proactive design (pipe bridges) and avoidance (buffers).

17.6.12 A Utility Report (**Appendix 17A**) was used to inform the preliminary design and provided detailed information relating to the location of underground utilities to ensure the appropriate buffers and engineering considerations could be applied during the iterative design process.

17.6.13 In addition to the consultation described in **Section 17.4** above, consultation was undertaken with the telecommunication and utility providers. A summary of those obtained to date are provided in **Table 17-3**.

*Table 17-3 Consultation matters and responses for telecommunications, television reception and utilities*

Organisation	Category	Conclusion
<b>C.A. Telecom UK - [Colt Technology Services]</b>	Telecommunications	Confirmed not affected by the Proposed Development.
<b>CityFibre</b>	Telecommunications	Confirmed not affected by the Proposed Development.
<b>GTC</b>	Electricity, Gas, Telecommunications, Water Supply	Confirmed not affected by the Proposed Development.

<b>Network Rail</b>	Rail	Confirmed not affected by the Proposed Development.
<b>OCU Group</b>	Telecommunications	Confirmed not affected by the Proposed Development.
<b>SKY Telecommunications Services</b>	Telecommunications	Confirmed not affected by the Proposed Development.
<b>Verizon</b>	Telecommunications	Confirmed not affected by the Proposed Development.
<b>Virgin Media</b>	Telecommunications	Confirmed not affected by the Proposed Development.
<b>Vodafone</b>	Telecommunications	Confirmed not affected by the Proposed Development.
<b>Wales and West Utilities</b>	Gas	Confirmed not affected by the Proposed Development.
<b>Dwr Cymru Welsh Water</b>	Sewerage, Water Supply	Confirmed that there was potential to be affected by the Proposed Development*.
<b>LinesearchbeforeUdig</b>	N/A	Confirmed that there was potential to be affected by the Proposed Development*.
<b>National Grid Electricity Distribution</b>	Electricity	Confirmed that there was potential to be affected by the Proposed Development*.
<b>National Grid Electricity Transmission</b>	Electricity	Confirmed that there was potential to be affected by the Proposed Development*.
<b>Natural Resources Wales</b>	Environmental Body	Confirmed that there was potential to be affected by the Proposed Development*.
<b>Openreach (British Telecommunications)</b>	Telecommunications	Confirmed that there was potential to be affected by the Proposed Development*.
<b>Utility Assets</b>	Electricity	Confirmed that there was potential to be affected by the Proposed Development*.

<b>Newport City Council</b>	Council	No response received*.
<b>Leep Utilities</b>	Sewerage, Water Supply	No response received.
<b>Eclipse Power</b>	Electricity	No response received.

\*Note reference should also be made to **Table 17-3** above, where responses were also received from these organisations during the scoping process.

17.6.14 In order to identify existing infrastructure constraints, a detailed desk-based assessment was undertaken using the findings of the Utilities Report described above (**Appendix 17A**). This report was used to inform the preliminary design presented in **Chapter 2: Description of the Proposed Development** and provided detailed information relating to telecommunications and utilities, to ensure the appropriate buffers and engineering considerations could be applied during the iterative design process described in **Chapter 3: Alternatives and Design Evolution**.

17.6.15 A total Site area of 547.69 hectares (ha) has been included within the PEIR Assessment Boundary. All of this land, however, is not required for the Proposed Development. Therefore, this gives flexibility in design of the Proposed Development meaning that underground utilities can be avoided in the first instance.

17.6.16 The information obtained from the desk-based assessment summarised in **Table 17-3** as well as that gained through the scoping process has been used to inform the siting and design of the Proposed Development along with appropriate mitigation measures to ensure the protection of existing infrastructure which has the potential to be affected by the Proposed Development. Appropriate embedded measures identified through the ongoing consultation process have been summarised in **paragraph 17.6.18** below.

### Summary of significant effects

17.6.17 There is the potential for utilities to be affected during the construction of the Proposed Development as a result of excavation or engineering practices. In order to prevent the potential for adverse effects, a number of precautionary measures have been incorporated into the design as embedded mitigation as depicted in **Figure 17-1**.

17.6.18 These include the following:

- Sensitively locating the Proposed Development outside of utility protected zones
- The use of ground penetrating radar prior to excavation to identify any unknown utilities
- Consultation and agreement of construction and demobilisation methods prior to the construction phase.

17.6.19 An oCEMP has been prepared to accompany the PEIR (see **Appendix 2A**). An oCEMP will be produced to support the ES. The oCEMP describes mitigation measures to be followed, to be carried forward to a detailed CEMP prior to construction. The aim of the oCEMP is to reduce nuisance impacts from a range of activities - including utilities diversion.

17.6.20 These measures will be incorporated into the detailed CEMP, which will be agreed and finalised prior to construction, to reduce the potential for effects on utilities during the construction phase. As such, no adverse effects are expected during the construction of the Proposed Development.

17.6.21 There are no predicted effects on utilities as a result of the operational phase of the Proposed Development as no below-ground works will be required during operation.

### Mitigation

17.6.22 No mitigation has been identified for telecommunications and Television Reception.

17.6.23 The potential for the construction phase to damage utilities will be minimised through the embedded mitigation defined in **Section 17.6** coupled with the desk based assessment which has led to the mapping of infrastructure that intercepts the PEIR Assessment Boundary, reducing the risk through the iterative design process defined in **Chapter 3: Alternatives and Design Evolution**. The DCO Application will include protective provisions for the protection of electronic communication networks and utilities, and engagement with relevant statutory undertakers in this respect is ongoing. No further mitigation will be required.

### Cumulative Effects

17.6.24 As detailed above, the Proposed Development is not anticipated to have an effect on telecommunications, television reception or utilities. It is assumed that the other

developments included within the shortlist presented in **Appendix 5B** will equally have no effect on telecommunications, television reception or utilities.

## Summary

17.6.25 As detailed above, relevant measures will be incorporated into the Proposed Development's design and construction processes, Therefore, it is considered that significant effects are not expected during either construction, operation or decommissioning of the Proposed Development upon underground utilities, or on Telecommunications, Television Reception and Utilities as a whole.

## 17.7 Waste

### Introduction

17.7.1 This Section sets out the expected waste streams associated with the construction, operational and decommissioning phases of the Proposed Development (see; **Table 17-1**).

17.7.2 For the purpose of this assessment, construction wastes include surplus spoil, scrap, recovered spills, unwanted surplus of materials, packaging, wastewater and broken, worn-out, contaminated or otherwise spoiled plant, equipment, and materials.

17.7.3 The full legal definition of waste is laid out in The Environmental Protection Act 1990 (Ref 17-3), which also includes a wider definition: 'any substance or object which the holder discards or intends or is required to discard'.

### Relevant Legislation, Guidelines and Policy

17.7.4 **Table 17-4** below demonstrates the regulations taken into account:

*Table 17-4 Regulations used to inform this assessment.*

Regulation	Context
<b>Control of Pollution (Amendment) Act 1989 (Ref 17-4)</b>	It is a criminal offence for anyone not registered as a carrier, to transport Controlled Waste.
<b>Hazardous Waste Regulations 2005 (Ref 17-5)</b>	Regulations that control the disposal of hazardous waste.
<b>Waste Electrical and Electronic</b>	Regulations specific to waste arising from electrical equipment.

<b>Equipment (WEEE) regulations 2005 (Ref 17-6)</b>	
<b>The Waste Framework Directive 2008/98/EC (Ref 17-7)</b>	Provides a framework for waste management across the European Union, and is still used in the UK post-Brexit.
<b>Waste (England and Wales) Regulations 2011 (Ref 17-8)</b>	<p>Regulations across England and Wales that require waste prevention programmes and waste management plans that apply the Waste Hierarchy (Plate 17-1).</p> <p>Places a duty on producers and holders of waste to:</p> <ul style="list-style-type: none"> <li>• Prevent illegal disposal, treatment or storage of waste;</li> <li>• Handle their waste safely;</li> <li>• Know whether the waste is hazardous or non-hazardous;</li> <li>• Store waste securely in a manner that prevents release of the waste;</li> <li>• Provide an accurate written description of the waste in order to facilitate;</li> <li>• the compliance of others with the duty and avoidance of the offences;</li> <li>• under Section 33 of the Environmental Protection Act 1990: via a</li> <li>• compulsory system of Controlled Waste Transfer Notes (WTNs) which;</li> <li>• controls the transfer of waste between parties; and</li> <li>• Ensure anyone dealing with their waste has the necessary authorisation.</li> </ul> <p>This requirement originally arose under Section 34 of the Environmental Protection Act (Ref 17-3).</p>
<b>Waste (England and Wales) Regulations 2011 (Amended 2014) (Ref 17-9)</b>	<p>places a duty on producers and holders of waste to:</p> <ul style="list-style-type: none"> <li>• Prevent illegal disposal, treatment or storage of waste;</li> <li>• Handle their waste safely;</li> <li>• Know whether the waste is hazardous or non-hazardous;</li> <li>• Store waste securely in a manner that prevents release of the waste;</li> <li>• Provide an accurate written description of the waste in order to facilitate the compliance of others with the duty and avoidance of the offences under Section 33 of the Environmental Protection Act 1990: via a compulsory system of Controlled Waste Transfer Notes (WTNs) which controls the transfer of waste between parties; and</li> <li>• Ensure anyone dealing with their waste has the necessary authorisation.</li> </ul>
<b>Revised Waste Framework</b>	Introduces new provisions in order to boost waste prevention and recycling as part of the Waste Hierarchy (Plate 17-1).

17.7.5 Where possible waste will be managed following the Waste Hierarchy (Ref 17-10), demonstrated in **Plate 17-1** below:

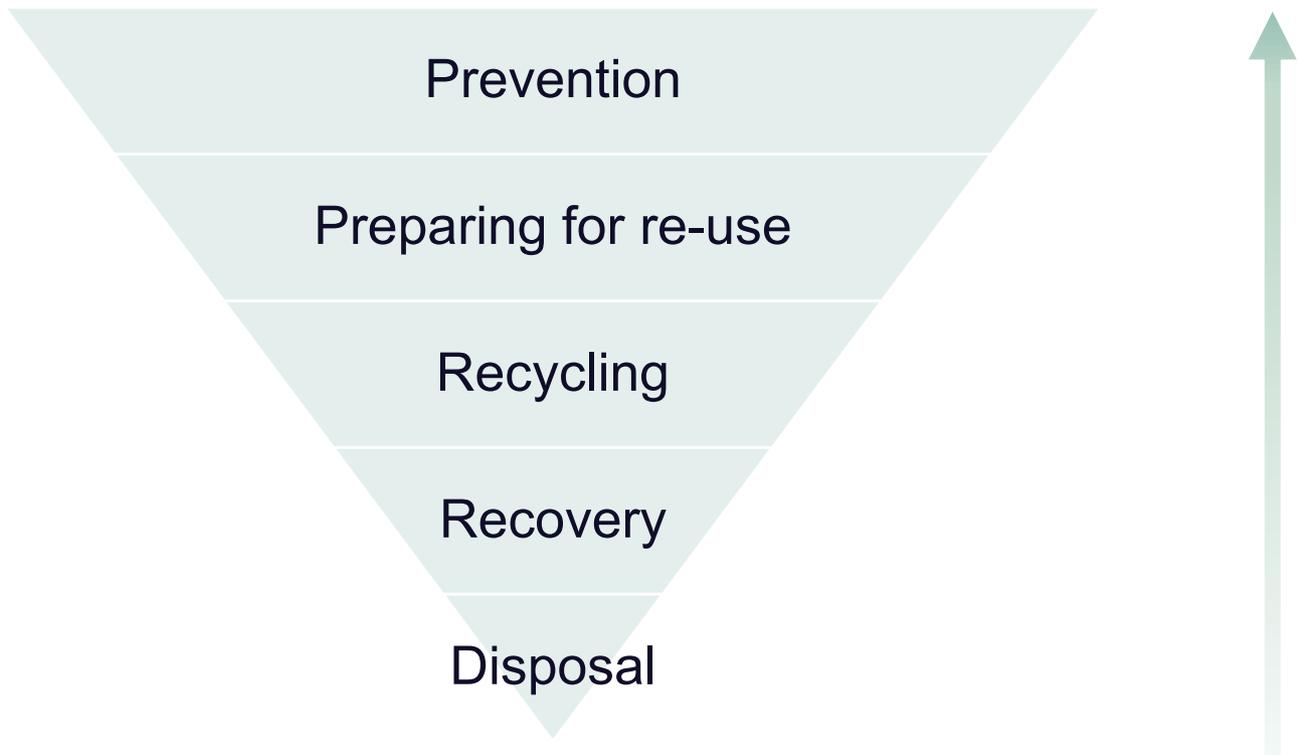


Plate 17-1 Waste Hierarchy

### Stakeholder Engagement

17.7.6 The consultation responses relating to waste from the Planning Inspectorate (see: **Table 17-1** above) set out that: *“estimated volumes, by type and quantity, of expected residues and emissions and quantities and types of waste produced, and an assessment of the likely significant effects is included in the ES, a standalone Chapter on waste is not required in the ES. If off-site disposal is required, an assessment of likely significant effects including cumulative effects should be included within the ES. The ES should provide a waste management plan and describe any measures implemented to minimise waste and demonstrate how the waste hierarchy will be applied”*.

## Waste

### Construction

- 17.7.7 During the construction phase, the detailed CEMP will set out how waste will be managed on-Site, and how opportunities for recycling will be explored.
- 17.7.8 The potential waste streams that are associated with the removal of waste material during the construction phase are summarised in **Table 17-5**. Volumes will be presented at ES.

*Table 17-5 Waste expected to arise during construction*

Waste	Proposed Destination
<b>Metals (iron and steel)</b>	Recycling or recovery of metals and metal components
<b>Mixed construction wastes that do not contain hazardous substances</b>	Recycling plant
<b>Cables that do not contain hydrocarbons, coal tar or other hazardous substances</b>	Recycling plant
<b>Plastic</b>	Recycling plant
<b>Paper and cardboard containers</b>	Recycling plant
<b>Wood</b>	Recycling plant
<b>Absorbents, cleaning cloths</b>	Authorised recycling plant or authorised landfill for hazardous waste
<b>Aerosol sprays</b>	Authorised recycling plant or authorised landfill for hazardous waste
<b>Land and stones containing hazardous substances</b>	Authorised recycling plant or authorised landfill for hazardous waste
<b>Empty containers of contaminated metal or plastics</b>	Authorised recycling plant or authorised landfill for hazardous waste
<b>Used oils</b>	Authorised recycling plant or authorised landfill for hazardous waste
<b>Oil filters</b>	Authorised recycling plant or authorised landfill for hazardous waste
<b>Welfare facility waste</b>	Authorised landfill for hazardous waste

- 17.7.9 All the electrical infrastructure is expected to be delivered to the Site ready for installation and therefore construction and assembly waste is expected to be minimal. Packaging will be processed onsite in construction compounds along with the sorting of different waste types, no offsite waste processing is anticipated.

- 17.7.10 Significant material is not expected to be removed from the Site during the construction phase owing to the lack of demolition, and relatively little waste associated with Solar Farms.
- 17.7.11 During the site preparation works, opportunities to minimise waste produced as a result of the construction phase of the Proposed Development will be explored. Where possible, re-use or recycling of materials will be explored before landfills are utilised.
- 17.7.12 Large scale earth works are not anticipated as result of the construction phase of the Proposed Development. Initial assessment have not identified likely presence of ground conditions, however, if soil contamination is found, this may require the removal of soil from Site for treatment or disposal, as it is not practical to treat this on-site. However, where possible, soil arisings will be balanced through a cut and fill exercise to retain volumes on Site.
- 17.7.13 Toxic and hazardous waste must be treated and transported by a licensed operators. Waste relating to toxic and hazardous materials will be managed in accordance with the detailed CEMP which will be produced by the appointed contractor.
- 17.7.14 The Site is not located in a mineral safeguarding area and therefore an Excavated Materials Management Plan is not required.
- 17.7.15 During the construction phase, the detailed CEMP will set out how waste will be managed on-Site, and how opportunities for recycling will be further explored.
- 17.7.16 Waste during the construction phase will be managed by detailed CEMP which will be in line with relevant legislation and guidance.
- 17.7.17 An outline CEMP (oCEMP) has been prepared to support this PEIR (**Appendix 2A**) and sets out the plan for recycling and waste disposal for the Proposed Development. It highlights the commitment to the circular economy, recycling. Thus, it is considered that there is a low possibility of a significant impact. As such, it is not anticipated to result in a significant effect.
- 17.7.18 Considering the above it is anticipated that there will not be any significant effects arising from waste from the Proposed Development.

## Operation

17.7.19 The potential waste arising as a result of the operation of the Proposed Development includes the following:

- Replacement and maintenance of equipment;
- Waste metals;
- General waste (including paper, cardboard, wood etc.); and
- Welfare facility waste.

17.7.20 Another potential source of waste during the operational phase is from the maintenance and replacement of parts across the Site. These include:

- Inverters. Likely replacement every 12 years. May require full or phased replacement. If inverter roof is installed life expectancy should increase;
- Solar Panels. Not replaced unless damaged;
- Cabling: Not replaced unless damaged;
- PV Mounting Structures: Minimal replacement of screws or small elements; and
- Access Tracks. Yearly filling of potholes, and possible road grading every few years, which may produce small amounts of waste.

17.7.21 The above demonstrates that relatively little waste is expected to be generated through maintenance/replacement Proposed Development owing to the nature of the development.

17.7.22 As there are expected to be staff employed on Site full time, there will be waste generated as a result. However, as the number of staff is anticipated to be low - a total of 11-22. for the Proposed Development, increasing during seasonal vegetation or inspection cycles as described in **Chapter 2: Description of the Proposed Development**.

17.7.23 As both the amount of staff on Site and the expected maintenance and replacement of parts are both expected to be low, it is unlikely there will be a significant effect generated by operational waste.

## Decommissioning

- 17.7.24 The potential waste streams associated with the decommissioning phase of the Proposed Development are considered to be similar or greater than those identified for the construction phase in **Table 17-5** above.
- 17.7.25 During the preparation works, opportunities to minimise waste produced as a result of the decommissioning phase of the Proposed Development will be explored. Where possible, re-use or recycling of materials will be explored before landfills are utilised.
- 17.7.26 Toxic and hazardous waste must be treated and transported by a licensed operators. Waste relating to toxic and hazardous materials will be managed in accordance with the detailed CEMP which will be produced by the appointed contractor.
- 17.7.27 During decommissioning, all site infrastructure will be removed from the Site and recycled, or disposed of in accordance with good practice as described in **Section 2.8 of Chapter 2: Description of the Proposed Development**. Waste during the decommissioning phase will be managed by detailed DEMP which will be in line with relevant legislation and guidance at that time.
- 17.7.28 An (oDEMP) has been prepared to support this PEIR (**Appendix 2B**) and sets out the plan for recycling and waste disposal for the Proposed Development. It highlights the commitment to the circular economy, recycling. Thus, it is considered that there is a low possibility of a significant impact. As such, it is not anticipated to result in a significant effect.

## Summary

- 17.7.29 Any waste generated during all phases of the Proposed Development will be delivered to the appropriately licensed operators.
- 17.7.30 Large scale earth works are not anticipated as result of the construction, operation or decommissioning of the Proposed Development. If soil contamination is found, this may require the removal of soils from Site for treatment or disposal, as it is not practical to treat this on-site. However, where possible, soil arisings will be balanced through a cut and fill exercise to retain volumes on Site.

- 17.7.31 There are no expected effects from waste associated with the Proposed Development. A more in depth assessment of waste generated during construction will be conducted in the oCEMP to be submitted with the ES and in the detailed CEMP.
- 17.7.32 Owing to the nature of the Proposed Development, there is unlikely to be large quantities of waste generated during the operational phase. The decommissioning phase is expected to produce larger amounts of waste, which will be discussed in more detail in the oDEMP (**Appendix 2B**).
- 17.7.33 A Waste Management Plan will be submitted with the ES and will describe any measures implemented to minimise waste, demonstrating how the waste hierarchy will be applied.

## **17.8 Major Accidents and Disasters**

- 17.8.1 Paragraph (8) of Schedule 4 of the EIA Regulations 2017 (Ref 17-1) and EU Directive 2014/52/EU (Ref 17-11) require that the ES should include a description of the expected significant effects deriving from the vulnerability of the Proposal to risks of major accidents and/or disasters which are relevant to the Proposed Development.
- 17.8.2 The scope for the EIA to consider major accidents and disasters is initially considered in **Table 17-6** below. Major accidents or disasters have been scoped in where they represent a risk to the Proposed Development, either from the proposed location or from the development itself. A high risk is considered to be where there is reasonable likelihood of the accident or disaster occurring, or where the effect of the accident or disaster will lead to the requirement for mitigation which is beyond the usual scope of construction or operational activities.
- 17.8.3 Where an accident or disaster has been scoped in, the technical chapter(s) identified will consider the matter in more detail. This further detail may show that no further assessment is needed, or it may lead onto an appropriate level of assessment and/or identification of appropriate mitigation.

Table 17-6 Major Accidents and Disasters

Major Accident or Disaster	Risk Due to Location	Risk Due to Project	Scoped In/Out Due to Risk	Rationale	Environmental Statement Chapter
<b>Biological hazards: epidemics</b>	Very low	Very low	Out	The probability of epidemics which will affect the construction, operation or decommissioning of the Proposed Development is considered to be very low.	N/A
<b>Biological hazards animal and insect infestation</b>	Very low	Very low	Out	The probability of animal and insect infestations which will affect the construction, operation or decommissioning of the Proposed Development is considered to be very low.	N/A
<b>Earthquakes</b>	No	No	Out	Any earthquakes in the vicinity of the Proposed Development will be of a very small magnitude and the design of panel foundations etc. is adequate to withstand such low magnitude events.	N/A
<b>Tsunamis / tidal waves / storm surges</b>	Negligible	Low	In – storm surges could damage the panels	The Proposed Development proximity to the coast means there is the potential for storm surges to affect the panels.	<b>Chapter 10: Water Environment</b>

Major Accident or Disaster	Risk Due to Location	Risk Due to Project	Scoped In/Out Due to Risk	Rationale	Environmental Statement Chapter
<b>Famine / food Insecurity</b>	Negligible	Very low	Out	The probability of famine / food insecurity which will affect the construction, operation or decommissioning of the Proposed Development is considered to be negligible as the siting of the development is outside of BMV. However, there have been examples of solar schemes impacting food security as they are often sited on agricultural land.	N/A
<b>Displaced populations</b>	Negligible	Very low	Out	The probability of displaced populations affecting the construction, operation or decommissioning of the Proposed Development is considered to be negligible. However, there have been examples of solar schemes impacting food security as they are often sited on agricultural land.	N/A
<b>Landslide / subsidence</b>	Negligible	No	Out	The Site of the Proposed Development is located within the Severn Estuary, however the probability of landslides and subsidence affecting the construction, operation or decommissioning of the Proposed Development is considered to be negligible.	N/A

Major Accident or Disaster	Risk Due to Location	Risk Due to Project	Scoped In/Out Due to Risk	Rationale	Environmental Statement Chapter
<b>Severe weather: storms</b>	Medium	No	In – severe weather could cause damage to the panels.	The operation of the Proposed Development could be affected by severe weather events.	<b>Chapter 10: Water Environment</b>
<b>Severe weather: droughts</b>	Negligible	No	Out	The probability of severe drought occurring in the vicinity of the Proposed Development is considered to be very low. Additionally, panels will be unaffected by drought conditions.	N/A
<b>Severe weather: extreme temperatures</b>	Low	Very Low	In – severe cold weather could lead to ice or snow build-up on panels.	Ice and snow build up could decrease PV efficiency.	The measures detailed in <b>Appendix 19A</b> demonstrate that the Proposed Development is resilient to climate change across the lifecycle of the assets. Critical infrastructure will be designed to be resilient to climate change for the life of the asset.
<b>Floods</b>	Medium	Medium	In – a flood risk assessment will be undertaken as part of the EIA	The Proposed Development could increase the potential of flooding. Furthermore, damage to panels or infrastructure from flooding, or increase in flood risk elsewhere from development in flood zone.	<b>Chapter 10: Water Environment</b>

Major Accident or Disaster	Risk Due to Location	Risk Due to Project	Scoped In/Out Due to Risk	Rationale	Environmental Statement Chapter
				The extensive reed network across the Site could lead to increased risk of flooding.	
<b>Terrorist incidents</b>	No	No	Out	The probability of terrorist incidents which will affect the construction, operation or decommissioning of the Proposed Development is considered to be very low.	N/A
<b>Cyber attacks</b>	No	No	Out	The probability of a cyber-attack which will affect the construction, operation or decommissioning of the Proposed Development is considered to be very low.	N/A
<b>Disruptive industrial action</b>	No	No	Out	The probability of disruptive industrial action which will affect the construction, operation or decommissioning of the Proposed Development is considered to be very low.	N/A
<b>Public disorder</b>	No	No	Out	The probability of public disorder affecting the construction, operation or decommissioning of the Proposed Development is considered to be negligible.	N/A
<b>Wildfires and Urban Fires</b>	No	No	Out	The probability of wildfires and urban fires affecting the construction, operation or decommissioning of the	N/A

Major Accident or Disaster	Risk Due to Location	Risk Due to Project	Scoped In/Out Due to Risk	Rationale	Environmental Statement Chapter
				Proposed Development is considered to be negligible.	
<b>Severe space weather</b>	No	No	Out	The probability of severe space weather <sup>1</sup> affecting the operation or decommissioning of the Proposed Development is considered to be negligible.	N/A
<b>Poor air quality events</b>	No	No	Out	The probability of poor air quality events effecting the Proposed Development are considered to be negligible.	N/A
<b>Transport accidents</b>	No	Yes	In – abnormal loads and increase in traffic from construction.	Abnormal loads or an increase in traffic could lead to an increased risk of accidents during the construction and decommissioning phases. The road network may not be suitable for the increased levels of traffic, further increased the risk of an accident.	<b>Chapter 15: Transport and Access</b>

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<sup>1</sup> Space weather describes changing environmental conditions in near-Earth space. Magnetic fields, radiation, particles and matter, which have been ejected from the Sun, can interact with the Earth's upper atmosphere and surrounding magnetic field to produce a variety of effects.

Major Accident or Disaster	Risk Due to Location	Risk Due to Project	Scoped In/Out Due to Risk	Rationale	Environmental Statement Chapter
<b>Industrial accidents</b>	No	Yes	In – potential from construction and maintenance activities.	Manual labour, working at height and use of specialist plant all bring risk of industrial accidents during the construction and decommissioning phases. Relevant UK health and safety legislation will be adhered to; Site construction management practices will include, but are not limited to, temporary diversions of public rights of way, relevant signage and fencing of potentially hazardous construction areas where appropriate.	Construction activities are covered by separate H&S legislation and guidelines.

## 17.9 Heat and Radiation

### Introduction

- 17.9.1 This Section sets out the expected waste streams associated with the construction, operational and decommissioning phases of the Proposed Development (see; **Table 17-1**).
- 17.9.2 Paragraph 5(c) Schedule 4 of the EIA Regulations 2017 (Ref 17-1) requires a description of the likely significant effects of the development on the environment resulting from the emission of heat and radiation.
- 17.9.3 Effects relating to heat and radiation are only relevant to the operation phase of the Proposed Development and have potential to occur due to the potential heat effects associated with the introduction of Solar Panels and radiation effects associated with cabling and other electrical infrastructure.
- 17.9.4 The installation of Solar Panels has potential to increase local surface temperatures, however, this is comparable to other hard surfaces and does not pose a significant risk to human health. As set out in **Appendix 19A: Commitments Register** and **Chapter 8: Ecology** the vegetation under the Solar Panels will be managed and grazed appropriately, while the buffers adjacent to reens and ditches (between 7m – 12.5m) will help to regulate temperature and mitigate any localised warming. Therefore, any effects from heat are not anticipated to be significant.
- 17.9.5 The potential effects of the introduction of the Solar Panels and other relevant infrastructure on ecological receptors is covered in **Chapter 8: Ecology**.
- 17.9.6 Solar Panels do not emit any radiation, however, the introduction of inverters, transformers and underground electrical cables may result in Electro-Magnetic Fields (EMFs). It is anticipated that the radiation or EMFs would be well below safety standards, it is proposed that **Chapter 8: Ecology** would assess potential effects of EMFs on ecological receptors from watercourse crossings as part of the ES.

## 17.10 Summary

17.10.1 **Table 17-7** below brings together the identified receptors and significance of impact, including from across the individual technical Chapters, in order to summarise this Chapter.

Table 17-7 Summary of other environmental topics

Receptor	Technical Chapter Reference	Level of Effect
<b>Land Conditions</b>		
Existing Land-Use Patterns	Chapter 16: Ground Conditions	The Proposed Development will involve the permanent loss of up to 13.2ha of soils within agricultural land for hard development – resulting in a low magnitude of change.
<b>Major Accidents &amp; Disasters</b>		
Tsunamis / tidal waves / storm surges	Chapter 10: Water Environment	Neutral to Minor and not significant.
Severe weather: storms	Chapter 10: Water Environment	Neutral to Minor and not significant.
Floods	Chapter 10: Water Environment	Neutral to Minor and not significant.
Transport accidents	Chapter 15: Transport & Access	Neutral
Industrial accidents	Construction activities are covered by separate H&S legislation and guidelines. Solar Farm Site selection and design, <b>Chapter 10: Water Environment</b> and <b>Chapter 8: Ecology</b> .	Water Environment Pollution - Minor or Moderate ( <b>Significant</b> )
<b>Electromagnetic Fields</b>		
Ecological receptors	Chapter 8: Ecology	To be assessed at ES.
<b>Human Health and Population</b>		
Landscape elements within the Study Area.	Chapter 11: Landscape and Visual Amenity.	Effects range from Minor (not Significant) to Major ( <b>Significant</b> )
Visual Receptors within the Study Area: nearby settlements (residents); transport routes (primarily minor roads); recreational	Chapter 11: Landscape and Visual Amenity.	See: <b>Section 11.8 of Chapter 11: Landscape and Visual Amenity</b>

<b>routes (including PRow, Wales Coast Path, Sustrans Cycle Route 4); and recreational and tourist destinations.</b>		
<b>Effects on soils</b>	<b>Chapter 16: Ground Conditions</b>	Moderate Adverse, Not Significant. Effects on soil resources from the permanent infrastructure and compaction of soil.
<b>Effects on agricultural land (agricultural as land national / regional / local resource)</b>	<b>Chapter 16: Ground Conditions</b>	Not Significant
<b>Effects on land contamination</b>	<b>Chapter 16: Ground Conditions</b>	Not Significant
<b>Highway Network and receptors</b>	<b>Chapter 15: Transport &amp; Access</b>	Neutral / to be determined at EIA stage
<b>Active Travel Links</b>	<b>Chapter 15: Transport &amp; Access</b>	See <b>Appendix 15A: Draft Travel Plan</b>
<b>Construction activity noise</b>	<b>Chapter 13: Noise and Vibration.</b>	Not Significant
<b>Construction activity vibration</b>	<b>Chapter 13: Noise and Vibration.</b>	Not Significant
<b>Construction road traffic noise</b>	<b>Chapter 13: Noise and Vibration.</b>	Not Significant
<b>Operational Noise</b>	<b>Chapter 13: Noise and Vibration.</b>	Not Significant
<b>Telecommunications, Television Reception and Utilities</b>		
<b>Underground Utilities</b>	N/A	No Significant Effects
<b>Waste</b>		
<b>Ecological or Human Receptors</b>	N/A	No Significant Effects
<b>Ecological Receptors</b>	<b>Chapter 8: Ecology</b>	To be assessed at ES.



## 17.11 References

Ref 17-1 The Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2017). Available at: [http://www.legislation.gov.uk/ukxi/2017/572/pdfs/ukxi\\_20170572\\_en.pdf](http://www.legislation.gov.uk/ukxi/2017/572/pdfs/ukxi_20170572_en.pdf) [Accessed November 2025].

Ref 17-2 PAS128 Website (N.D.). What is a PAS 128? Available at: <https://www.pas128.co.uk/what-is-pas.html> [Accessed November 2025].

Ref 17-3 The Environmental Protection Act 1990. Available at: <https://www.legislation.gov.uk/ukpga/1990/43/contents>. [Accessed November 2025].

Ref 17-4 Control of Pollution (Amendment) Act 1989. Available at: <https://www.legislation.gov.uk/ukpga/1989/14/contents> [Accessed November 2025].

Ref 17-5 Hazardous Waste Regulations 2005. Available at: <https://www.legislation.gov.uk/ukxi/2005/894/contents> [Accessed November 2025].

Ref 17-6 Waste Electrical and Electronic Equipment (WEEE) regulations (2018). Available at: Regulations: Waste Electrical and Electronic Equipment (WEEE) - GOV.UK. [Accessed November 2025].

Ref 17-7 Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on Waste and repealing certain Directives (Waste Framework Directive). Available at: <https://eur-lex.europa.eu/eli/dir/2008/98/oj/eng>. [Accessed November 2025].

Ref 17-8 Waste (England and Wales) Regulations 2011. Available at: [The Waste \(England and Wales\) Regulations 2011](#). [Accessed November 2025].

Ref 17-9 The Waste (England and Wales) (Amendment) Regulations 2014. Available: <http://www.legislation.gov.uk/ukxi/2014/656/contents/made2014> [Accessed November 2025].

Ref 17-10 Directive 2018/851/EC of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste (Waste Framework Directive). Available: <https://eur-lex.europa.e> [Accessed November 2025].

Ref 17-11 EU Directive 2024/52/EU (2014), [Online], available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0052&rid=1> [Accessed November 2025].